



North West Leicestershire District Council
Local Plan Review:
Sustainability Appraisal (incorporating EqIA & HIA)

Appendix B Baseline Data








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1 Introduction

This appendix presents the baseline information on the environmental, social and economic characteristics of the North West Leicestershire District collated for the Sustainability Appraisal (SA) of the North West Leicestershire Local Plan Review. The SA incorporates Health Impact Assessment as well as Equalities Impact Assessment. Relevant baseline information is provided in relation to health in Section 2.3 and equalities in Section 2.2.

Baseline data enables a characterisation of the plan area to be developed, including the sensitivity of the environment. Gaining an understanding of this information allows the impacts of the plan to be assessed and its performance to be monitored after adoption. Baseline information can put the plan area into context in relation to a national or regional situation or in relation to adjacent areas.

The detailed baseline information has been compiled in a series of topics (listed below) in line with published guidance¹ to include comparators, targets, trends and indicators and is presented in turn within this appendix:

- Population & Communities;
- Housing;
- Employment & Economy;
- Transport & Access;
- Air, Noise & Light Pollution;
- Climate Change;
- Biodiversity & Geodiversity;
- Landscape, Townscape & Land;
- Cultural Heritage;
- Water; and
- Waste & Minerals.

¹ A practical guide to the Strategic Environmental Assessment Directive 2005 ODPM ISBN 1851 127887

2.1 Introduction

This chapter presents baseline data relating to demographics, diversity, inclusion, deprivation, crime and health and therefore presents the baseline data required to identify potential health and equalities impacts.

2.2 Equality, Diversity & Inclusion

2.2.1 Demographics

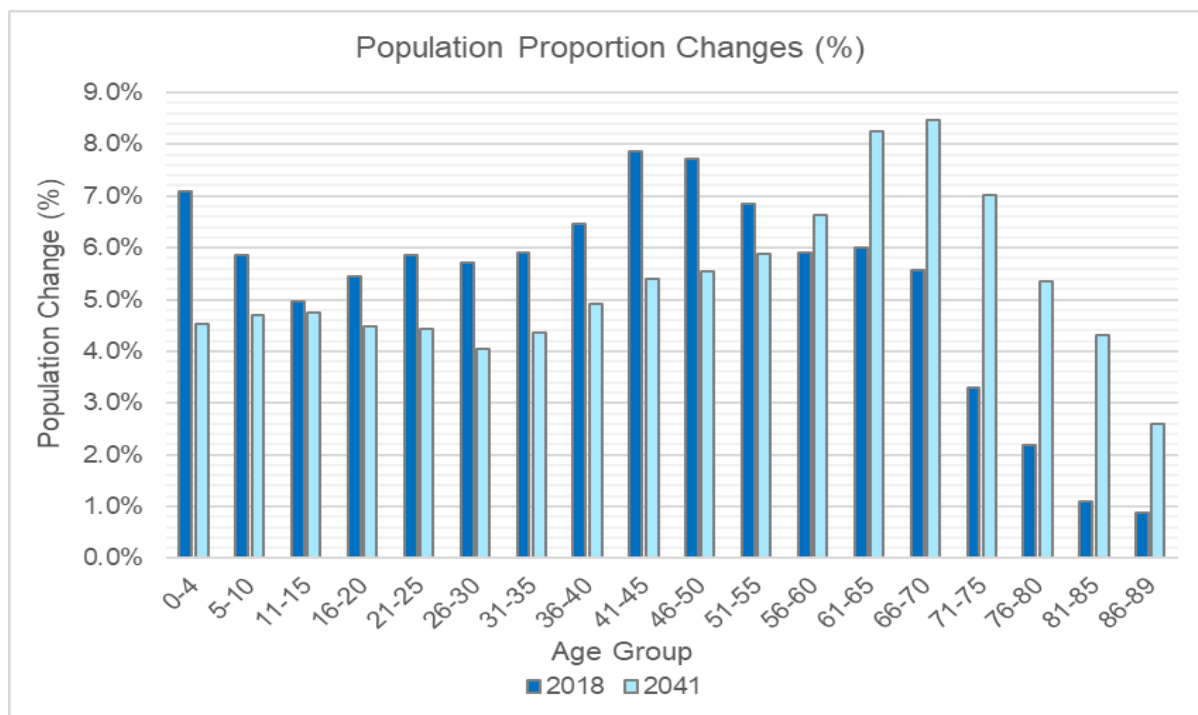
It was estimated that the population of NWL would be 100,109² in 2018 and that it would continue to rise over the next 23 years by 14.5%.

Figure 2.1 shows the population changes predicted to take place between 2018 and 2041. At present, the largest age group in NWL is the 46-50 year olds, making up 7.9% of the total population, followed by the 51-55 year olds (7.7%) and 5-10 year olds (7.1%). The smallest age group are those aged 90 and over at just 0.9%. By 2041, the age demographic is set to shift slightly, however, 46-50 year olds will still make up the largest proportion of the population at 6.6%. This is followed by those aged between 51-55 or 71-75, both making up 6.4% respectively. The smallest age group will be those aged between 86-89 at just 1.9%.

Figure 2.1 also highlights the low proportion of 16-25 year olds which may well be indicative of a larger number of younger residents moving away for university and employment opportunities. There is potential that this could have a future impact on local economic growth as well as future demand for services and facilities.

² Household projections for England and local authority districts, DCLG, published July 12th 2016 <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2>

Figure 2.1: Predicted Population Change³



By 2036, the biggest increases in population will be in the over 75s, particularly the 86-89s, with a projected rise of 114.8%. The smallest changes will be seen in the those aged 5-10 with an increase of 2.2%. It is projected that there will be a decrease in the number of 46-50 years olds (-8.0%), 51-55 year olds (-9.4%) and 56-60 year old (-4.3%). Table 2.1 shows the population projections for all age groups in the District between 0-4 and 90 plus, between 2018 and 2036.

Table 2.1 Population Projection ⁴			
Age Group	2018	2036	% Change
0-4	5310.3	5688.6	7.1%

³ ONS – 2016 Based Household Projections In England

⁴ Household projections for England and local authority districts, DCLG, published July 12th 2016 <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2>

Table 2.1 Population Projection⁴

Age Group	2018	2036	% Change
5-10	7101.7	7255.1	2.2%
11-15	5860.2	6273.1	7.0%
16-20	4973.1	5535.2	11.3%
21-25	5454.6	5750.9	5.4%
26-30	5852.1	6133.5	4.8%
31-35	5722.5	5945.3	3.9%
36-40	5914.6	6645.6	12.4%
41-45	6476.0	7428.5	14.7%
46-50	7864.4	7238.5	-8.0%
51-55	7735.1	7004.6	-9.4%
56-60	6852.3	6559.9	-4.3%
61-65	5913.0	7446.4	25.9%
66-70	6006.9	7751.6	29.0%
71-75	5567.3	7023.8	26.2%
76-80	3294.6	5233.0	58.8%
81-85	2194.1	3883.4	77.0%
86-89	1103.4	2369.8	114.8%
90 +	884.6	1748.5	97.7%
All ages	100080.9	112915.5	12.8%

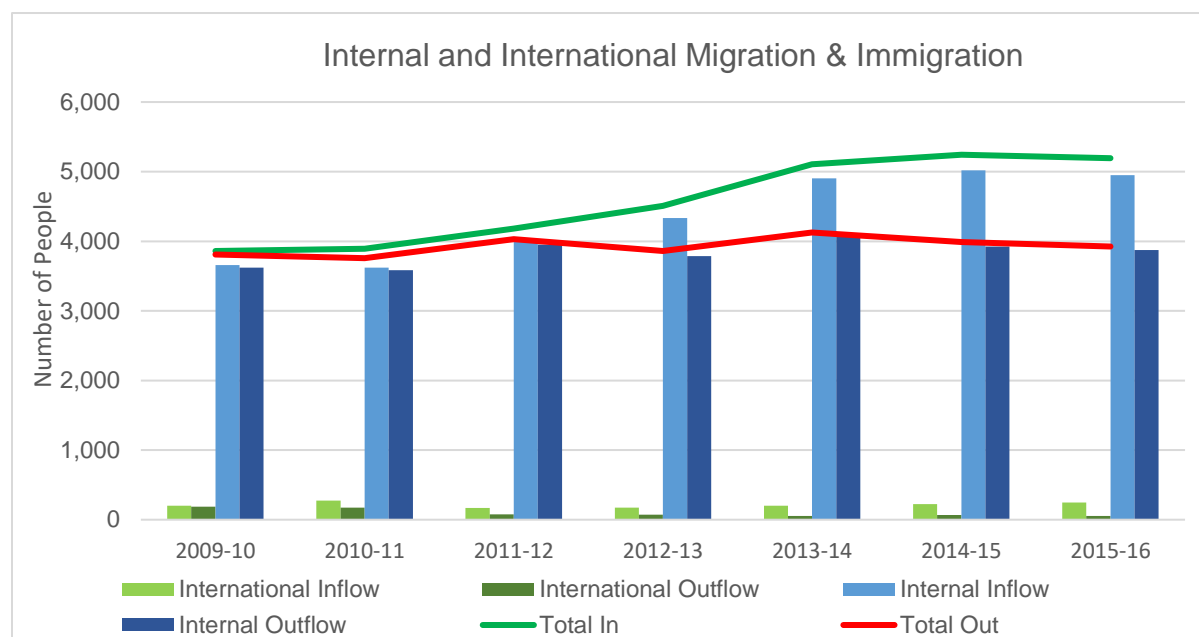
Table 2.2 shows the changes in the number of households between 2013 and 2018, as well as the projected change in the number of households between 2018 and 2036. The table identifies that there is an overall upward trend in the number of households across Leicestershire. NWL currently has 41,400 households, which has grown by 4.2% since 2013. This is projected to continue to rise by 12.6%, bringing the total number of households by 2036 to 47,000. This growth is higher than Blaby, Melton and Oadby and Wigston districts but lower than Charnwood, Harborough and Hinckley and Bosworth.

Table 2.2: Changes in Household Numbers (All Households ('000s))⁵					
District	2013	2018	% Change (from 2013)	2036	% Change (from 2018)
Blaby	39.3	40.7	3.6%	46	11.9%
Charnwood	68.5	73.5	7.4%	89	21.4%
Harborough	35.9	38.0	6.0%	45	17.7%
Hinckley and Bosworth	46.0	48.2	4.6%	55	13.4%
Melton	21.8	22.6	3.8%	25	12.0%
North West Leicestershire	39.7	41.4	4.2%	47	12.6%
Oadby and Wigston	21.4	21.7	1.3%	24	10.2%

Figure 2.2 shows the internal and international migration and immigration in the District between 2009-10 and 2015-16. It shows that overall inflow is much higher than overall outflow, with the majority as a result of internal migration. There has been a slow increase in international inflow since 2009-10, whilst international outflow continues to decrease year on year.

⁵ ONS – 2016 Based Household Projections In England

Figure 2.2: Internal and International Migration and Immigration⁶

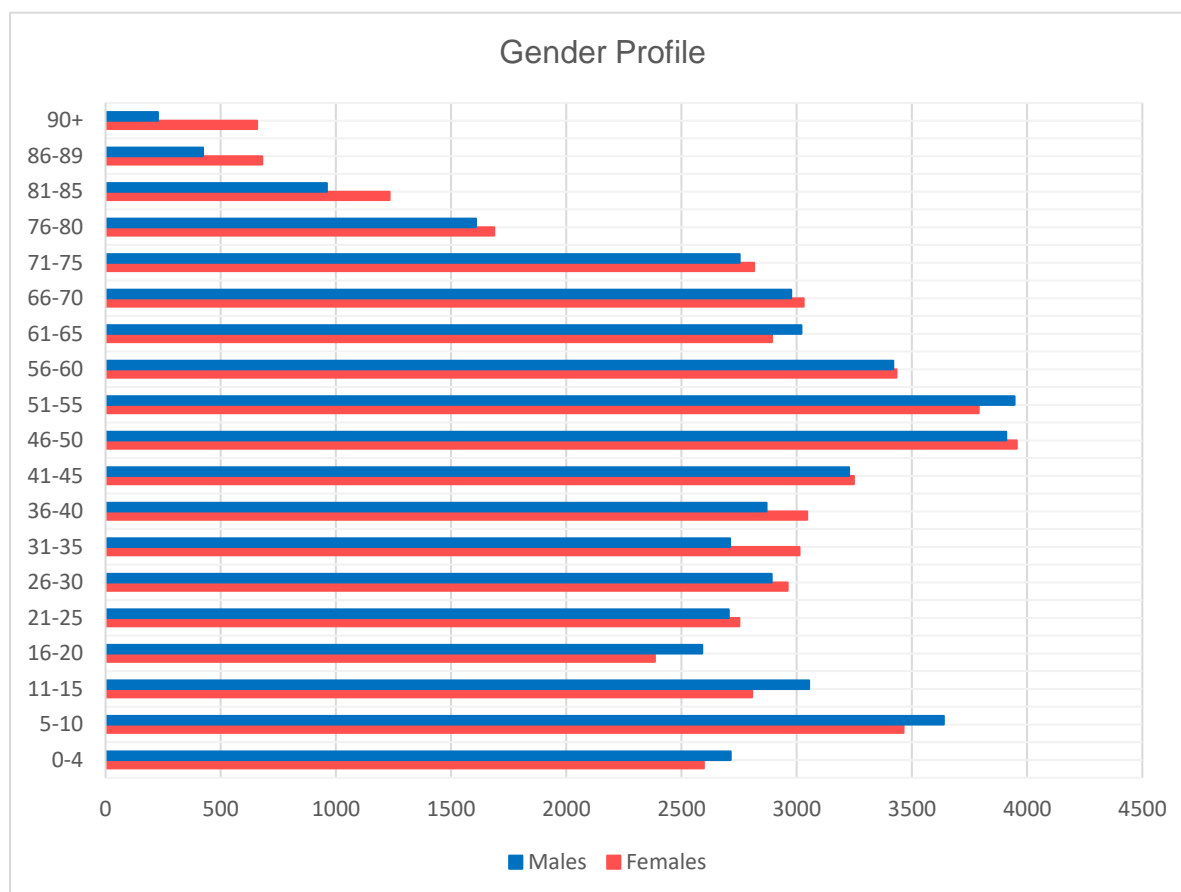


2.2.2 Gender

There is a slightly higher proportion of females than males in the District, making up 50.6% of the total population. Figure 2.3 shows the gender profile across all age groups in the District. It shows that there is a higher proportion of males aged between 0-20, whilst there are more women aged between 21-50. The biggest differences between males and females occur between those aged between 81-90+, where there is a significantly higher proportion of women. This could be reflective of differences in average life expectancy.

⁶ ONS, Local Area Migration Indicators, UK, 2017

Figure 2.3: NWL Gender Profile⁷



2.2.3 Race

Table 2.3 presents the 2011 ethnicity Census⁸ data for the District. The District is not very diverse with 95.3% of the population being classed as 'white British', which is above the Leicestershire average of 88.9%. The second biggest ethnic group is 'White Other' making up 1.7% of the population. The table shows that there was less than 1% of Asian or Asian British: Pakistani or Bangladeshi, 'Black/African/Caribbean/Black British: Other' or 'Other ethnic group: Arab' ethnic backgrounds recorded within the 2011 Census.

⁷ ONS, Census, 2011 - Sex

⁸ ONS, Census, 2011 - Ethnicity

Table 2.3: Ethnicity⁹				
Ethnic Group	NWL		Leicestershire	
	Population	% Population	Population	% Population
White British	89,116	95.3%	578,432	88.9%
White Irish	406	0.4%	3,528	0.5%
Gypsy or Irish Traveller	77	0.1%	411	0.1%
White Other	1,588	1.7%	12,396	1.9%
Mixed or Multiple Ethnic Group: White or Black Caribbean	358	0.4%	3,024	0.5%
Mixed or Multiple Ethnic Group: White or Black African	59	0.1%	714	0.1%
Mixed or multiple ethnic group: White and Asian	322	0.3%	3,262	0.5%
Mixed or multiple ethnic group: Other	142	0.2%	1,551	0.2%
Asian or Asian British: Indian	520	0.6%	28,598	4.4%
Asian or Asian British: Pakistani	16	0.0%	2,099	0.3%
Asian or Asian British: Bangladeshi	20	0.0%	2,313	0.4%
Asian or Asian British: Chinese	198	0.2%	3,502	0.5%
Asian or Asian British: Other	320	0.3%	4,265	0.7%
Black/African/Caribbean/Black British: African	91	0.1%	1,990	0.3%
Black/African/Caribbean/Black British: Caribbean	78	0.1%	1,379	0.2%
Black/African/Caribbean/Black British: Other	36	0.0%	418	0.1%
Other ethnic group: Arab	25	0.0%	866	0.1%
Other ethnic group: Any other ethnic group	96	0.1%	1,741	0.3%

2.2.4 Religion or Belief

Table 5.4 identifies the religious diversity in NWL compared with Leicestershire. 64.9% of the population in NWL identify themselves as Christians, which is higher than the County average of 60.3%. 27.5% of the population have no religion, whilst 6.2% have not stated their religion. Other religions make up less than 2% of the population, with less than 1% identifying as Jewish.

⁹ ONS, Census, 2011 - Ethnicity

Table 2.4 Religion or Belief ¹⁰		
Religion	% Population NWL	% Population Leicestershire
Christian	64.9	60.3
Buddhist	0.2	0.2
Hindu	0.4	2.8
Jewish	0.0	0.1
Muslim	0.2	1.4
Sikh	0.1	1.2
Other religion	0.4	0.4
No religion	27.5	27.1
Religion not stated	6.2	6.5

2.2.5 Marriage & Civil Partnership

Table 2.5 presents the marital and civil partnership status of those living in the NWL District, as recorded in the 2011 Census. 52.4% of the population are married, which is higher than the East Midlands average of 48.5%. A lower percentage of the NWL population is considered to be single (28.3%) than across the East Midlands (32.3%). 0.2% of both the NWL population and the East Midlands population are considered to be in a registered same-sex civil partnership.

Table 2.5: Marital and Civil Partnership Status ¹¹				
Marital Status	NWL		East Midlands	
	Count	%	Count	%
All usual residents aged 16+	75,791	-	3,694,767	-
Single (never married or never registered a same-sex civil partnership)	21,443	28.3%	1,192,443	32.3%
Married	39,715	52.4%	1,790,916	48.5%
In a registered same-sex civil partnership	173	0.2%	7,179	0.2%
Separated (but still legally married or still legally in a same-sex civil partnership)	1,888	2.5%	96,149	2.6%
Divorced or formerly in a same-sex civil partnership which is now legally dissolved	7,100	9.4%	342,665	9.3%

¹⁰ ONS Census 2011 – Religion in England & Wales

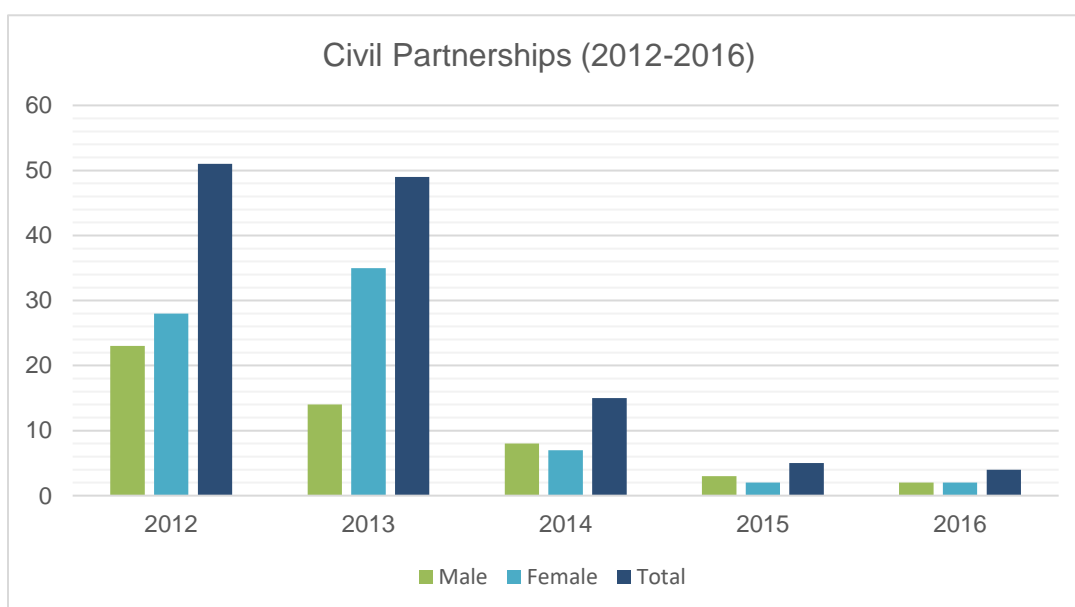
¹¹ ONS Census 2011 - Marital and Civil Partnership Status

Table 2.5: Marital and Civil Partnership Status ¹¹				
Marital Status	NWL		East Midlands	
	Count	%	Count	%
Widowed or surviving partner from a same-sex civil partnership	5,472	7.2%	265,415	7.2%

Figure 2.4 shows the number of civil partnerships in Leicestershire over a 5 year period, between 2012 and 2015. This shows that the total number of civil partnership ceremonies is declining, with 51 in 2012 compared to just 4 in 2016.

However, this drop in civil partnership formations could be down to the legalisation of same sex marriages in 2014.

Figure 2.4 Civil Partnership Formations (2012 – 2016)¹²



2.2.6 Sexual Orientation

95.4% of people in Leicestershire consider themselves to be heterosexual; this is slightly higher than the East Midlands average of 94.1% and the UK average of 93.8%. 0.7% of the population in Leicestershire consider themselves to be gay or lesbian whilst 0.3% consider themselves to be

¹² ONS Civil Partnership Formations, 2017

bisexual. Again, these are both lower than the regional and national averages. Table 2.6 below shows these figures.

Table 2.6: Sexual Orientation¹³					
	Heterosexual or straight	Gay or lesbian	Bisexual	Other	Don't know or refuse
Leicestershire	95.4	0.7	0.3	0.1	3.5
East Midlands	94.1	0.9	0.4	0.4	4.2
UK	93.8	1.1	0.6	0.3	4.2

2.2.7 Deprivation

The English Indices of Deprivation 2015 attempts to measure a broad concept of measures of multiple deprivation at the small area level. The Indices provide a set of relative measures of deprivation for small areas (Lower Super Output Areas) across England, based on seven different domains of deprivation¹⁴:

- Income Deprivation;
- Employment Deprivation;
- Education, Skills and Training Deprivation;
- Health Deprivation and Disability;
- Crime; and
- Barriers to Housing and Services.

According to the Indices, NWL is ranked 214th most deprived local authority in England, out of 326 (where 1 is the most deprived and 326th is the least deprived). Table 5.7 shows the average rank of each of the 7 deprivation domains in Leicestershire; red indicates the most deprived local authority and green indicates the least. This measure is calculated by averaging all of the LSOA ranks in each larger area after they have been population weighted. The 'average rank' scores for the larger areas are then ranked, where the rank of 1 (most deprived) is given to the area with

¹³ ONS, Subnational Sexual Identity, 2013 - 2015 (Released 2017)

¹⁴ The Department for Communities and Local Government, The English Indices of Deprivation 2015 Technical Report, 2015

the highest score. The most and least deprived districts have been highlighted for each of the domains in the table below.

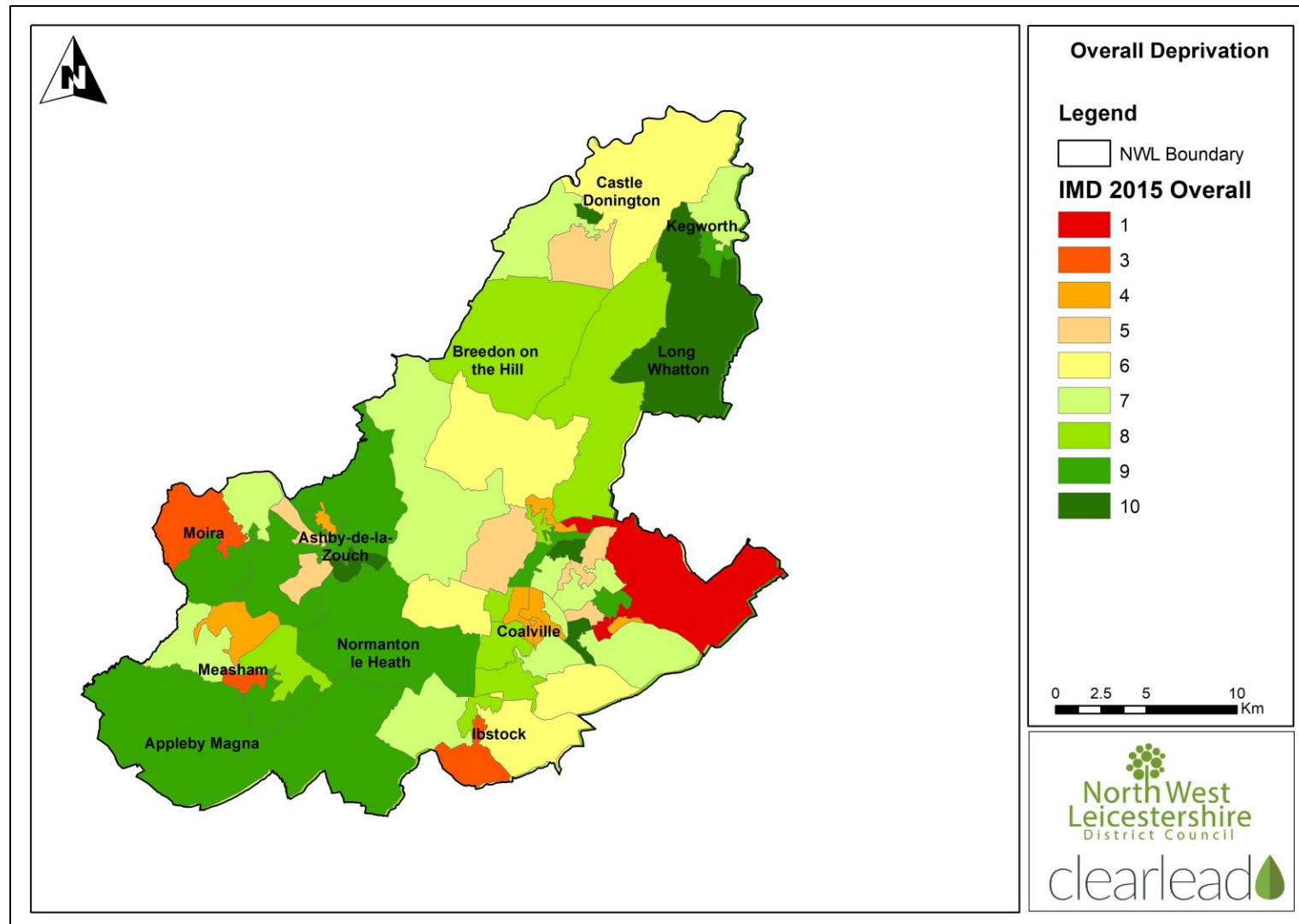
Table 2.7: IMD Rankings Per Domain ¹⁵								
Local Authority	Overall Rank	Income	Employment	Education	Health	Crime	Housing	Environment
Blaby	288	262	259	170	246	143	309	303
Charnwood	237	227	247	194	220	134	231	201
Harborough	311	312	303	277	286	293	222	290
Hinckley and Bosworth	248	230	221	153	254	176	267	262
Melton	236	270	271	220	273	179	75	169
North West Leicestershire	214	203	176	130	185	159	266	280
Oadby and Wigston	249	221	218	178	201	203	287	221
Leicester	14	15	47	11	57	31	243	31

Overall, NWL is the second most deprived local authority in Leicestershire. In each of the 7 domains, NWL does not appear as one of either the least deprived or most deprived local authorities. Once broken down into smaller lower super output areas, there are pockets of high level deprivation within NWL. Figure 2.5 shows the overall deprivation scores for NWL broken down by wards, where 1 is the most deprived and 10 is the least deprived.

This shows that LSOA 009C and 009A in the ward of Greenhill (east of Coalville) are within the top 10% of most deprived LSOAs in England. LSOA 013F in the ward of Ibstock and Heather and LSOA 008A in the ward of Moira are among the top 30% of most deprived LSOA in the country. Some of the least deprived areas are located around Ashby-de-la-Zouch, Long Whatton, Normanton le Heath and Appleby Magna.

¹⁵ Ministry of Housing, Communities & Local Government, The English Indices of Deprivation 2015, Local Authority District Summaries

Figure 2.5: IMD Overall LSOA Deprivation in NWL



2.3 Health

2.3.1 Life Expectancy

Life expectancy in NWL is fairly similar to the national and Leicestershire averages. Table 2.8 shows that expectancy for males is 80.1 years which slightly higher than the Leicestershire (79.3 years) and the national average (79.5 years). Like the national trend, women have a longer life expectancy at 82.9 years; although this is the same as the Leicester average it is slightly below the national average of 83.1 years.

Table 2.8: Life Expectancy (2014-16) ¹⁶			
	NWL	Leicestershire	England
Males	80.1	79.3	79.5
Females	82.9	82.9	83.1

The health and wellbeing of children in NWL is generally better than the England average. The level of child poverty in the District is better than the England average, however, 2460 children are living in poverty¹⁷. The foundation stage assessment is completed in the final term of the academic year in which a child reaches the age of five, and aims to measure the levels of development of children. In NWL, a lower proportion of children than the England average are judged to have achieved a good level of development at the end of the 2016/17 foundation stage¹⁷.

The English Indices of Deprivation¹⁸ highlights that there are some disparities between wards in NWL, with regards to health deprivation and disability domain. This is reflected in life expectancies as it is 7.3 years lower for both men and women in the most deprived areas of North West Leicestershire than in the least deprived areas. This is shown in Figure 2.6 below. The health deprivation and disability domain measure the risk of premature death and the impairment of quality of life from poor physical or mental health and is comprised of the following indicators:

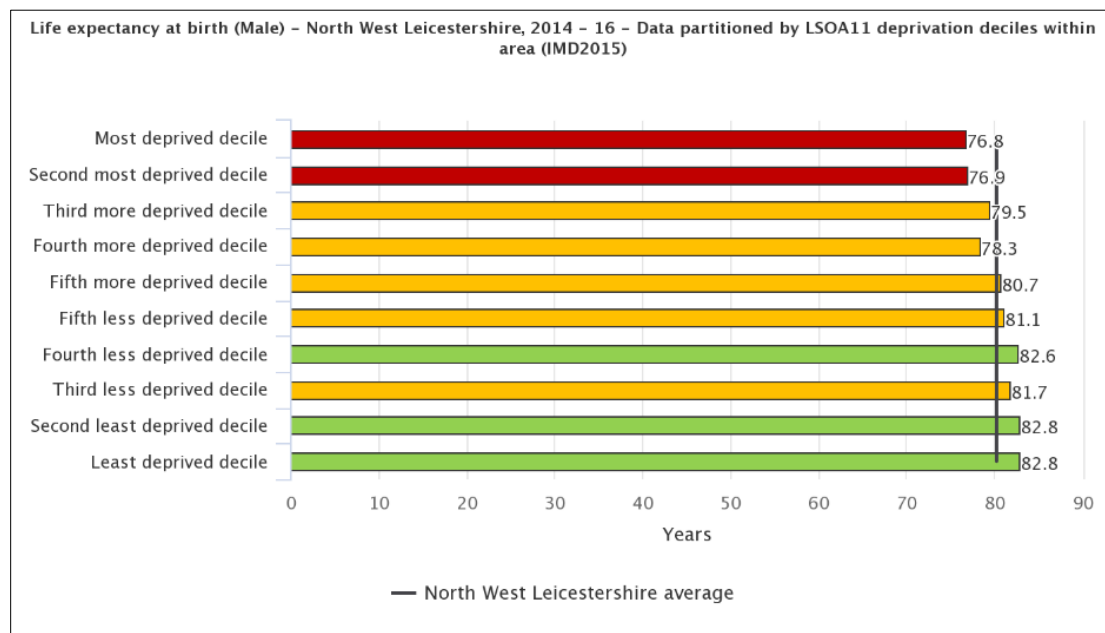
¹⁶ Public Health England, Local Authority Health Profiles

¹⁷ Leicestershire County Council, School Health Profile 2016/17 North West Leicestershire, <http://www.lsr-online.org/uploads/north-west-leics-school-health-profile-2016-17.pdf> Accessed on: 19/07/2018

¹⁸ Department of Local Communities & Local Government, English Indices of Deprivation 2015

- Years of potential life lost: An age and sex standardised measure of premature death;
- Comparative illness and disability ratio: an age and sex standardised morbidity/disability ratio;
- Acute morbidity: an age and sex standardised rate of emergency admission to hospital; and
- Mood and anxiety disorders: a composite based on the rate of adults suffering from mood and anxiety disorders, hospital episodes data, suicide mortality data and health benefits data¹⁹.

Figure 2.6: Life Expectancies Disparities¹⁶



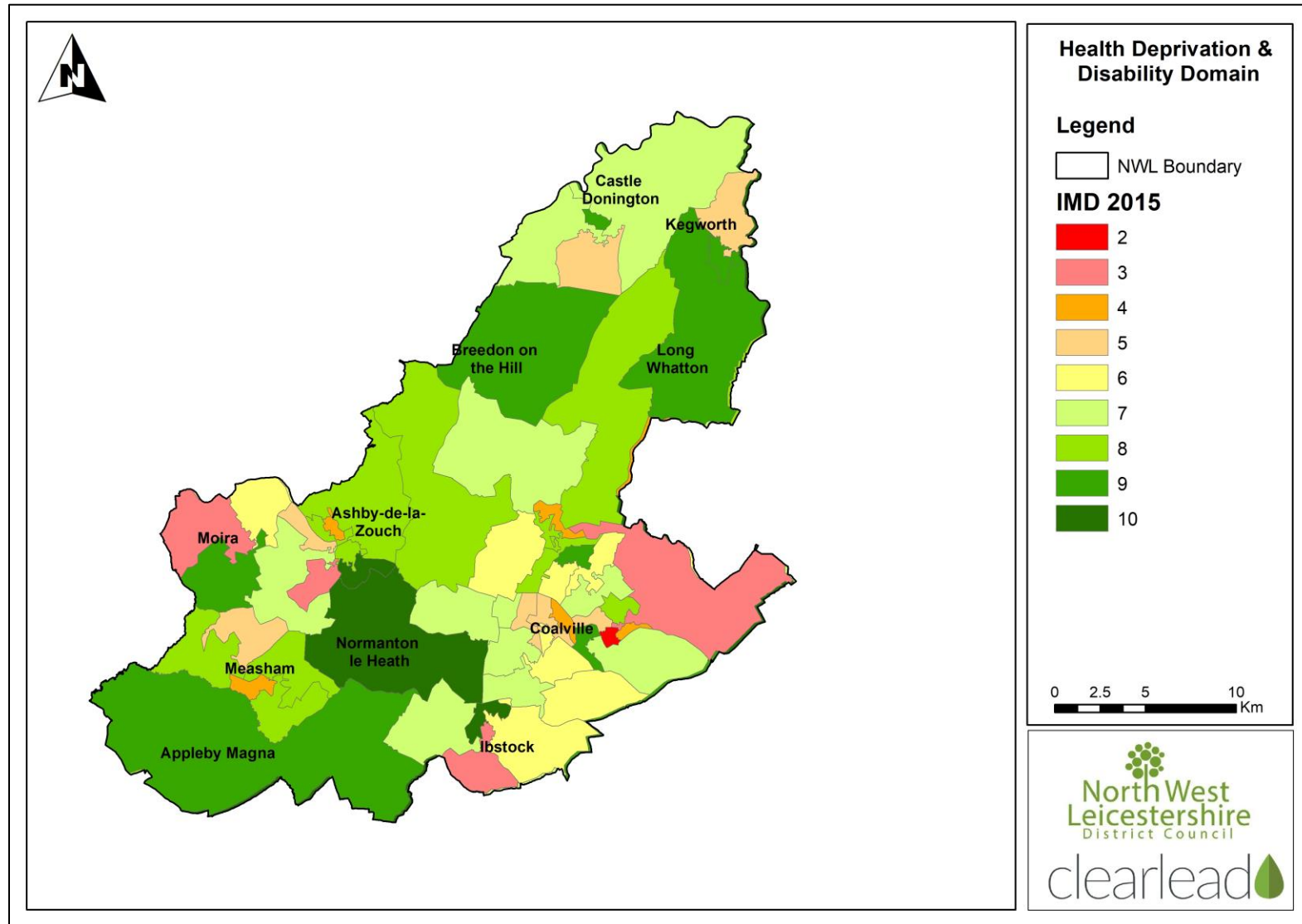
Areas within the Greenhill ward are amongst the top 20% of most deprived neighbourhoods in England, and areas within Ibstock and Heather, Moira and Ashby Ivanhoe are amongst the top 30% most deprived neighbourhoods with regards to health deprivation and disability. However, the wards of Ravenstone and Packington, Moira, Ibstock and Heather and Ashby Castle have areas which are among the top 10% of least deprived neighbourhoods in the county. Figure 2.7 shows areas of deprivation broken down by wards, where 1 is the most deprived and 10 is the least deprived.

¹⁹ Department of Local Communities & Local Government, English Indices of Deprivation 2015, Technical Report



Much of the population of NWL live in rural or semi-rural areas, which could be contributing further to health and disability deprivation, as access to health service provision is low in some areas of the District. With an ageing population, additional needs will need to be met including access to services to support the rural economy.

Figure 2.7: Health & Disability Deprivation



2.3.2 Physical Activity

According to the World Health Organisation²⁰, physical inactivity is the 4th leading risk factor for global mortality and is directly responsible for 6% of deaths (about 3.2 million) globally. By achieving a minimum level of 150 minutes of physical activity a week, an adult could potentially experience a 19% reduction in mortality risk²¹.

66.4% of adults (18+) in NWL are considered to be either overweight or obese. This number is above both the national average of 61.3% and regional average of 63.3%¹⁵. The National Active People Survey²² carried out in 2016, identified that in NWL only 34.7% of the population took part in 1 session a week (at least 1 activity at moderate intensity for at least 30 minutes). Whilst 54% of people living in District took part in physical activity.

In light of these statistics, the Council put together a Physical Activity Team and created a Physical Activity Commissioning Plan, aimed at developing a range of new activities and programmes each year to help residents lead a healthier lifestyle. As a result of this, the 2016/17 Activity Commissioning Plan²³ registered over 95,000 attendances to physical activity sessions throughout the District.

An Open Space audit was carried out for the District in 2007²⁴. This identified that there is shortfall in provision of recreation grounds and open space, but an over provision of children's play areas in Coalville and a slight under provision in Ashby-de-la-Zouch. The study identified an over-provision in respect of recreation grounds in Ibstock and Kegworth, but under-provision in respect of children's play areas and local open space. There was slight deficit in respect of both recreation grounds and local open space, but over-provision in respect of children's play areas in Measham.

2.3.3 Long Term Health & Disability

Table 2.9 shows the long term health and disability of residents in the District. 81.3% of the District's residents consider themselves to be in either good or very good health, with 82.3% of the population not regarding their day-to-day activities as limited. 5% of the population describe

²⁰ WHO, Global Health Risks, Mortality and Burden of Disease Attributable to Selected Major Risks, 2009

²¹ Hertfordshire Physical Activity And Sport Framework (2015)

²² Sport England, National Active People Survey (2016)

²³ North West Leicestershire Commissioning Plan,
https://www.nwleics.gov.uk/pages/north_west_leicestershire_physical_activity_commissioning_plan Accessed on:
20/07/2018

²⁴ North West Leicestershire, Open Space Audit, 2007

their health as bad or very bad and 8% of the population's day-to-day activities being limited a lot, which is lower than the national average of 8.3%.

Table 2.9 Long Term Health & Disability²⁵						
General Health	Very good or good health		Fair health		Bad or very bad health	
	75,375	(81.3%)	12,695	(13.7%)	4,627	(5.0%)
Long-term health problem or disability	Day-to-day activities not limited		Day-to-day activities limited a little		Day-to-day activities limited a lot	
	76,318	(82.3%)	8,997	(9.7%)	7,382	(8.0%)

Air pollution is associated with a number of adverse health impacts and is recognised as a contributing factor in the onset of heart disease and cancer. Air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often in more deprived areas²⁶. According to the North West Leicestershire Air Quality Annual Status Report (2018)²⁷, the District has the highest fraction of attributable deaths to particulate air pollution in Leicestershire.

The District Council currently runs a Disability Action Group for disabled residents, carers, and organisations providing services for disabled people. The group meet quarterly and have implemented a number of successful initiatives, including:

- Raising awareness of disability equality;
- Carrying out access audits of council run services such as leisure centres;
- Acting as a consultative group on major planning applications;
- Recognising and celebrating The International Day of Disabled person; and
- Lobbying the County Council to improve public transport in the District.

²⁵ ONS, Census 2011 Subnational Long Term Health & Disability

²⁶ Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

²⁷ North West Leicestershire Air Quality Annual Status Report, 2018

2.4 Crime

Figure 2.8 shows the types of crimes committed in NWL between June 2017 and May 2018. The most common type of crime committed was violent crime, with 1,744 cases reported during this period, making up over a quarter of the total number of reported crimes. The second most reported crime at 19% was anti-social behaviour. There are a low number of robberies, drug, bike theft, theft from a person and possession of a weapon-related crimes reported in the District.

Figure 2.8: Types of Crime in NWL²⁸

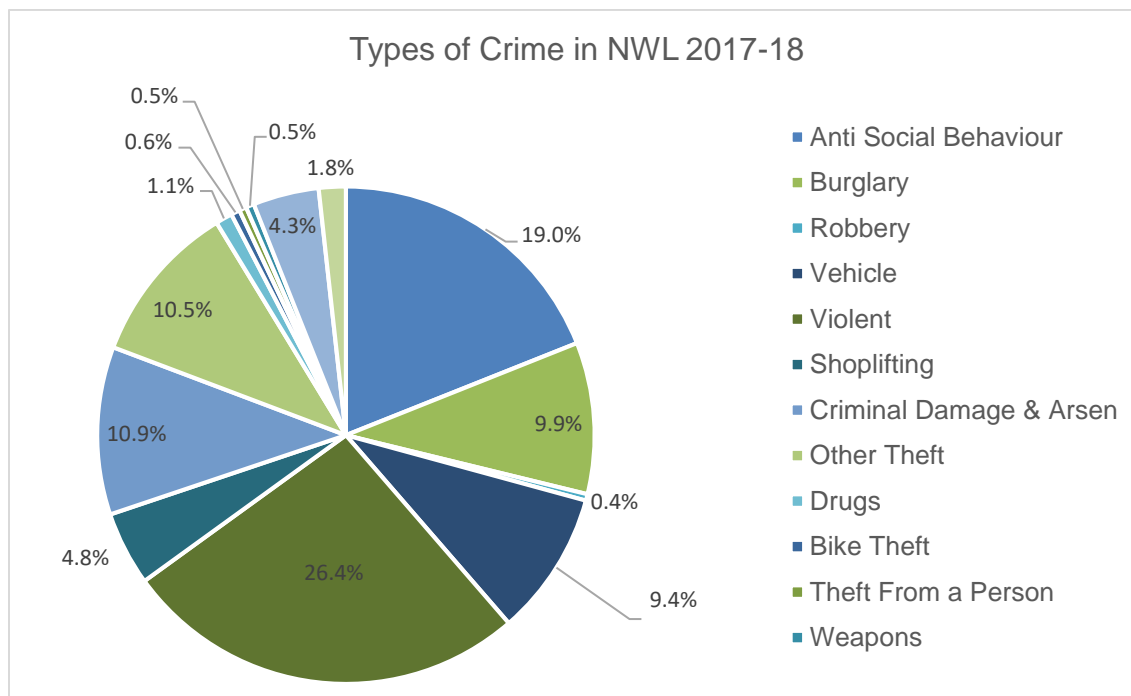


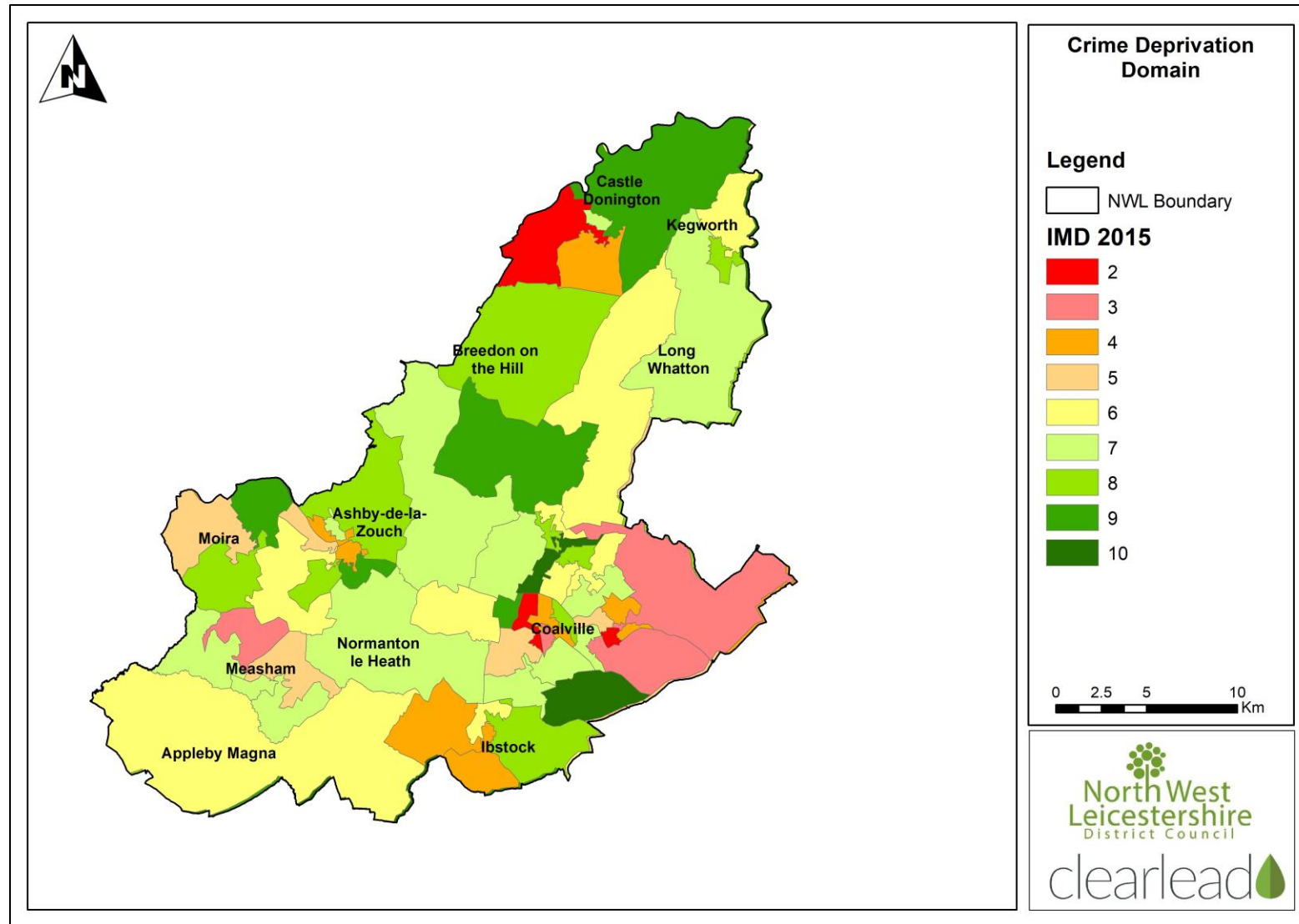
Table 2.10 shows the changes in types of crime in NWL for the month of May for each year since 2013. This shows that the total number of crimes is up by 34% over this period. The biggest increase in crimes is within the 'other' category (+650%), with the second biggest increase in public order (+290%). There is also a significant increase in violent crimes, with an increase of 178%. However, there have been decreases in anti-social behaviour, bike theft and theft from a person.

²⁸ UK Crime Statistics, 2018

Table 2.10: Changes in Types of Crime²⁸							
	2013	2014	2015	2016	2017	2018	% Change
Anti -Social Behaviour	162	159	117	142	171	138	-15%
Burglary	42	42	33	27	89	61	+45%
Robbery	3	2	1	3	0	3	0%
Vehicle	46	46	50	52	84	72	+57%
Violent	67	86	37	94	148	186	+178%
Shoplifting	33	19	24	45	34	37	+12%
Criminal damage and Arson	58	49	41	58	86	70	+21%
Other Theft	62	68	43	63	60	62	0%
Drugs	13	12	2	7	4	14	+8%
Bike Theft	6	11	2	3	2	3	-50%
Theft from a person	24	3	4	2	1	8	-67%
Weapons	2	2	4	2	3	3	+50%
Public Order	10	10	9	20	21	39	+290%
Other	2	3	0	7	12	15	+650%
Total	530	215	367	525	715	711	+34%

The English Indices of Deprivation 2015 highlights that there are some disparities between wards in NWL with regards to the crime domain. The crime domain measures the risk of personal and material victimisation at the local level. Areas around Castle Donington, Coalville and Greenhill being among the top 20% of most deprived neighbourhoods in England with regards to crime. Figure 2.9 shows crime deprivation at a ward level in NWL, where 1 is the most deprived and 10 is the least deprived.

Figure 2.9: Crime Deprivation



3 Employment & Economy

In recent years, the NWL District has experienced the strongest employment growth relative to its size in Leicestershire. Between 1991 and 2015 an additional 20,500 jobs have been created²⁹. The key drivers of this employment growth have been the professional, scientific and technical, wholesale, retail, administrative and transportation and storage sectors.

Further growth is also expected in NWL linked to the East Midlands Gateway (the Strategic Rail Freight Interchange) which will provide a freight terminal large enough to accommodate 775m-long trains, provide up to 557,414m² of warehouses as well as supplying 7,000 new jobs³⁰.

The economic activity rate in NWL is 86.7%, which far exceeds the regional average of 77.6% and the national average of 78.4%. 94.7% of men are employed which again far exceeds the regional average of 82.9% and the national average of 83.4%. The unemployment rate is 2.9% which is below the regional and national average of 4.4%, whilst 13.3% of the population are economically inactive compared to 22.4% regionally and 21.6% nationally. Of those who are economically inactive, 87.9% of them do not wish to be employed, which suggests that limited capacity exists to expand local labour supply.

Table 7.1 Employment and unemployment, 2017 (Aged 16+ *)³¹				
	North West Leicestershire	North West Leicestershire	East Midlands	Great Britain
	(Numbers)	(%)	(%)	(%)
Economically Active	53,600	86.7	77.6	78.4
In Employment	52,200	84.4	74.1	74.9
Employees	46,800	77.5	64.5	64
Self Employed	4,800	#	9.2	10.6
Unemployed	1,500	2.9	4.4	4.4

* Numbers are for those aged 16 and over, % are for those aged 16-64

Sample size is too small to provide reliable estimate.

²⁹ Leicester and Leicestershire Authorities and the Leicester and Leicestershire Enterprise Partnership HEDNA Main Report, January 2017

³⁰ Roxhill, East Midlands Gateway SRFI, <http://www.roxhill.co.uk/portfolio/kegworth/> Accessed on: 05/07/2018

³¹ Nomis, Labour Market Profile, North West Leicestershire

<https://www.nomisweb.co.uk/reports/lmp/la/1946157146/report.aspx?town=north%20west%20leicestershire>
Accessed on 17/07/2018

Figure 7.1: Employment Deprivation

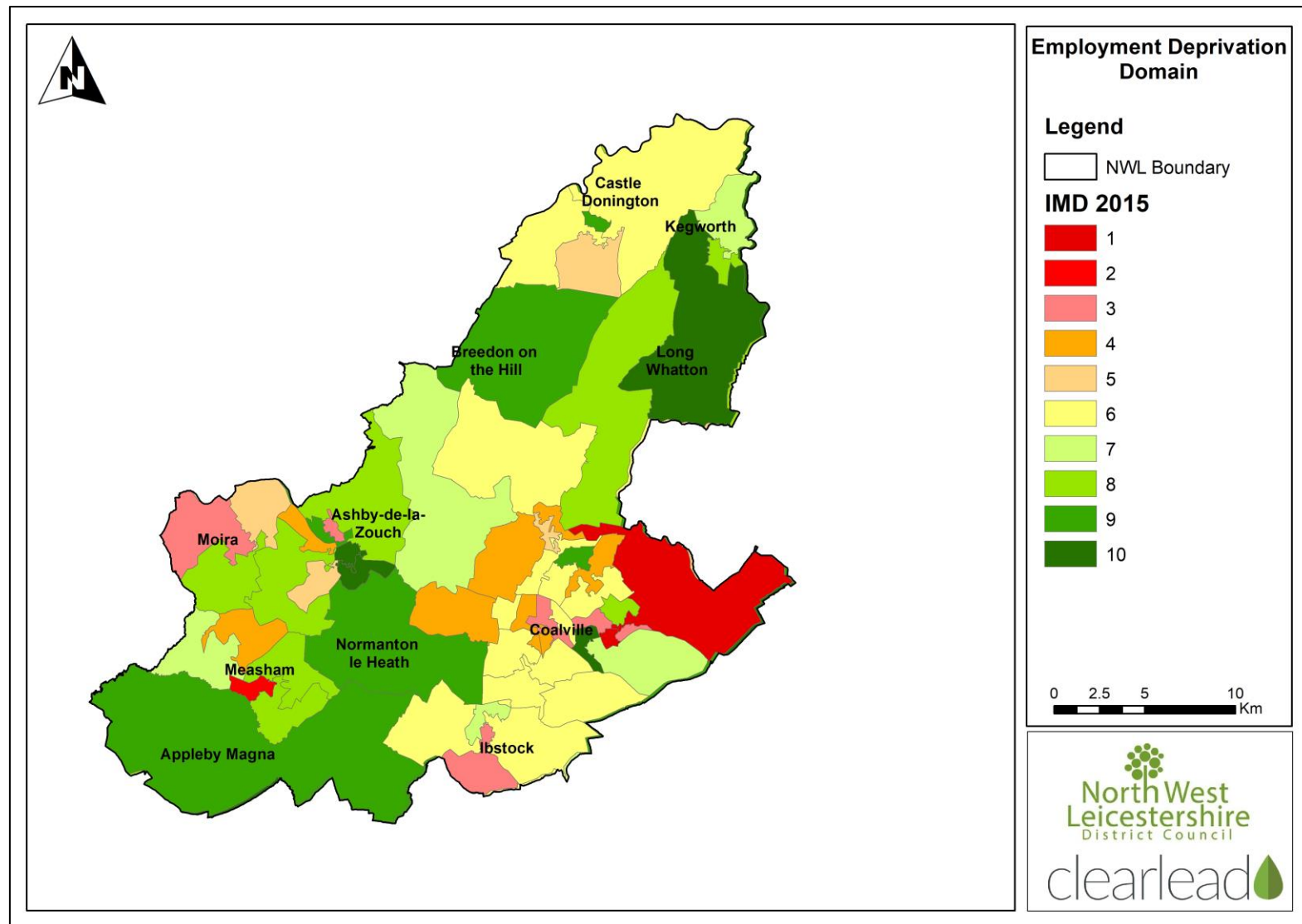


Figure 7.1 shows the levels of deprivation in the District with regards to employment, where 1 is the most deprived and 10 is the least deprived. The Employment Deprivation Domain measures the proportion of the working-age population in an area involuntarily excluded from the labour market. This includes people who would like to work but are unable to do so due to unemployment, sickness or disability, or caring responsibilities¹⁴. The indicators include:

- Claimants of Jobseeker's Allowance (both contribution-based and income based), women aged 18 to 59 and men aged 18 to 64;
- Claimants of Employment and Support Allowance (both contribution-based and income-based), women aged 18 to 59 and men aged 18 to 64;
- Claimants of Incapacity Benefit, women aged 18 to 59 and men aged 18 to 64;
- Claimants of Severe Disablement Allowance, women aged 18 to 59 and men aged 18 to 64; and
- Claimants of Carer's Allowance, women aged 18 to 59 and men aged 18 to 64.

LSOAs 009C and 009A within the ward of Greenhill (Coalville) are considered to be among the top 10% of deprived LSOAs in England and LSOA 012D in Measham is ranked amongst the top 20% of least deprived LSOAs in England with regards to employment. Conversely, LSOAs in Kegworth and Whatton, Whitwick and Ashby Castle (Ashby de -la-Zouch) are amongst the top 10% of least deprived LSOAs in England with regards to the employment domain.

Employment levels have continued to rise year on year since 2012. Between 2012 and 2013, employment levels were below the regional and national averages, but since 2015 they have remained well above the both the regional and national averages. Despite this, employment rates fell slightly in 2016, from 84.5% to 80.6%, but this rose again in 2017, to a high of 86.7%. Figure 7.2 shows the changes in employment rates.

NWL is situated in a highly accessible position in the midlands, with excellent road links, a growing international airport and Strategic Rail Freight Interchange and it is a highly competitive location for growth opportunities to capture local and regional demand. Due to the location, the area has proved attractive to investors, and this has been linked to the high levels of employment growth in the area.

Figure 7.2: Employment rates (2012 – 2017)³¹

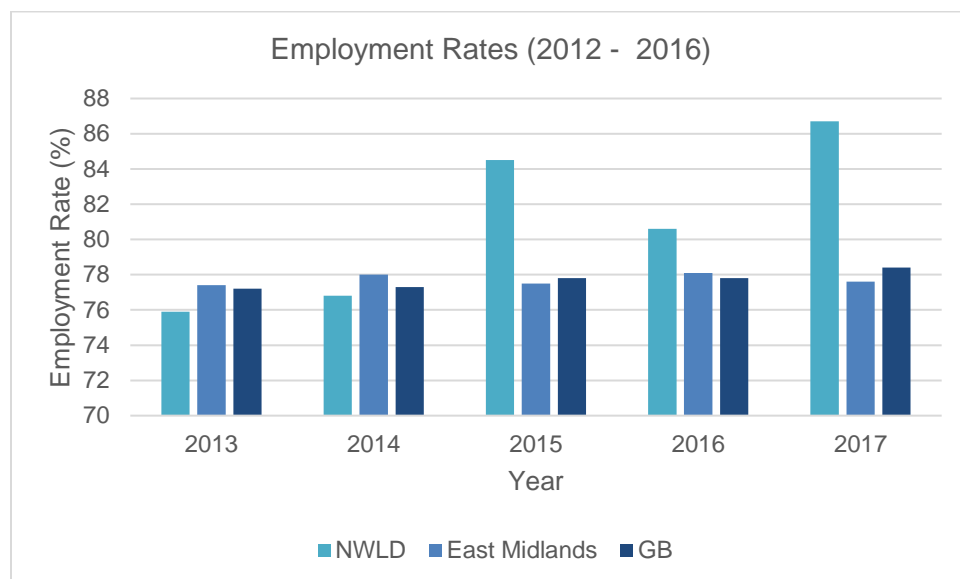


Table 7.2 shows the type of employment in the District by occupation. The majority of the working population in NWL are employed within associate professional and technical roles or professional occupations which, when combined, represents 42% of the working population. This is higher than both the national and regional averages. The second biggest employment sectors are skilled trade occupations and elementary occupations, both employing 6,200 respectively. The percentage of those employed within skilled trade occupations exceeds the regional and national averages at 11.8%. Those employed within elementary occupations (11.9%) is below the regional average of 12% but higher than the national average of 10.5%.

Table 7.2: Employment by Occupation (Jan 2017-Dec 2017)³¹				
	North West Leicestershire	North West Leicestershire	East Midlands	Great Britain
	(Numbers)	(%)	(%)	(%)
1 Managers, Directors and Senior Officials	#	#	10.7	10.9
2 Professional Occupations	10,900	20.8	17	20.3
3 Associate Professional & Technical	11,100	21.2	13.5	14.4
4 Administrative & Secretarial	6,000	11.6	10.2	10.3
5 Skilled Trades Occupations	6,200	11.8	11.4	10.3
6 Caring, Leisure and Other Service Occupations	#	#	9.2	9.1
7 Sales and Customer Service Occupations	#	#	6.9	7.5

Table 7.2: Employment by Occupation (Jan 2017-Dec 2017)³¹				
	North West Leicestershire	North West Leicestershire	East Midlands	Great Britain
	(Numbers)	(%)	(%)	(%)
8 Process Plant & Machine Operatives	#	#	8.6	6.3
9 Elementary Occupations	6,200	11.9	12	10.5

#: Sample size is too small to provide reliable estimate

68% of NLW workforce is sourced from Leicester and Leicestershire local authorities³². 63.1% of the District's residents work in NWL, with 8.2% in Charnwood, 5.7% in Leicester and 3.8% in Derby³³. 60% Of those commuting outside of the District, are employed in either managerial or professional jobs.

Table 7.3 shows the qualification attainment within the District. The attainment of a NVQ4 qualification or above is 43.5%, which is higher than the both the East Midlands (32.1%) and the national averages (38.6%). 91.5% of the population have at least a NVQ1 or above. However, there are large disparities between wards, with Greenhill (Coalville) and Measham featuring in the top 10% of most deprived areas in England, with regards to education, skills and training. Conversely, wards such as Appleby, Valley and Ravenstone and Packington are some of the least deprived areas in England, with regards to education, skills and training.

Table 7.3: Qualifications (Jan 2017-Dec 2017)³¹				
	North West Leicestershire	North West Leicestershire	East Midlands	Great Britain
	(Level)	(%)	(%)	(%)
NVQ4 And Above	26,100	43.5	32.1	38.6
NVQ3 And Above	38,600	64.5	52	57.2
NVQ2 And Above	48,000	80.1	70.9	74.7
NVQ1 And Above	54,800	91.5	83.6	85.4

³² Leicester and Leicestershire Strategic Housing Market Assessment (SHMA), 2014

³³ District Profile for North West Leicestershire (2012)

Table 7.4 shows employment by industry of those living within the District. Wholesale and retail trade, repair of motor vehicles and motorcycles, is the biggest employment sector of those living in the District, employing 9,000 people, making up 16.1% of the employment share. The second biggest sector is transportation and storage, employing 8,000 people and making up 14.3% of the employment share. When compared regionally and nationally this share far exceeds the average of 5.3% and 4.9% respectively. The smallest sector in the District is the water supply; sewerage, waste management and remediation activities, employing just 175 people, although when compared regionally and nationally the sector is relatively small across the board.

Table 7.4: Employment by Industry (2017)³¹				
	North West Leicestershire	North West Leicestershire	East Midlands	Great Britain
	(Employee Jobs)	(%)	(%)	(%)
B: Mining and Quarrying	1,750	3.1	0.2	0.2
C: Manufacturing	7,000	12.5	13.1	8.1
D: Electricity, Gas, Steam and Air Conditioning Supply	600	1.1	0.7	0.4
E: Water Supply; Sewerage, Waste Management and Remediation Activities	175	0.3	0.6	0.7
F: Construction	3,500	6.2	5	4.6
G: Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	9,000	16.1	17.1	15.3
H: Transportation and Storage	8,000	14.3	5.3	4.9
I: Accommodation and Food Service Activities	4,000	7.1	7.5	7.5
J: Information and Communication	1,250	2.2	2.2	4.2
K: Financial and Insurance Activities	600	1.1	1.5	3.6
L: Real Estate Activities	600	1.1	0.9	1.6
M: Professional, Scientific and Technical Activities	6,000	10.7	6.5	8.6
N: Administrative and Support Service Activities	5,000	8.9	9.5	9
O: Public Administration and Defence; Compulsory Social Security	700	1.2	3.9	4.3
P: Education	3,000	5.4	8.7	8.9
Q: Human Health and Social Work Activities	2,500	4.5	13.1	13.3
R: Arts, Entertainment and Recreation	1,250	2.2	2.2	2.5

Table 7.4: Employment by Industry (2017)³¹				
	North West Leicestershire	North West Leicestershire	East Midlands	Great Britain
	(Employee Jobs)	(%)	(%)	(%)
S: Other Service Activities	800	1.4	1.8	2.1

Table 7.5 presents the average earnings of both males and females in full time employment in the District. Overall weekly pay is £511.60, which is higher than the regional average of £499.40, but lower than the national average of £552.30. The gross weekly pay of females in the District (£451.90) also exceeds the regional average of £430.40 but falls below the national average of £494. Gross weekly pay for males in NWL (£543.30) is lower than both the regional (£545.90) and national (£594.10) averages. The same trend for males and females also continues in gross hourly pay, however overall hourly pay (£12.37) falls below both the regional (£12.47) and national (£13.99) averages.

Table 7.5 Earnings³¹			
	NWL	East Midlands	GB
Grossly Weekly Pay			
Full-Time Males	£ 543.30	£ 545.90	£ 594.10
Full-Time Females	£ 451.90	£ 430.40	£ 494.00
All Full Time Employees	£ 511.60	£ 499.40	£ 552.30
Grossly Hourly Pay - Excluding Overtime			
Full-Time Males	£ 12.91	£ 13.08	£ 14.56
Full-Time Females	£ 11.74	£ 11.30	£ 13.17
All Full Time Employees	£ 12.37	£ 12.46	£ 13.99

Table 7.6 shows the gender pay gap in the District. The difference in pay between males and females in the District is £91.40 per week. This is better than both the regional average of £115.50 and the national average £100.10 per week.

Table 7.6 Gender Pay Gap (per week)³¹			
	Men	Women	Gender Gap
NWL	£ 543.30	£ 451.90	-£ 91.40
East Midlands	£ 545.90	£ 430.40	-£ 115.50
GB	£ 594.10	£ 494.00	-£ 100.10

The Leicester and Leicestershire, Strategic Economic Plan (SEP) 2014 - 2020³⁴, sets out the economic ambition and priorities for Leicester and Leicestershire. Leicester and Leicestershire have been allocated £111 million worth of funding from European Structural and Investment Funds³⁵. The allocations are as follows:

- Structural Funds allocation: £54m
- European Social Fund: £54m
- European Agricultural Fund for Rural Development: £3.5m

This EU funding along with additional local funding has been earmarked for five major growth projects in Leicestershire:

- Leicester Launchpad
- East Midlands Gateway Strategic Rail Freight Interchange
- Loughborough University Science & Enterprise Parks
- MIRA Technology Park (MTP) Enterprise Zone
- Coalville Growth Corridor

High levels of employment in the transportation and storage sector is influenced by East Midlands Airport which is the second largest cargo airport in the UK, with DHL, UPS and TNT all having major distribution facilities based around the airport. The East Midlands Gateway will provide a unique 250 acre distribution and logistics development alongside East Midlands Airport and the M1 with a rail terminal providing up to 557,414 m² of large scale warehousing to establish the UK's largest multi modal hub creating over 7,000 new jobs³⁴.

There are also plans for development in the Coalville Growth Corridor, along the A511 between Ashby, Coalville and Bardon, which is a key route in the county linking east to west. It is considered that improvements along the A511 corridor could unlock significant housing and commercial developments, which will enable the construction of 5,275 houses and 25 hectares of employment developments that have been planned, but remain constrained by poor transport infrastructure. Figure 7.3 outlines the locations of the Coalville Growth Corridor and the East Midlands Gateway.

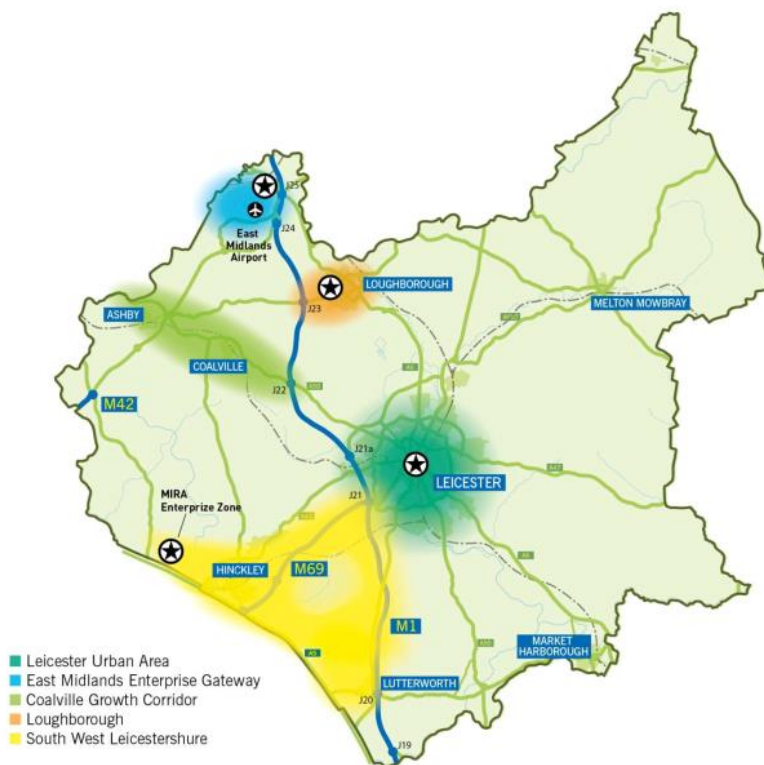
A number of other growth opportunities within the District include the Castle Donington Industrial Area, Bardon Hill, Stephenson and Hermitage Industrial Estates, the Amazon Distribution Centre and Ashby Business Park have been completed. These have resulted in growth in the wholesale,

³⁴ Leicester and Leicestershire, Strategic Economic Plan 2014 - 2020

³⁵ Leicester & Leicestershire Enterprise Partnership, European Structural and Investment Funds Strategy 2014-2020

transportation and storage sectors with a lesser impact on the professional, scientific and technical and administrative and support sectors.

Figure 7.3 Key Growth Areas in Leicestershire³⁴



A Retail and Leisure Capacity Study³⁶ was completed in February 2019. The purpose of this study was to provide a robust and credible evidence base to inform the Council's work on the early review of the adopted Local Plan, as well as considering changes since previous evidence was prepared. The updated Local Plan will reflect the emerging employment, housing, retail and leisure needs up to 2039.

The study also made recommendations for the main centres in North West Leicestershire District and how identified growth could be accommodated. These recommendations are summarised as follows:

³⁶ Retail and Leisure Capacity Study: Final Report, Lichfields, February 2019

- The majority of new floorspace for convenience goods could be distributed in Coalville;
- In qualitative terms, food store retail provision is strong within the District with no areas of deficiency in food store provision being identified;
- Investment is needed in the District to retain the existing levels of comparison goods expenditure;
- Growth in expenditure should provide opportunities to enhance food and beverage provision within all centres;
- Residents in the District have limited access to most types of commercial leisure and entertainment facilities;
- One of the short term priorities for accommodating growth should be the reoccupation of vacant floorspace in the centres; and
- Ashby de la Zouch and Coalville have several development opportunities which offer potential to accommodate all of the projected growth up to 2036.

Table 7.7 shows the vacancy rates within the main settlements. This shows the highest level of vacancy (by a significant amount) is in Coalville, with the rate in 2018 slightly higher than the previous peak in 2014. Vacancy rates in Ashby-de-la-Zouch have decreased slightly in the past 12 months, and is still the lowest percentage of any centre in the District. Over the same period Castle Donington vacancy rates increased from 3.6% to 7.1%. Ibstock is the only town where vacancy rates have risen from 0% vacancy to 10.87% between 2016-2018. Measham is the only town where vacancy rates have remained unchanged between 2017 and 2018.

Table 7.7: Town Centre Retail Vacancy Rates 2012-2018³⁷						
Town/Settlement	2013	2014	2015	2016	2017	2018
Coalville	14.7%	15.7%	14.7%	10.1%	12.9%	17.2%
Ashby-de-la-Zouch	4.7%	3.7%	3.1%	0.5%	1.6%	1%
Castle Donington	3.6%	2.7%	0%		3.6%	7.1%
Ibstock	0.0%	1.8%		0%	2.7%	10.8%
Measham	5.9%	5.9%	8.8%		2.9%	2.9%

³⁷ North West Leicestershire Annual Monitoring Report 2017/18

Tourism in NWL is related to growth around the National Forest and the airport. Tourism venues in and around the District include: Ashby Castle, Breedon Priory Church, Calke Abbey, Donington Park, Donington Le Heath Manor House, and East Midlands Airport Aeropark.

The Ashby Canal runs through the District and has a current and future potential to benefit the tourism economy. The northern section of the canal has been restored from Moira to Donisthorpe and links Conkers, Moira Furnace and Donisthorpe Woodland Park in an area that is developing as a tourist destination.

Restoration is now focused on extending the current terminus of the canal from Snarestone northwards for a distance of 4.5 km to a new canal wharf at Measham. The power to acquire the necessary land and to construct and maintain the canal was provided in October 2005 when the Leicestershire County Council (Ashby-de-la-Zouch Extension) Order was approved under the powers of the Transport and Works Act 1992. The main objectives of the restoration are to:

- Advance and accelerate continuing economic regeneration of the area and contribute to rural diversification and social inclusion through opportunities for employment, leisure, recreation, learning and skills;
- Provide a green gateway to the National Forest and develop and link the recreational tourism facilities;
- Improve the environmental quality of the area;
- Provide a recreational, cultural and social resource for the local community; and
- Connect Measham, and ultimately Moira, to the national waterways network.

Tourism currently accounts for 7% of all employment in Leicestershire³⁸. In 2016, Leicester and Leicestershire was ranked 34th out of 38 Local Enterprise Partnership (LEP) areas in England, for total number of overnight stays, with 285,939. The Leicestershire LEP has identified that there is clear potential for NWL to link into the County's wider tourism activities and develop mutually supportive packages with other attractions such as Calke Abbey and Twycross Zoo. Such packages could extend the length of time spent in the area and increase overall expenditure by visitors.

³⁸ Leicester & Leicestershire Economic Assessment Summary, 2010

³⁹ Visit England, Tourism Survey 2016, LEP Areas

4 Transport & Access

NWL benefits from excellent road transport links, strategically placed at the intersections of the M1 and A42 motorways, making it a leading location for the logistics and distribution industry. The A42/M42 provides a route to the South West, the M1 to the central North and the South East, whilst the A50 links the District with both Leicester and Burton Upon Trent.

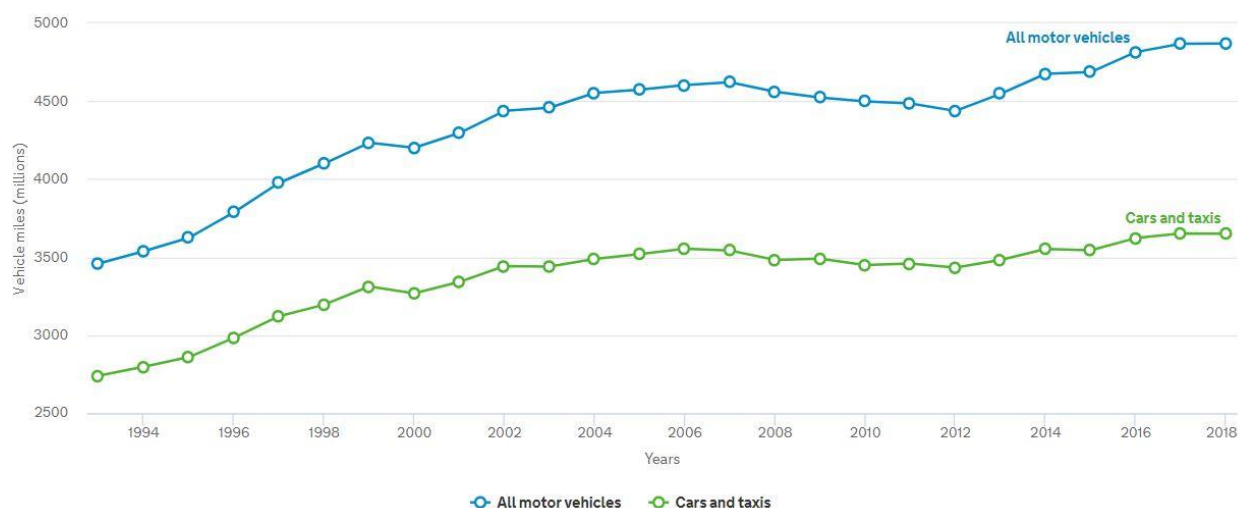
Despite a well-connected road network, the District currently has no passenger rail services. The Leicester & Burton rail freight line runs north-west from Leicester to Burton upon Trent and is used to transport aggregates from Bardon Hill Quarry. The new East Midlands Parkway Station lies just outside of the District, approximately 4km from Kegworth. This station provides regular services on the London to Nottingham mainline. However, there are currently no bus services to and from the station and very limited walking and cycling options, meaning either a car and taxi are the only real suitable modes of access.

Figure 8.1 shows the total amount of motor vehicles on major roads, in million miles, from 2011 to 2018 within Leicestershire. It shows that the total vehicle mileage is up from 4,485,700 in 2011 to 4,869,000 in 2018.

In 2016, 92% of all journeys to work in the District were made using a private car or van, whilst just 7% were made on foot⁴⁰. This far exceeds the national average of 78%. Details on other modes such as cycling and bus and coach travel could not be provided as sample sizes are too small to provide reliable estimates.

⁴⁰ ONS, Travel to work methods and the time it takes to commute from home to work, Labour Force Survey, 2007 to 2016

Figure 8.1 Annual traffic by vehicle type in Leicestershire, in million vehicle miles 2011 to 2018⁴¹



There are a number of bus routes that connect the main settlements of Coalville, Ibstock, Castle Donington and Ashby-de-la-Zouch, as well as larger centres such as Loughborough, Leicester, Nottingham and Burton upon Trent. However, these services become limited at evening and weekends. Kegworth is located in the north-east corner of the District, and despite being well-connected to Loughborough, Derby and Nottingham, with the exception of Castle Donington, it has no public transport links with any other settlements within the District.

East Midlands Airport is located in the north of the District and is one of the UK's major freight airports. The airport has seen significant growth in both passenger numbers and cargo freight since the mid-1990s and supports businesses within the sub-region, as well as a range of markets across much of England. The airport also provides a connection for international business travellers and tourists.

East Midlands Airport is well connected by road, via the M1, A42, A50 and A52. There is a 24-hour a day, 7 day a week bus network (Skylink) connecting the airport to Coalville, Shepshed and Kegworth as well larger centres such as Derby, Nottingham, Leicester, Long and Loughborough.

Despite having good road connections there are no direct rail links with East Midlands Airport. East Midlands Parkway rail station is approximately 6 miles away. 71% of staff employed at the Airport commute via private car, 9.4% travel by bus, 1.6% cycle and 13.9% car share⁴². The East

⁴¹ Department for Transport, Traffic Counts Leicestershire <https://roadtraffic.dft.gov.uk/local-authorities/60>
Accessed on: 13/06/2019

⁴² East Midlands Airport Sustainable Development Plan, 2015

Midlands Airport Sustainable Development Plan (2015)⁴² seeks to encourage the increased use of public transport journeys to the airport, for both passengers and staff and is looking to develop new bus services to Ilkeston, Coalville, Shepshed Ashby, Swadlincote and Burton.

In November 2016, the Secretary of State confirmed part of the Phase 2b route of the High Speed 2 (HS2). This route will go through the District as part of the Eastern leg connecting the East Midlands, South Yorkshire, Leeds and the North East. This will pass through the District on the route of the M42 then A42, passing between Measham and Ashby-de-la-Zouch. A new station the 'East Midlands Hub' would be provided in Toton, in the outskirts of Nottingham to the north east of the District. Figure 8.2 shows the route of the Phase 2B.

Figure 8.2: HS2 Phase 2B Route⁴³



The number 52 National Cycle Route runs north to south through the District. This is a 50 mile cycle route that starts in Warwick and finishes just west of Loughborough, where it joins National Route 6. Most of the route is on roads, but there are sections through Coalville, Thringstone and Ravenstone that benefit from being traffic-free. Other National Cycle Routes in the District include

⁴³ New Civil Engineer, HS2 routes for Phase 2 confirmed, Katherine Smale, 18th July 2017, <https://www.newcivilengineer.com/business-culture/hs2-routes-for-phase-2-confirmed/10021706.article>
Accessed on: 20/07/2018



Route 63, running from Burton on Trent to Wisbech, Route 6 running from Watford to Cumbria and Route 15 linking Belton to Grantham.

NWL has commissioned cycling strategies for both Coalville and Ashby de la Zouch, in order to support the economic growth of the area and maximise the tourism, active travel and recreational cycling opportunities for residents and visitors to the District. It is thought that the national cycleways associated with the HS2 route through the District should connect to these local networks.⁴⁴

⁴⁴ North West Leicestershire Cycling Strategy Part 2: Ashby de la Zouch, 2016

5 Air, Noise & Light Pollution

5.1.1 Air Pollution

Air pollution in NWL is predominantly a result of emissions from road vehicles. Carbon monoxide (CO), oxides of nitrogen (NOX), volatile organic compounds (VOCs) and small particulate matter (PM¹⁰) are among the pollutants emitted from vehicle exhausts. These compounds can cause severe cardio-vascular and respiratory harm to people, especially in the long term, and also have adverse effects on the natural and built environment.

There are five Air Quality Management Areas (AQMA) in the NWL District all of which have been declared for their exceedance nitrogen dioxide (NO²). These are detailed in Table 9.1 below. Figures 9.1 and 9.1 show the locations of the AQMAs in the District.

Table 9.1 AQMA in the NWL District ⁴⁵		
AQMA Name	Description	Date declared
Castle Donington AQMA	An area encompassing the High Street and Bondgate area of Castle Donington. The northern extent of the AQMA has been amended to include the junction of Bondgate with The Spittal and the southern extent shall extend to the Moira Arms.	09/01/2008
Coalville AQMA	An area encompassing parts of Stephenson Way, Broom Leys Road and Bardon Road in Coalville.	09/01/2008
Copt Oak AQMA	An area encompassing 10 properties in the part of the village of Copt Oak that lies within the boundaries of the NWL District.	30/07/2009
Kegworth AQMA	Busy trunk road fronted by residential properties.	26/07/2004
M1 AQMA	Motorway with selected close properties.	26/07/2004

⁴⁵ Defra, Air Information Resource, AQMAs Declared by North West Leicestershire District Council

Figure 9.1: AQMAs in the North of the District

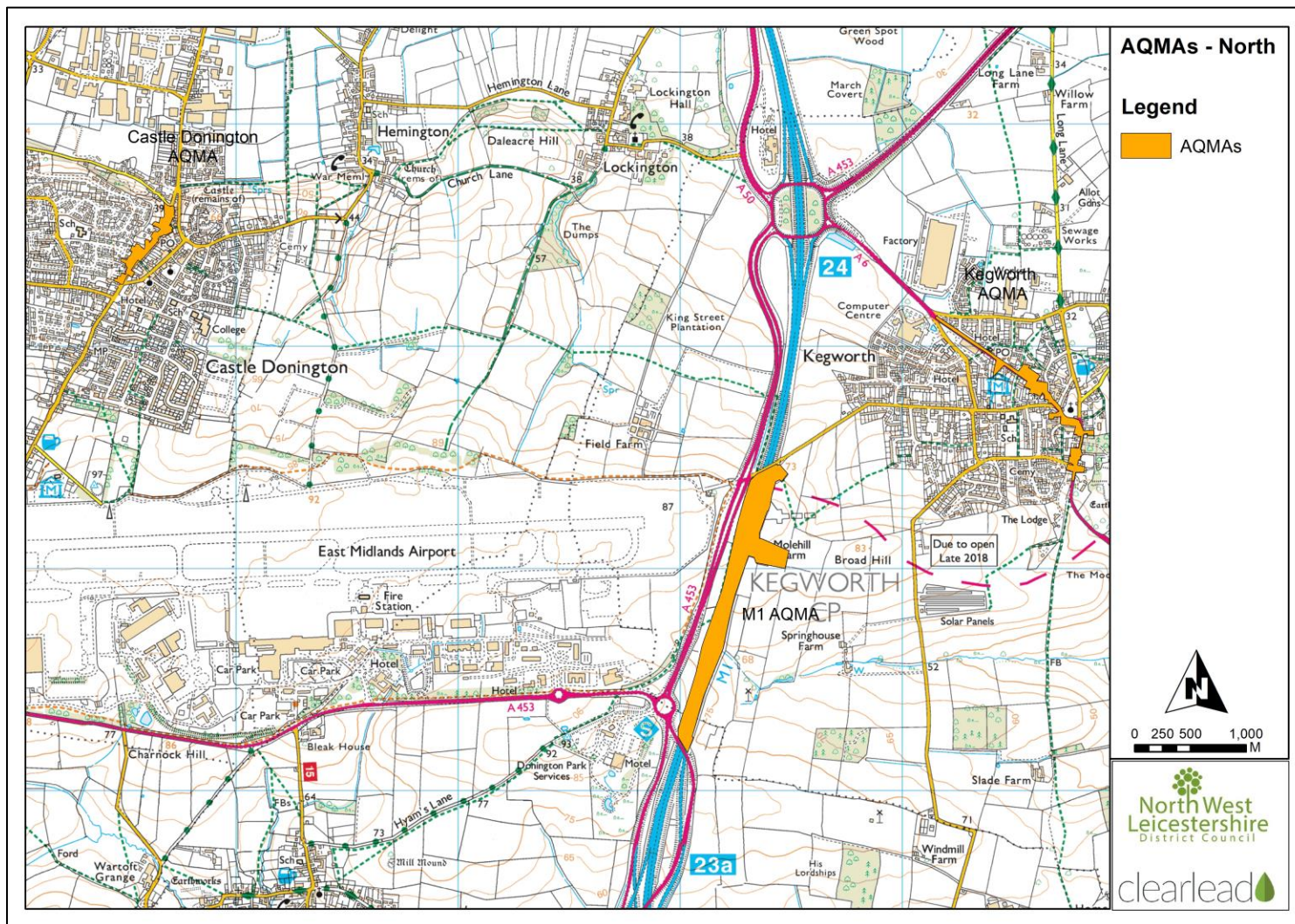
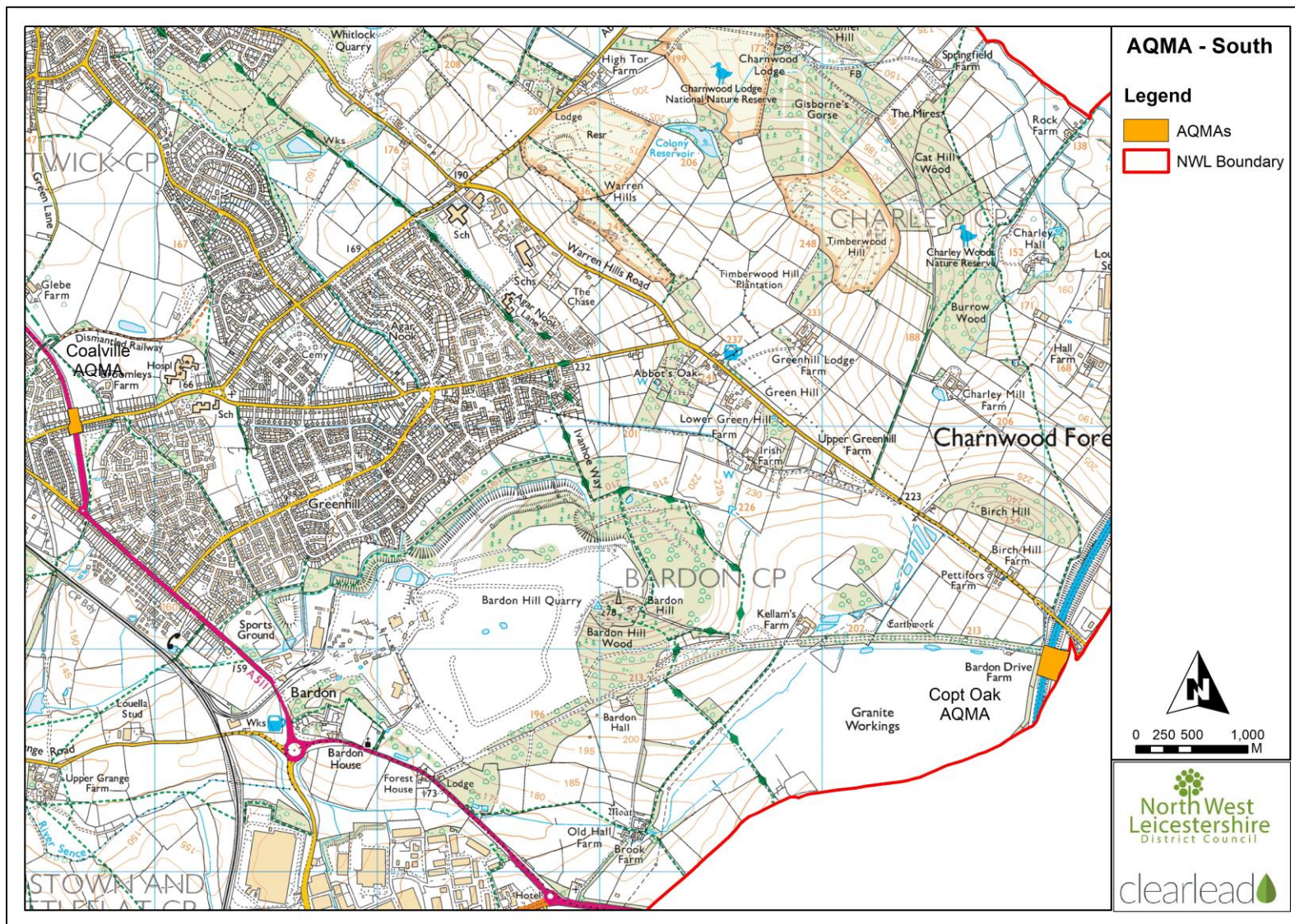


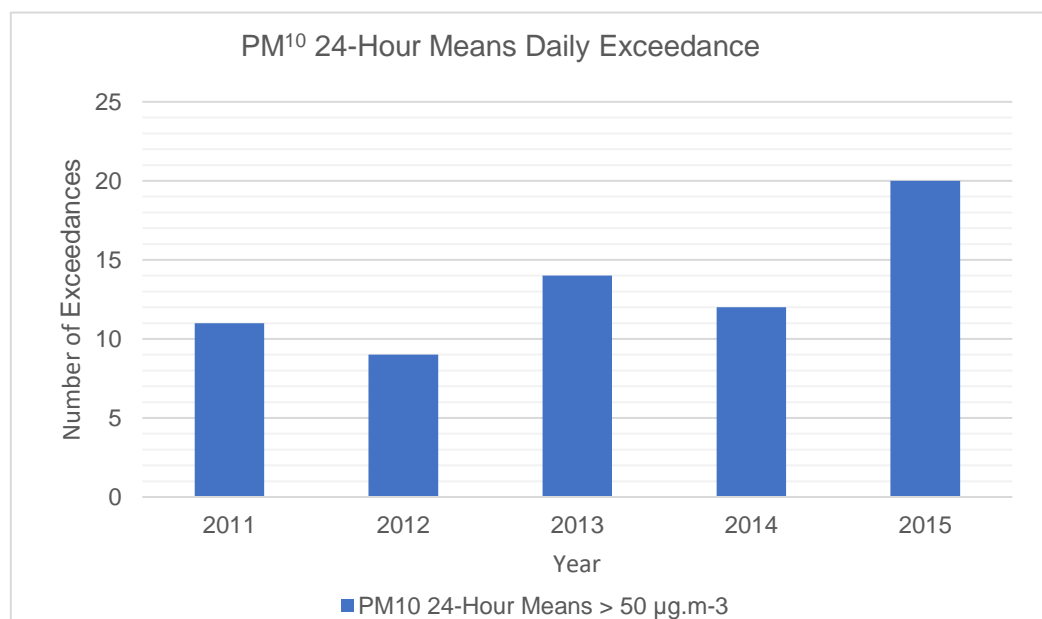
Figure 9.2: AQMAs in the South of the District



As part of the UK Air Quality Strategy (2000) and the EU First Daughter 50 Directive (99/30/EC) the annual limit values for both particulates and nitrogen dioxide is $40 \mu\text{g}/\text{m}^3$ ⁴⁶. According to the North West Leicestershire Air Quality Annual Status Report (2018)⁴⁷, the District has the highest fraction of attributable deaths to particulate air pollution in Leicestershire with 6 deaths in 2018.

The Air Quality Annual Status Report concluded that of the five AQMAs, Copt Oak and Castle Donington both contain smaller sites that exceeded the nitrogen dioxide standard. The report also highlights that with regards to particulate matter (PM^{10}), the national annual mean air quality standard of $40\mu\text{g}.\text{m}^{-3}$, was not exceeded at either of these sites. The daily mean standard of $50\mu\text{g}.\text{m}^{-3}$, was exceeded 20 times, which is within the national limit of 35 times per year. However, this number continues to increase year on year. Figure 9.3 below demonstrates this.

Figure 9.3: 24 Hour PM^{10} Daily Exceedances of $50\mu\text{g}.\text{m}^{-3}$ ⁴⁷



⁴⁶ Defra, National Air Quality Objectives and European Directive Limit and Target Values for the Protection of Human Health, 2010

⁴⁷ North West Leicestershire Air Quality Annual Status Report, 2018

5.1.2 Noise

Noise pollution is the result of high levels of noise or an unpleasant sound that causes temporary disruption. This can be applicable to sounds or noises that are unnatural in either their volume or their production.

The principle noise sources in the District are road traffic, in particular the motorways and major trunk roads. East Midlands Airport is also a key source of noise complaints, especially with the increasing role as a freight hub requiring night flights. At current there is no limit on night flights but East Midlands Airport, have introduced new noise surcharge and a more stringent noise penalty scheme.

The airport has also put measures in place to monitor and manage aircraft noise, which includes monitoring systems to help monitor existing noise with the purpose of improving performance. This monitoring system tracks planes and enables production of community noise reports and enforcement of night noise fines. There are permanent noise monitors in place a Kegworth, Castle Donington, Sutton Bonington, Weston upon Trent and Wilson, which provide data which contributes to monthly community noise reports published online.

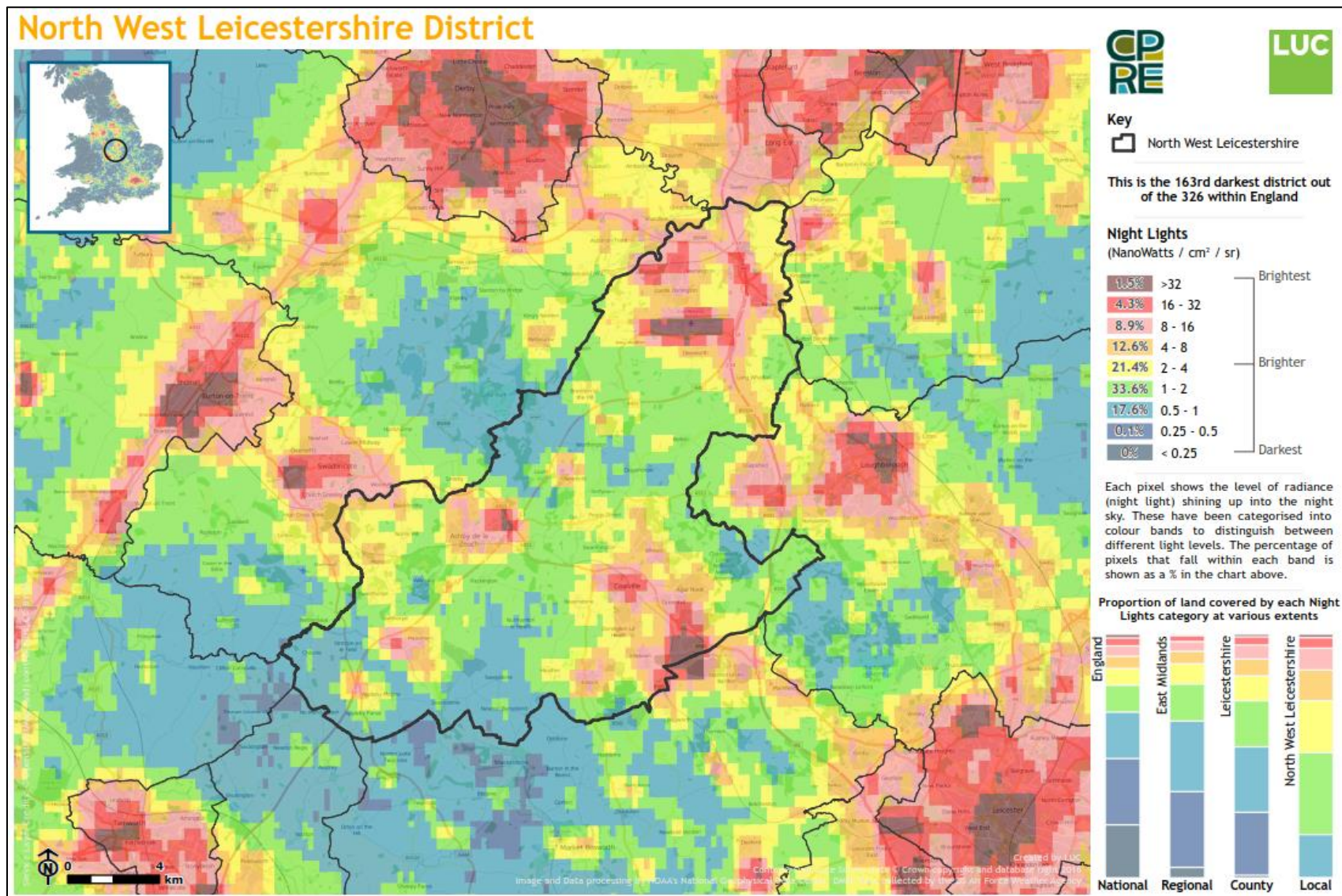
5.1.3 Light Pollution

Light pollution is caused by excessive or intrusive artificial light arising from poor or insensitive design. Light pollution can have a detrimental effect on the character and amenity of an area after dark. NWL is ranked as the 163rd darkest district out 326 in England⁴⁸. Figure 9.4 shows the level of light pollution in the District. Each pixel on the map shows the level of radiance (night light) shining up into the night sky, which have been categorised into colour bands to distinguish between different light levels.

Figure 9.4 also shows the percentage of the District that falls under each lighting band. This highlights that NWL has no areas identified as the <0.25 Nano Watts/cm²/sr otherwise known as the darkest skies. 33.6% of the light in the District falls 1-2 Nano Watts/cm²/sr. Areas with the brightest of skies (>32 Nano Watts/cm²/sr) are located around Coalville, junction 13 of the A42 outside of Ashby-de-la-Zouch, Castle Donington, East Midland Airport and Junctions 24 and 24A of the M1.

⁴⁸ Campaign to Protect Rural England (CPRE), England's Light Pollution and Dark Skies Satellite Map, 2016

Figure 9.4: Light Pollution⁴⁸



6 Climate Change

6.1 Greenhouse Gas Emissions

Emissions of carbon expressed as 'per capita' (per residents) allow a comparison across different areas. Per capita CO₂ emissions for NWL are more than double the national and county average at 11.7 tonnes per capita. Although per capita CO₂ emissions in the District have exceeded the national and regional trends since 2005, and they continue to decrease year on year. Figure 10.1 demonstrates this trend, and whilst it exceeds the Leicestershire average it matches the overall downward trend.

Figure 10.1: Per Capita Emissions (t) between 2005 - 2016⁴⁹

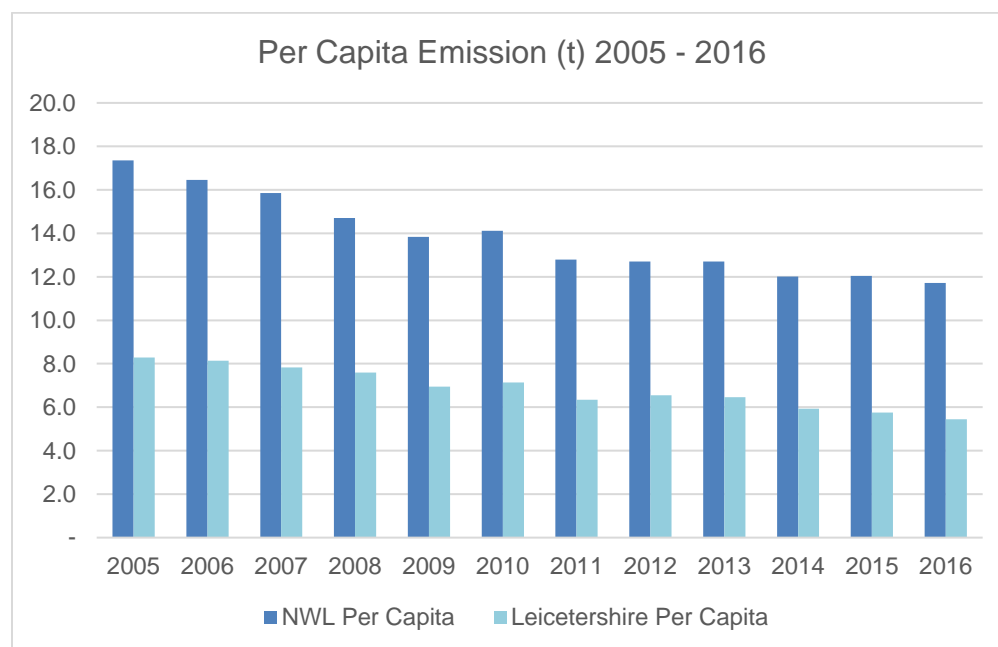


Table 10.1 shows the local, regional and national carbon emission estimates broken down into sectors. In 2016, total emissions in the District were estimated at 922.9 tonnes, with over half of the total emissions being sourced from industry. This matches both the regional and national trends, but the percentage contributions far exceeds them both at 50.48%. The lowest contribution comes from domestic emissions at just 19.25% (177.7 tonnes), which is far lower than the regional (30.19%) and national (28.65%) averages. Transport makes up the second highest percentage,

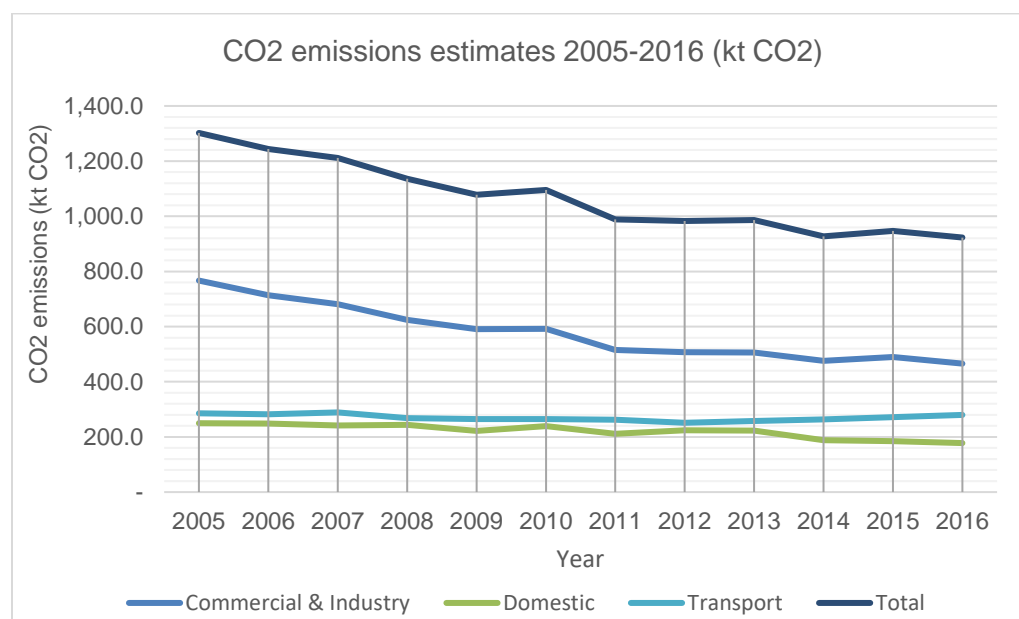
⁴⁹ UK local authority and regional carbon dioxide emissions national statistics: 2005-2014, BEIS

which highlights the reliance upon private cars and the strong distribution / logistics sector within the District.

Table 10.1 Local, Regional and National Emissions Estimates for 2016 (kt CO₂)⁴⁹						
	NW Leics.	% of Total	Leics.	% of Total	UK	% of Total
Industry and Commercial	465.9	50.48%	1,388.7	37.51%	137,629	38.50%
Domestic	177.7	19.25%	1,117.8	30.19%	102,432	28.65%
Transport	279.4	30.27%	1,195.6	32.30%	128,053	35.82%
Total	922.9		3,702.1		357,469	
Per Capita Emissions (t)	11.7		5.4		5.4	

Since 2005, overall emissions and those from industry/commercial and domestic sectors have seen steady decreases, however, the transport sector has shown little change. Figure 13.1 shows this downward trend.

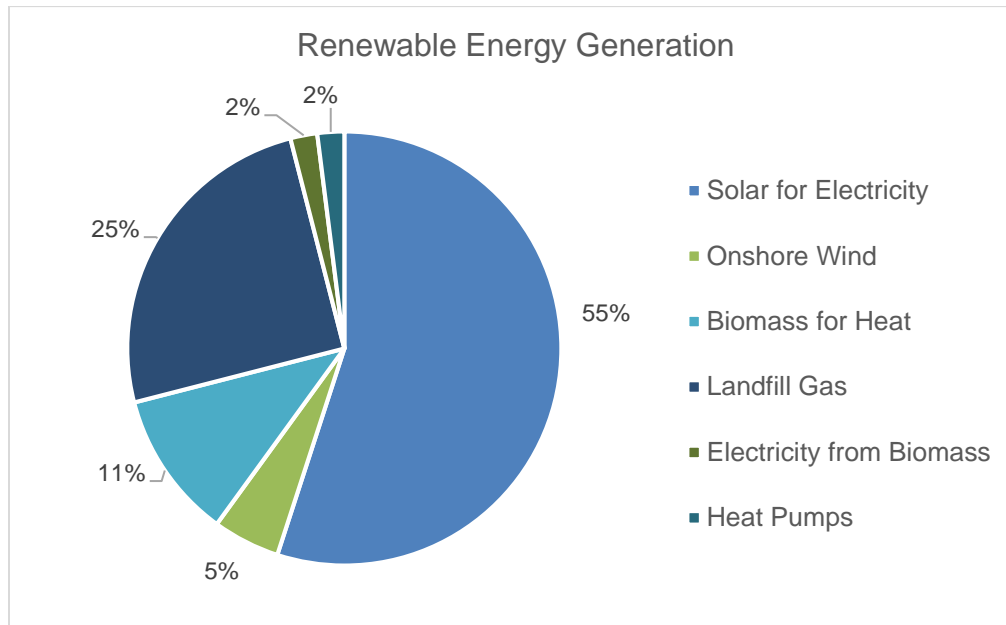
Figure 10.2: CO₂ Emission Estimates 2005 – 2016 (kt CO₂)⁴⁹



The charity Green Alliance Trust has estimated the generation and capacity for renewable energy generation in local authorities across England and Wales in 2016. Currently NWL generates

81,129 MWh⁵⁰, giving it an overall rank of 134 out of 348 local authorities across England and Wales. Figure 10.3 shows the breakdown of renewable energy sources in NWL, of which solar for electricity makes the greatest contribution at 55%. The second largest contribution comes from landfill gas.

Figure 10.3: Renewable Energy Generation, Breakdown by Source (2016)⁵⁰



Renewable energy generation in the District makes up 13% of the total electricity consumption, which exceeds the county average of 8.6%. It is anticipated that the District has a capacity for 57.6 MW, of which 82% could be supplied by solar for electricity. This puts the District into the top 100 local authorities in England and Wales, with a rank of 92.

The Council is committed to a 'Green Footprints Challenge' with the aim of making people feel proud to be part of a 'greener' District. It was launched in 2008 and through community leadership it aims to work with residents and businesses to implement schemes to tackle climate change and increase resilience to it.

⁵⁰ The Green Alliance, Renewable Energy Locator, <https://renewablelocator.green-alliance.org.uk/area/374> Accessed on: 06/07/2018

6.2 Flooding

The Humber river basin district covers approximately 26,000km², and comprises 15 river catchments and three flood risk areas⁵¹. North West Leicestershire falls within the River Trent Catchment area. Fluvial flooding is the primary source of flood risk in NW Leicestershire. The northern and eastern parts of the District are vulnerable to flooding from the River Trent and River Soar, whilst the southern and western parts of the District are vulnerable to flooding from the River Mease, River Sense and other tributaries of the River Trent and River Soar, including Gilwiskaw Brook and Grace Dieu Brook.

The main urban areas at risk of fluvial flooding from the River Trent are, Hemington, Lockington and Castle Donington, whilst Kegworth is at risk from the River Soar. Diseworth is at risk of flooding from Whatton Brook, Osgathorpe and Belton from Westmeadow Brook, Thingstone and Whitwick from Grace Dieu Brook, whilst Ashby de la Zouch and Packington from Gilwiskaw Brook and Appleby Magna is at risk from minor watercourses and tributaries⁵². Figure 10.4 shows the flood zones in the District.

The Infrastructure Delivery Plan 2016⁵³ identified the potential localised risk of pluvial flooding particularly where drainage system capacities have been exceeded by sudden periods of high intensity rainfall. Areas identified to be at risk of pluvial flooding include Coalville, Measham, Blackfordby, Appleby Magna, Peggs Green and Castle Donington’.

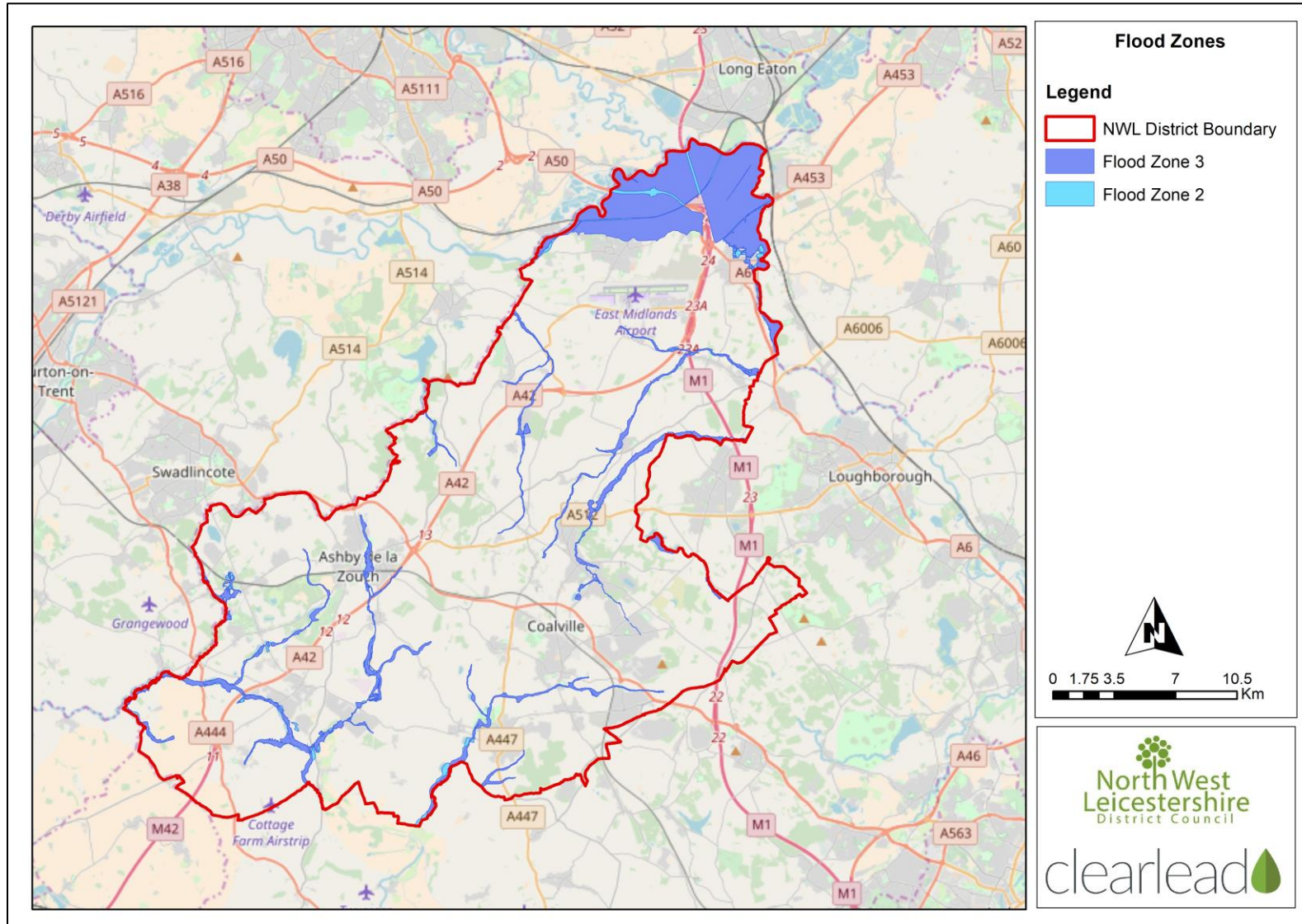
The impacts of climate change are expected to be warmer, wetter winters and hotter, drier summers. Sea levels are expected to rise and, together with an increase in rainfall, lead to more frequent flooding of rivers. Extreme weather events such as storms or heat waves are likely to be more frequent.

⁵¹ Humber Flood Risk Management Plan (2016), Environment Agency

⁵² North West Leicestershire SFRA SFRA Report (2015 update) Prepared by Atkins

⁵³ North West Leicestershire Infrastructure Delivery Plan, 2016

Figure 10.4: Flood Zones



7 Biodiversity & Geodiversity

7.1 Biodiversity

Biodiversity includes not only the variety of individual species but also the genetic diversity within species and the range of ecosystems that support them. Despite Leicestershire being largely rural, it is amongst one of the poorest counties in the UK for sites of recognised nature conservation value. The very best sites (Sites of Special Scientific Interest (SSSI)) represent only about 1.3 % of the land area⁵⁴. There is one internationally designed nature conservation area in the District, the River Mease Special Area of Conservation (SAC). The SAC is at risk from adverse effects from wastewater treatment outflows that have introduced damagingly high level of phosphates into the river. In March 2012, Natural England finalised a Restoration Plan and technical document to support the improvement of the River and restore features on which protected wildlife depends.

In addition to these sites, the District has one National Nature Reserve (NNR); Charnwood Lodge; and five Local Nature Reserves (LNR); Moira Junction, Nature Alive, New Lount Saltersford Wood, Saltersford Wood and Snibston Grange. Figure 11.1 shows the distribution of nature conservation sites within the District.

The majority of the land in the District is used for farming, which is one of the main reasons why habitats for wildlife are being reduced, squeezing out the local wildlife and leading to their continued decline. According to the Leicester, Leicestershire and Rutland BAP, the following are the main reasons for biodiversity decline in the region:

- Modern farming methods;
- Development (housing, roads, mineral extraction);
- Recreational activities;
- Drainage schemes; and
- Tidying up and destruction of rough ground and 'brown-field' land.

There are 17 designated SSSI sites within the District⁵⁵. Table 11.1 below lists these along with the reasons for designation and current condition. The majority of SSSI designations have been

⁵⁴ Space for Wildlife - The Leicester, Leicestershire and Rutland Biodiversity Action Plan 2016 - 2026

⁵⁵ Excludes Blackbrook Reservoir SSSI located within Charnwood District but adjacent to the boundary with NWL. This SSSI could potentially be affected by development within NWL and this would be considered within the SA should any development be proposed in this part of NWL within the Local Plan Partial Review.

awarded for their biological contributions, with just Bardon Hill designated solely for geological reasons. The majority of sites are either in favourable or unfavourable but recovering condition. Blackbrook Reservoir, Lount Meadows and Grace Dieu & High Shapley SSSI sites have areas demonstrating decline. 100% of the Ashby Canal and the River Mease SSSI are in unfavourable condition with no change since the previous condition survey. 44% of the Dimmesdale site has now been destroyed.

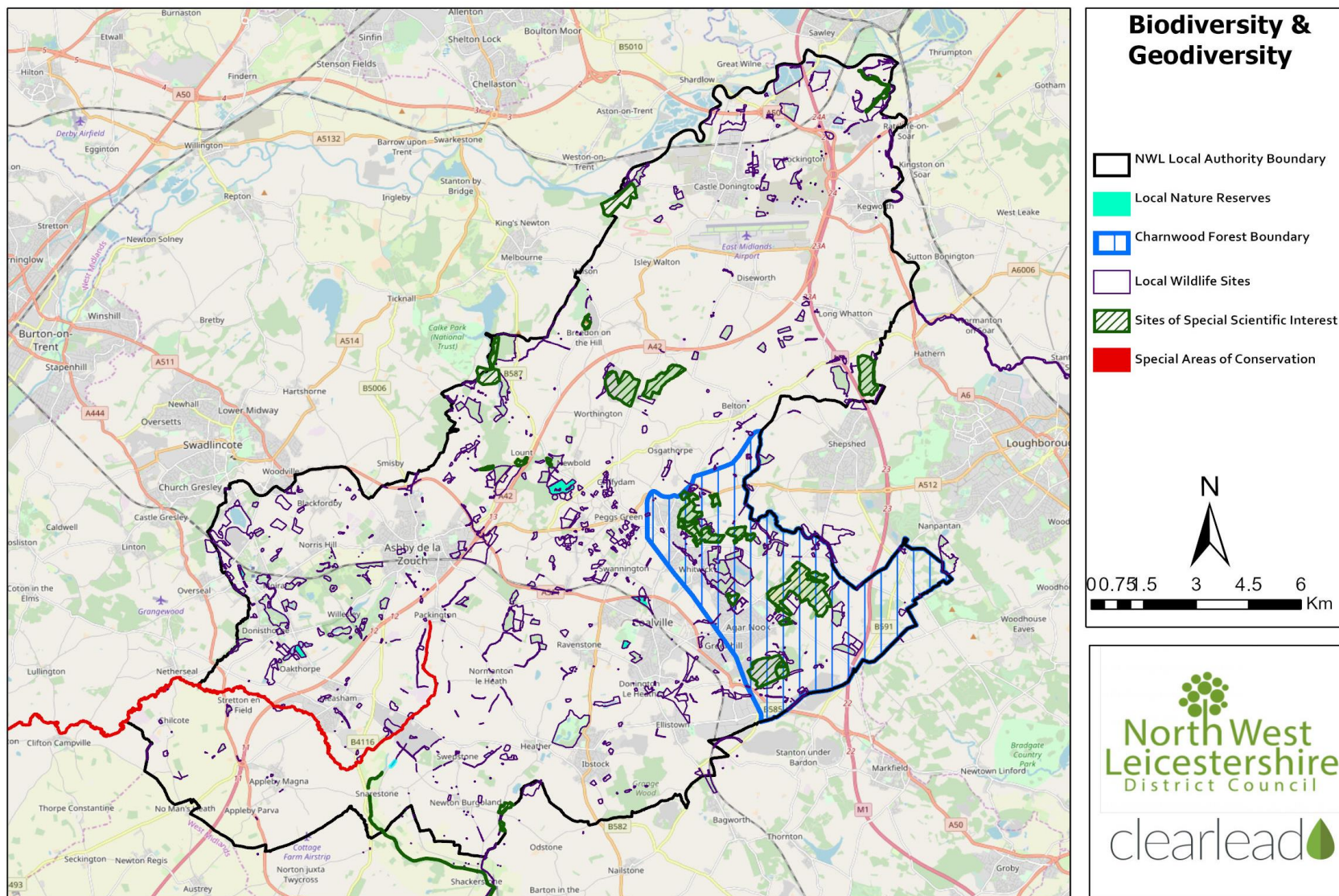
Table 11.1: SSSI Conditions ⁵⁶		
SSSI Site Name	Designation	Condition
Pasture & Aspin Woods	Biological	23% Favourable
		76% Unfavourable - Recovering
Breedon Cloud Wood & Quarry	Mixed	93% Favourable
		7% Unfavourable - Recovering
Breedon Hill Quarry	Biological	100% Unfavourable - Recovering
Donnington Park	Biological	100% Unfavourable - Recovering
Lockington Marshes	Biological	32% Favourable
		68% Unfavourable - Recovering
Dimmesdale	Mixed	26% Unfavourable - Recovering
		28% Unfavourable - No Change
		44% Destroyed
Lount Meadows	Biological	49% Unfavourable - Recovering
		51% Unfavourable - declining
Ashby Canal	Biological	100% Unfavourable - No Change
Newton Burgoland Marshes	Biological	58% Unfavourable - Recovering
		42% Favourable
Oakley Wood	Biological	100% Favourable
River Mease	Biological	100% Unfavourable - No Change
Bardon Hill	Geological	100% Favourable
Holly Rock Fields	Biological	45% Favourable

⁵⁶ Natural England, Designated Sites View

Table 11.1: SSSI Conditions ⁵⁶		
SSSI Site Name	Designation	Condition
		55% Unfavourable - No Change
Coalville Meadows	Biological	100% Unfavourable - Recovering
Charnwood Lodge	Biological	67% Unfavourable - Recovering
		33% Favourable
Blackbrook Reservoir	Biological	15% Favourable
		85% Unfavourable - Declining
Grace Dieu & High Shapley	Mixed	3% Favourable
		60% Unfavourable - Recovering
		5% Unfavourable - No Change
		30% Unfavourable - Declining

Local Wildlife Sites (LWS) are important areas for wildlife in NWL and have been identified using robust, scientifically-determined criteria and detailed ecological surveys. The criteria are also developed specifically for Leicestershire. LWS are listed as designated sites in the NPPF. Equally Leicestershire and Rutland Wildlife Trust reserves are managed for wildlife and are also important sites for wildlife and biodiversity within the District.

Figure 11.1: Biodiversity and Geodiversity within the District



The north of the District is bounded by the Trent River Valley. Over the past two centuries, industrialisation along the Trent has taken its toll and agriculture, mineral extraction and development have all led to a loss of reed beds, wet grassland and other habitats. As a result species such as redshank, lapwing and otters have suffered dramatic decline in numbers.

In light of this the 'Transforming the Trent Valley Living Landscape' project has been set up by the Derbyshire Wildlife Trust. The long-term vision of the project is to create a wildlife corridor along the Derbyshire Trent Valley, linking wetlands and other low-lying habitats and reconnecting the river, floodplain and the wildlife that depends on them. The project aims to boost recreation and leisure facilities, promote access and connectivity whilst presenting a varied and biodiverse landscape of habitats that encourages environmental conservation.

Erewash Borough Council is currently undertaking work to comprehensively map the section of the Trent Valley area within its area, recording key elements including assets, leisure and recreational facilities, land owners and land uses. Sawley Marina is located within NWL and is identified as a key attraction in the Trent Valley area.

The Trent River Valley represents one of the Districts numerous wildlife corridors. Other wildlife corridors include⁵⁷:

- River Mease and tributaries (International and national importance);
- River Soar (Regional and national importance);
- M1 (Regional importance);
- Ivanhoe Railway (Regional importance);
- Gilwiskaw Brook (County importance);
- River Sence (County importance);
- Black Brook (County importance);
- Grace Dieu Brook (County importance);
- Ashby Canal (County importance);
- M42/A42 (County importance);
- Measham Railway/Ivanhoe Way (County importance);
- Long Whatton, Diseworth and Westmeadow Brooks (Local importance);
- Ramsley Brook (Local importance);
- Swannington Railway/Cloud Trail (Local importance);
- A511 (Local importance); and
- A512 (Local importance).

Figure 11.2 is reproduced from the draft North West Leicestershire: Ecological Network, LRERC 2015 document and shows wildlife corridors and biodiversity hotspots within NWL.

⁵⁷ Draft North West Leicestershire: Ecological Network, LRERC 2015

7.2 Geodiversity

Geodiversity defined as ‘the variety of rocks, fossils, minerals, natural processes, landforms and soils that underlie and determine the character of our landscape and environment’⁵⁸.

In addition to their SSSI status, Bardon Hill Quarry and Breedon Cloud Wood and Quarry are designated Regionally Important Geological and Geomorphological Sites (RIGs). These are the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). Sites are selected under locally-developed criteria, according to their value for education, scientific study, historical significance or aesthetic qualities⁵⁸.

In the eastern area of the District, extending west to Coalville, lies Charnwood Forest. Although it is not formally designated, the Forest is of both biological and geological importance, making up part of the wider National Forest as well as a Regional Park. The Forest is home to some of the oldest rocks in the UK, and remains the only place in Western Europe where Precambrian fossils have been found.

Charnwood Forest Regional Park is a partnership of local authorities, agencies, user groups and land management organisations, who are all working to manage and promote the unique cultural and heritage features of the area. The partnership has recently received National Lottery Funding for a two year development which will lead to the delivery of around £3 million worth of projects to protect and celebrate Charnwood Forest between 2020 and 2025. One of the main aims of the project is to gain UNESCO Geo Park Status, which will see international recognition and protection, which could limit development in certain areas within close proximity to the site.

7.3 Green Infrastructure & Natural Capital

Natural England defines green infrastructure as:

‘a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design

⁵⁸ UK Geodiversity Action Plan, 2017

and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types⁵⁹.

The Landscape Sensitivity and Green Infrastructure Study for Leicester & Leicestershire, 2017⁶⁰ identified that areas toward the east of Coalville are green infrastructure deficient. It highlighted that parts of NWL generally have a poorer living environment than other areas in the County, and the delivery of high quality green infrastructure alongside new development has the greatest potential to positively impact on health and well-being in these areas.

The Government's 25 Year Environment Plan⁶¹ aims to support local authorities in assessing and improving their provision of green infrastructure. The Plan also aims to develop a Nature Recovery Network to protect and restore wildlife and provide opportunities to re-introduce species that have been lost from the countryside. This Nature Recovery Network will provide 500,000 hectares of additional wildlife habitat, more effective linkages to existing protected sites and landscapes, as well as urban green and blue infrastructure⁶¹. As well as helping wildlife thrive, the Nature Recovery Network could be designed to bring a wide range of additional benefits: greater public enjoyment; pollination; carbon capture; water quality improvements and flood management.

This work will be underpinned by a natural capital approach. This is defined as:

'The elements of nature that directly and indirectly produce value or benefits to people, including ecosystems, species, fresh-water, land, minerals, the air and oceans, as well as natural processes and functions⁶².

The 25 Year Environment Plan promotes a natural capital approach to achieve more effective decisions that can support environmental enhancement and help deliver benefits such as reduced long-term flood risk, increased biodiversity, and a boost to long-term prosperity⁶¹.

change. Facilitating the movement of species across the District and creating a network of natural greenspaces would help improve biodiversity and help species adapt to climate change.

⁵⁹ Natural England, Green Infrastructure Guidance

⁶⁰ Landscape Sensitivity and Green Infrastructure Study for Leicester & Leicestershire, 2017 Prepared by LUC

⁶¹ HM Government, A Green Future: Our 25 Year Plan to Improve the Environment, 2018

⁶² The Natural Capital Coalition, <https://naturalcapitalcoalition.org/natural-capital/> Accessed on: 20/07/2018

8 Landscape, Townscape & Land

8.1 Landscape Character

Landscape character is defined as *'a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse'*⁶³. Landscape gives a locality its sense of place, making it different from neighbouring localities.

Landscapes can be areas designated for their natural beauty or ambience but can also be 'ordinary' places that are not given statutory protection. Urban landscapes also have an important role to play in affecting the quality of people's lives, therefore enhancing 'townscapes' is also important.

Natural England have defined natural subdivisions in England, known as National Character Area (NCA). These are based on a combination of landscape, biodiversity, geodiversity and economic activity. There are 159 National Character Areas in total and they which follow natural, rather than administrative, boundaries. NWL falls into five landscape character areas; Trent Valley Washlands, Melbourne Parklands, Leicestershire and South Derbyshire Coalfield, Mease/Sence Lowlands and Charnwood as defined by Natural England. These areas have been defined below in Table 12.1 along with their key issues.

Table 12.1 National Character Area Profiles ⁶⁴		
Name	Natural England Description	Key Issues
Charnwood	Charnwood is a unique landscape, marked out by its geology and upland qualities, which contrast with the surrounding gentle lowlands'. It is formed by a mosaic of heathland, farmland, parkland and woodland. The underlying Precambrian geology has given rise to the distinct area of land characterised by exposures of rugged, rocky outcrops. It is a relatively well wooded landscape, with many areas of mixed, deciduous and coniferous woodlands.	<ul style="list-style-type: none"> • Poor woodland and hedgerow management • Poor condition of drystone walls • Insensitive built development • Quarry extensions • Visitor pressures

⁶³ Landscape Character Assessment (2008) Landscape Character Network, <http://webarchive.nationalarchives.gov.uk/20101111121753/http://www.landscapecharacter.org.uk/>

⁶⁴ Natural England, National Character Area Profiles. <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles>

Table 12.1 National Character Area Profiles⁶⁴

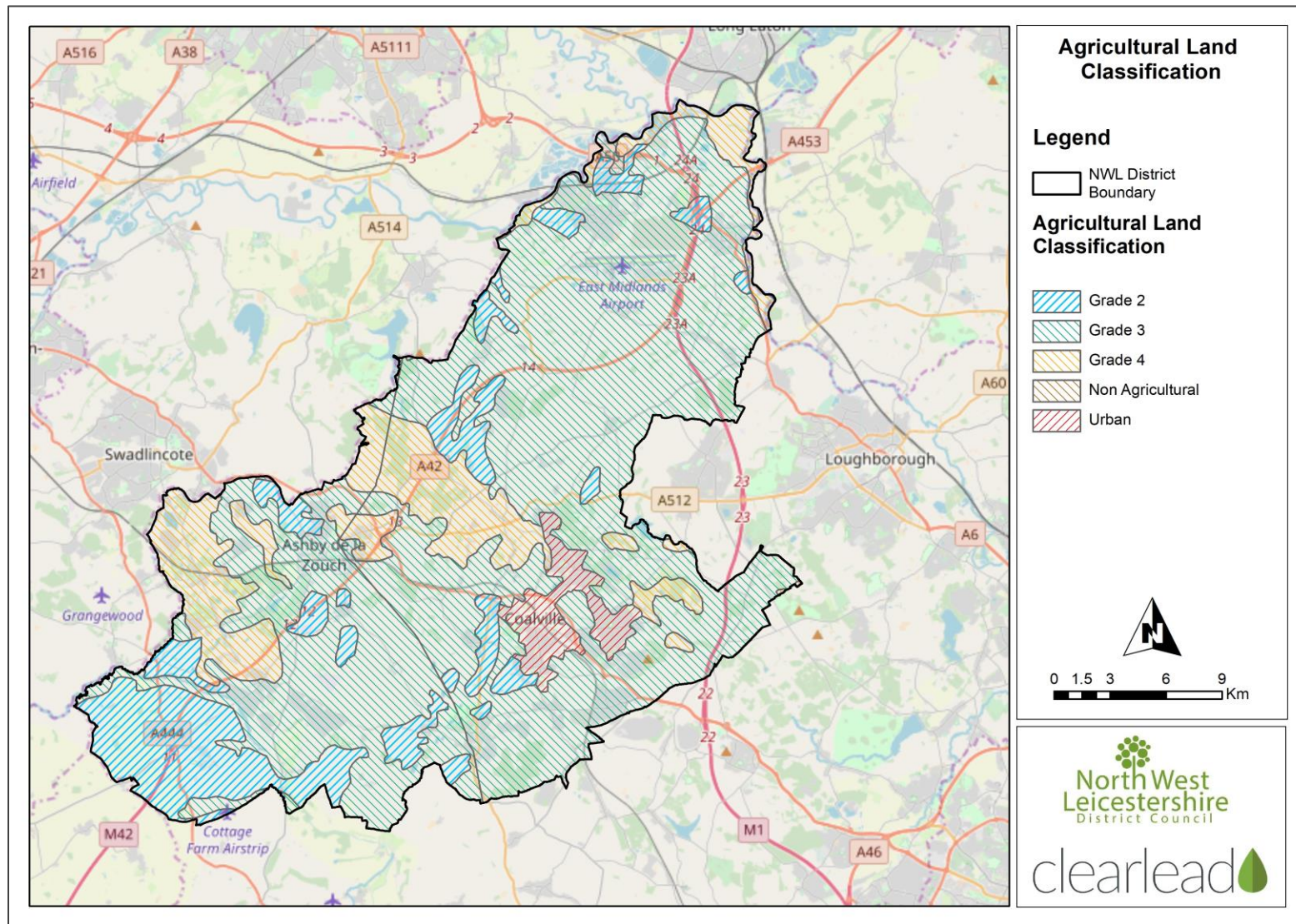
Name	Natural England Description	Key Issues
Mease/Sence Lowlands	The Mease/Sence Lowlands are a gently rolling agricultural landscape centred around the rivers Mease, Sence and Anker. The area extends across: Derbyshire in the north, Warwickshire in the south, Leicestershire in the east and Staffordshire in the west. With its towns lying on the fringes of the NCA, only a very small percentage of it is urban. These lowlands retain a rural, remote character, with small villages, red brick farmsteads and occasional historic parkland and country houses. The National Forest extends into the area north of the River Mease.	<ul style="list-style-type: none"> • Poor hedgerow condition, due to loss and ageing of species and inappropriate species, • Loss of field ponds • Conversion of pasture to arable
Leicestershire and South Derbyshire Coalfield	The Leicestershire and South Derbyshire Coalfield landform consists of a plateau with unrestricted views of shallow valleys and gentle ridges that become less pronounced in the south due to a layer of glacial till. To the east the land rises steeply, affording views of the Charnwood NCA. Ancient woodland straddles part of the boundary in the north, where the land falls away affording views of the wooded rolling landscape of the Melbourne Parklands NCA. The River Mease SSSI and SAC forms part of the boundary with the Mease/Sence Lowlands NCA in the south-west and the Leicestershire Vales NCA forms a less visually defined border in the south.	<ul style="list-style-type: none"> • Loss of trees and hedgerows • Poor management of hedgerows • Potential high visibility of new development due to open character of landscape • Restoration of former mineral workings.
Melbourne Parklands	The Melbourne Parklands NCA is located between the ancient forests of Needwood and Charnwood. The Trent Valley forms its northern and western boundary, in a wide arc sweeping round from its confluence with the River Soar in the north-east, to Burton-upon-Trent in the south-west. It is a landscape of rolling farmland, ancient and plantation woodland and, as the name suggests, a cluster of landscaped parklands with grand country houses, one of which, Calke Abbey, boasts a Grade II* listed historic park and garden.	<ul style="list-style-type: none"> • Decline of woodland • Quarry extensions • Pressure on hedgerows due to arable intensification • Road widening and improvements expansion of East Midlands Airport.
Trent Valley Washlands	The Trent Valley Washlands NCA comprises the river flood plain corridors of the middle reaches of the River Trent's catchment in the heart of England. It is a distinctly narrow, linear and low-lying landscape, often clearly delineated at its edges by higher ground, and it is largely comprised of the flat flood plains and gravel terraces of the rivers.	<ul style="list-style-type: none"> • Road, industrial and extractive development • Loss of hedgerows • Loss of small streams and drainage ditches.

8.2 Agricultural Land and Soils

The Agricultural Land Classification (ALC) provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use⁶⁵. The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a. This land is seen as the most productive, efficient and flexible land that can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals. In general, the NWL area is predominantly Grade 3 (Good to moderate), with pockets of Grade 2 (Excellent) around areas such as Castle Donington, Breedon on the Hill, Appleby Magna and Ibstock. The area north of Ashby De-La-Zouch and to the west of Measham is made up of poorer, Grade 4 soil types. Figure 12.1 shows the soil gradings in the District.

⁶⁵ Agricultural Land Classification of England and Wales, 1988

Figure 12.1: Agricultural Land Classification



The majority of the District lies within the National Forest, which spans the three counties of Derbyshire, Leicestershire and Staffordshire. The East Midlands region has a low proportion of woodland therefore the overall aim of the National Forest is to increase woodland cover. The Forest is a nationally leading example of landscape scale forest creation, by securing 102 hectares of new forest habitat since 2012⁶⁶. Charnwood Forest makes up part of the National Forest. Charnwood is a unique landscape marked out by its volcanic geology and, despite covering less than 10% of Leicestershire, contains more than 50% of the SSSI and 67% of the county's designated areas for geodiversity⁶⁷.

8.3 Contamination and Ground Stability

The long history of coal mining within NWL has left a legacy of potential land instability and contamination issues. The Coal Authority has defined a 'Development High Risk Area' that covers most of the District. In this area the potential land instability and other safety risks associated with former coal mining activities are likely to be greatest. They include, for example, areas of known or suspected shallow coal mining, recorded mine entries and areas of former surface mining. Other than householder developments and those exceptions as identified on the Coal Authority's exemptions list, all new development proposals within the defined Development High Risk Area must be supported by a Coal Mining Risk Assessment, or equivalent, in order to identify any potential risks to the new development and any required remediation measures⁶⁸.

Other problems associated with coal mining include waste tip stability and environmental pollution. Remediation of colliery waste tips has been on-going for many years and many tips have been restored to productive use. The responsibility for determining the extent and effects of such constraints lies with developers.

8.4 Townscape

The NWL District is comprised of a variety of settlements including the towns of Coalville and Ashby de la Zouch, as well as a number of other smaller settlements, associated urban fringe and rural farmed areas. The area is also noted for its industrial heritage and past coal and clay industries are evident as previous workings and restored landscapes⁶⁹. Ashby de la Zouch town

⁶⁶ National Forest Company's Annual Report, 2017

⁶⁷ Charnwood Forest Landscape Partnership Scheme

⁶⁸ North West Leicestershire Local Plan, adopted November 2017

⁶⁹ North West Leicestershire, Settlement Fringe Assessment, 2010



centre is historic and attractive with many notable buildings and churches. It is considered an attractive place to establish and expand business activity, namely due to its strategic location, visual setting and business offering, including modern units and industrial parks.

NWL District Council has been working with partners to deliver a range of projects aimed at regenerating Coalville town centre some of which will also achieve an improvement in townscape:

- Coalville Conservation Areas: Parts of the town centre have been designated as a Conservation Area, with the aim to protect the town's buildings and industrial heritage. This is considered an important way to regenerate and revitalise the town; and
- Shop Front Improvement Scheme: NWL District Council has been offering grants to local shop owners on Hotel Street and the High Street of 50%-70% of the cost towards repairs and restoration works. These streets have been identified for support in the design and upgrading of their fronts as they are located within the designated Coalville Conservation Area.

9 Cultural Heritage

Listing buildings aim to *'mark and celebrate a building's special architectural and historic interest, and also brings it under the consideration of the planning system, so that it can be protected for future generations'*⁷⁰.

The categories of listed buildings are described by Historic England as the following⁷⁰:

- Grade I buildings are of exceptional interest. Only 2.5% of Listed buildings are Grade I;
- Grade II* buildings are particularly important buildings of more than special interest. 5.8% of Listed buildings are Grade II*; and
- Grade II buildings are of special interest. 91.7% of all Listed buildings are in this class and it is the most likely grade of listing for a home owner.

The National Heritage List for England also includes Scheduled Monuments and Registered Parks and Gardens.

NWL has 675 buildings and monuments listed on the National Heritage List for England, of which seven are Grade I Listed, 602 are Grade II Listed, 40 are Grade II* Listed, 23 are Scheduled Monuments and three are Grade II* Listed Parks and Gardens⁷¹. Five of the buildings on the list are considered to be 'At Risk' and are listed on the Historic England Risk Register⁷². The entries and their conditions are listed in Table 13.1 below.

Figure 13.1 shows the distribution of listed buildings in the District, of which the majority are located in Ashby-de-le Zouch and Castle Donington.

⁷⁰ Historic England, Listed Buildings <https://historicengland.org.uk/listing/what-is-designation/listed-buildings/> Accessed on: 09/07/2018

⁷¹ Historic England, National Heritage List for England Search, <https://historicengland.org.uk/listing/the-list/results?q=north%20west%20leicestershire&county=North%20West%20Leicestershire&parish=-1&searchtype=nhlesearch&searchResultsPerPage=20> Accessed on: 09/07/2018

⁷² Historic England, Heritage at Risk Register, <https://historicengland.org.uk/advice/heritage-at-risk/search-register/> Accessed on 09/07/2018



Table 13.1: Heritage at Risk⁷²

Entry Name	Heritage Category	Condition	Priority Category
Church of St Michael and All Angels, Church Street, Appleby Magna	Listed Building Grade II*	Poor	D - Slow decay; solution agreed but not yet implemented
Church of St John the Baptist, Market Place, Whitwick	Listed Building Grade II*	Poor	C - Slow decay; no solution agreed
Church of St Laurence, High Street, Measham	Listed Building Grade II*	Very bad	B - Immediate risk of further rapid deterioration or loss of fabric; solution agreed but not yet implemented
Snibston Colliery, Ashby Road	Scheduled Monument	Fair	E - Under repair or in fair to good repair, but no user identified; or under threat of vacancy with no obvious new user (applicable only to buildings capable of beneficial use)
Former Midland Railway Station, Station Road, Ashby-de-la-Zouch	Listed Building Grade II*	Fair	F - Repair scheme in progress and (where applicable) end use or user identified; or functionally redundant buildings with new use agreed but not yet implemented.

In addition to Listed buildings, the District has 25 locally designated Conservation Areas, which are designated for their architectural or historic interest, and the character is desirable to preserve or enhance. The designation of Conservation Areas introduces control over permitted developer rights and the demolition of buildings, as well as controls over works to trees. The Conservation Areas are mainly representative of rural, agricultural areas with traditional houses, cottages and farm buildings, as well as areas characteristic of the industrial revolution, Georgian architecture and country houses. Conservation Area Appraisals have been undertaken for each of the designated areas.

There is archaeological potential in North West Leicestershire from the Bronze Age, roman period, and more recent modern (industrial) period. An excavation in North West Leicestershire has led to the discovery of a Bronze Age gold hoard and aerial photographic searches had revealed unseen features of possible archaeological origin in and around the study area. Many of the sites had not yet undergone verification by archaeological investigation, but 25 sites of possible Bronze Age, or earlier, date had now been recorded in an around the study area. A number of these sites had been destroyed, with only a few being subject to prior archaeological recording. The area was mainly arable agricultural land, and thus sites had been subject to much damage from plough erosion⁷³.

⁷³ University of Leicester Archaeological Services (2006) The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda: <http://www.le.ac.uk/ulas/publications/eastmidsfw.html> (Accessed on: 02/08/18)

10 Water

10.1 Water Supply

NWL is underlain by a wide variety of geological strata, including Coal Measures, Mudstone, Sandstone as well as Sand & Gravel and Clay drift deposits. These encompass a range of aquifer types that are protected by groundwater Source Protection Zones (SPZs). The District contains Principle, Secondary A and Undifferentiated Secondary Aquifers. Principle Aquifers usually have an intergranular and/or fracture permeability meaning that they usually provide a high level of water storage. Areas around Castle Donington, Measham and Coalville are underlain by Principle aquifers which are considered to be vulnerable. High vulnerability indicates that there is a high likelihood that pollutants discharged at ground level (i.e. above the soil zone) could reach groundwater aquifers. The Environment Agency may not grant permits or licences for certain activities located within a sensitive location⁷⁴.

Severn Trent Water manages the water supply in the area. The Severn Trent Water Resources Management Plan 2018⁷⁵ identifies the risk that an increase in population will pose, however, the success of leakage and demand management initiatives means that over the past decade they have been able to meet the growing demand in the region without having to increase the total amount of water put into supply.

Severn Trent Water have recently carried out a drought assessment which concluded that the raw water supplies are already resilient to a 1 in 200 year drought event, and therefore they do not anticipate needing to invest in new sources of water for the purpose of improving drought resilience⁷⁵. Despite this, the Water Resources Management Plan highlights that the population of the supply area is likely grow by a further 1.13 million people over the next 25 years⁷⁵ which will mean that water resources in the region will become more scarce. Severn Trent Water therefore aims to increase leakage and demand management efforts to offset this growth in water demand.

Through drainage network modelling, the North West Leicestershire District Council Detailed Water Cycle Study (2012)⁷⁶ has assessed sewer capacity and the potential improvements

⁷⁴ Environment Agency Guidance, Protect Groundwater and Prevent Groundwater Pollution, 2017

⁷⁵ Severn Trent Water Water Resources Management Plan 2018 (Draft)

⁷⁶ North West Leicestershire District Council Detailed Water Cycle Study (2012) (Prepared by AMEC)

required from proposed population growth. This concluded that with minor modifications to the existing infrastructure, there are unlikely to be significant constraints on growth.

However, the study identified that wastewater treatment is likely to be at capacity at Snarrows WwTW which serves Coalville (from 2015) and Castle Donington WwTW (from 2023 onwards). The WwTW serving Ibstock and Kegworth however, were also identified as having capacity for new developments. Severn Trent Water are currently investigating solutions to reduce surface water flow to the Snarrows WwTW which uses up valuable capacity.

10.2 Water Quality

Water Quality in the UK is based on standards set in the Water Framework Directive (2000)⁷⁷. The key objectives at European level are general protection of the aquatic ecology, specific protection of unique and valuable habitats, protection of drinking water resources, and protection of bathing water. All water courses must achieve the Water Framework Directive standard 'good' by 2027.

10.2.1 Surface Water

Table 14.1 shows the water quality of the District's rivers, and the main reasons they are not achieving overall 'Good' status. Water quality is ranked from 'High' to 'Bad' and are judged for their ecological and chemical status.

Of the water bodies in the District, 50% of them are rated either 'Bad' or 'Poor'. Coventry and Ashby Canal is the only water body that is considered to be of a good water quality. With the exception of the Hemington Brook Catchment (tributary of the Soar), all water bodies are not achieving 'Good' status, in part due to sewage discharge.

There is a significant issue with the water quality of the River Mease which is designated as an SAC. It is currently classified as being "Unfavourable No Change", due to high nutrient / phosphorus levels. The North West Leicestershire Infrastructure Delivery Plan⁷⁸ identified that future works are likely to be required in the Packington (and possibly Measham) Wastewater Treatment Work (WwTW) catchments in order to reduce the phosphate levels down from the previous objective of an annual average of 1mg/l to the Habitats Directive objective of 0.04mg/l downstream of Packington in the Gilwiskaw Brook and 0.05mg/l in the River Mease⁰⁷⁸.

⁷⁷The EU Water Framework Directive (2000) http://ec.europa.eu/environment/water/water-framework/index_en.html Accessed on: 5/11/2018

⁷⁸ North West Leicestershire Infrastructure Delivery Plan, 2016

Table 14.1: Surface Water Quality⁷⁹

Water Body Name	Overall Classification	Ecological	Chemical	Reasons for Not Achieving 'Good' Status
Mease from Gilwiskaw Bk to Hooborough Brook	Poor	Poor	Good	Urban development, sewage discharge and livestock
Gilwiskaw Brook from Source to River Mease	Moderate	Moderate	Good	Sewage discharge and livestock
Mease from Source to Gilwiskaw Brook	Poor	Poor	Good	Urban development, sewage discharge, livestock, drought, poor soil management and poor nutrient management
Sence from Source to Ibstock Brook	Poor	Poor	Good	Poor drainage, sewage discharge and livestock
Long Whatton Brook Catchment (trib of Soar)	Moderate	Moderate	Good	Sewage discharge, livestock, mining, transport drainage and river bank erosion
Soar from Long Whatton Brook to Trent	Bad	Bad	Good	Poor drainage, sewage discharge, livestock, arable land use, poor nutrient management
Trent from Dove to Derwent	Moderate	Moderate	Good	Transport drainage, sewage discharge and livestock
Ramsley Brook from Source to Carr-New	Poor	Poor	Good	Sewage discharge
Coventry and Ashby Canals	Good	Good	Good	N/A
Ibstock Brook from Source to River Sence	Moderate	Moderate	Good	Sewage discharge, livestock, private sewage treatment and land drainage

⁷⁹ Environment Agency, Catchment Data Explorer, <http://environment.data.gov.uk/catchment-planning/>
Accessed on: 5/11/2018

Table 14.1: Surface Water Quality⁷⁹

Water Body Name	Overall Classification	Ecological	Chemical	Reasons for Not Achieving 'Good' Status
Hemington Brook Catchment (trib of the Soar)	Bad	Bad	Good	Drought, river bank erosion, poor agriculture and rural land management
Trent from Derwent to Soar	Moderate	Moderate	Good	Sewage discharge and transport drainage

10.2.2 Groundwater Quality

According to the Water Directive Framework, the presumption in relation to groundwater should broadly be that it should not be polluted at all. Since groundwater moves slowly through the subsurface, the impact of human activities may last for a long time. This means that pollution that occurred some decades ago may still be threatening groundwater quality today and could continue to do so for several generations to come.

Table 14.2 shows the groundwater quality in the District. Groundwater quality is determined by quantitative and chemical elements. Overall, the Tame Anker Mease - Secondary Combined and Soar - Secondary Combined are the only groundwater sources achieving 'Good' overall status. Both the Lower Trent Erewash - Secondary Combined and the Tame Anker Mease - Coal Measures Swadlincote are classed as 'Poor' due to the presence of abandoned mining.

Table 14.2 Groundwater Quality⁷⁹

Groundwater Source	Overall Classification	Quantitative	Chemical	Reasons for Not Achieving 'Good' Status
Soar - PT Sandstone	Poor	Good	Poor	Livestock, poor nutrient management
Lower Trent Erewash - Secondary Combined	Poor	Good	Poor	Abandoned mining
Tame Anker Mease - Coal Measures Swadlincote	Poor	Good	Poor	Abandoned mining
Tame Anker Mease - Secondary Combined	Good	Good	Good	N/A
Soar - Secondary Combined	Good	Good	Good	N/A
Tame Anker Mease - PT Sandstone Burton	Poor	Good	Poor	Diffuse sources

11 Waste & Minerals

11.1 Waste

NWL District Council operates a household kerbside recycling scheme, which includes a full range of recyclables including: glass, plastic, cans, paper, card, garden waste and textiles. There is currently no food waste kerbside collection, so residents have to compost their own waste should they wish to do so. Therefore, food waste makes up a high proportion of waste going to landfill or other final disposal. According to the North West Leicestershire Infrastructure Delivery Plan⁵³, waste collection rounds are operating to maximum capacity and are being supplemented with 'incremental back up rounds'.

Table 15.1 shows the household waste collected by the council since the 2014/15 financial year. Overall waste generation continues to rise in the District; rising by 5.7% since 2014/15. Household waste not sent for recycling has increased by 5.3% over this period. Household waste sent for recycling, composting or to be reused is also up by 6.1%. The biggest increase since 2014/15 has been in household green recycling and reuse, with a rise of 11.2%.

Table 15.1: Household Waste Collection						
Financial Year	Household - total waste (tonnes)	Household - waste sent for recycling/ composting /reuse (tonnes)	Household dry recycling/ reuse (tonnes)	Household green recycling/ reuse (tonnes)	Household - waste not sent for recycling (tonnes)	Household - regular collection (not recycled) (tonnes)
2014-15	39,506	18,395	7,858	10,537	21,111	19,893
2015-16	40,351	18,755	7,838	10,917	21,596	19,686
2016-17	41,739	19,510	7,793	11,717	22,230	20,251
% Change	5.7%	6.1%	-0.8%	11.2%	5.3%	1.8%

The District has an overall recycling rate of 46.7%, ranking it 127th out of 350 local authorities⁸⁰. Table 15.2 shows the recycling rates between 2012/13 to 2016/17. Over this time the recycling rate has remained more or less the same, however the local authority ranking has fluctuated.

Table 15.2: Recycling Rates		
Financial Year	Recycling Rate (%)	Local Authority Rank
2012/13	46.5	106
2013/14	46.3	122
2014/15	46.6	134
2015/16	46.5	123
2016/17	46.7	127

11.2 Minerals

Leicestershire is highly mineral rich and is one of the principal producers of minerals in the country, particularly igneous rock. In fact, igneous rock extraction within the County accounts for around 75% of total sales in Leicestershire⁸¹. NWL also has a long history of coal mining, with it being mined in NWL from the medieval period.

The mineral resources within the County have been grouped into categories associated with their main uses. These are described as the following:

Igneous Rock: The igneous rock resources of Leicestershire have a relatively small spatial extent around the borders of Charnwood Forest and to the south-west of Leicester. Extraction is concentrated at four main sites: Bardon (within NWL); Cliffe Hill; Croft; and Mountsorrel.

Carboniferous Limestones: This appears at the surface in several small isolated inliers in NWL, close to the Leicestershire/Derbyshire border. At present, there are two of sites worked within NWL: at Breedon Hill and Cloud Hill.

Sand and Gravel Deposits: These occur in the valleys of the Rivers Wreake, Soar and Trent, as well as more complex series of isolated glacial deposits in areas to the south and west of Leicester. There are currently two sites in NWL that are currently active.

⁸⁰ Let's Recycle, Local Authority League Tables, <https://www.letsrecycle.com/councils/league-tables/> Accessed on: 09/07/2018

⁸¹ Leicestershire Minerals and Waste Local Plan Up to 2031, Pre-Submission, 2016



Brickclay: These resources are fairly extensive throughout Leicestershire. There are currently six brickworks with adjacent clay pits in the county, all located within NWL. There is a sequence of high quality pottery, pipe and refractory clays associated with the upper seams of the Middle Coal Measures of NWL and although restricted to a small area, these deposits have been recognised as an important national resource. The principal source of fireclay is currently the Donington Island site.

Coal: These deposits occur across the NWL District, as outcrops as well as in concealed measures towards the northeastern edge of the District. There is a small area where shallow coal reserves suitable for extraction by means of opencasting exist in the District. There is one opencast site in the District: Longmoor (between Ravenstone and Normanton-le-Heath) where operations have now ceased.