



**Community
Foundation**
Tyne & Wear and Northumberland



County Durham and Darlington's Vital Issues 2017

Environment

1 Environment

1.1 Overview

The County Durham area is well known for the variety of its rural landscapes, including beautiful heather moors, wild hills and dales, stunning rivers and waterfalls and a dramatic coastline. It also has picturesque and post-industrial towns and villages and historic buildings and landmarks. The natural and built environments are advertised as tourist attractions as well as providing opportunities for outdoor activities for visitors and local people. This section looks at the natural and built environments, biodiversity, as well as the levels of pollution, recycling and household living conditions, and how they all impact on the lives of local people.

1.2 Comparing the local environment to other areas

Various composite scores are available which assess the quality, and make-up of the environment, and associated issues, each of which is discussed below.

The **IMD Living Environment Deprivation Index** focuses on two indoor measures - housing without central heating, housing in poor condition (i.e. failing to meet the Decent Homes standard) - and two outdoor measures - air quality and road traffic accidents resulting in injury to pedestrians and cyclists. The County Durham and Darlington results on this measure are given in Table 11, below.

Table 11 - IMD Living Environment Deprivation Index, 2015ⁱ

Local Authority District name	Average score	Rank of average score	% of LSOAs in most deprived 10% nationally	Rank of % of LSOAs in most deprived 10% nationally	Decile
Darlington	10.7	285	0.0%	232	8
County Durham	6.1	320	1.2%	216	7

On this index, both County Durham and Darlington have low levels of deprivation, being within the least 30% (Darlington) and 40% (County Durham) of deprived communities. Of course, there is wide variation across the two areas, but no LSOA falls within the 1% most deprived. Part of Stanhope in Weardale and parts of Barnard Castle East and West fall in the 2% most deprived for indoors measures. All parts of County Durham and Darlington are in the 50% least deprived for outdoor measures.

By contrast, the **GTA Natural environment score** draws together housing density, road density, air quality, tranquillity, natural beauty, green space and water quality and indexes local scores to an England-wide average of 100. Scores above 100 indicate the environment is better than the average.

The scores for Darlington and County Durham are given in Table 12, below. These indicate that the NE's natural environment is among the better environments in England, and that County Durham is higher than the NE average. Darlington, by contrast scores below average. This measure rewards more rural areas, and this is reflected in the scores for County Durham and Darlington.

Table 12 – GTA Natural environment scores, 2013ⁱⁱ

Area Name	Natural environment: score (2013)
County Durham	149.4
Darlington	65.52
North East	123.55
England	100

This intra-regional difference is even more stark on the **GTPA Natural Beauty score**. This index focuses on assets including National Parks, Areas of Outstanding Natural Beauty, Heritage Coasts, Blue Flag beaches, ancient woodlands, nature reserves and environmentally-sensitive areas. Again, this is indexed to the England average, meaning scores above 100 are better than average.

Table 13 – GTA Natural environment scores, 2013ⁱⁱⁱ

Area Name	Natural beauty: score (2013)
County Durham	121.21
Darlington	3.99
North East	138.25
England	100.00

Table 13 shows County Durham scores well because of the number of natural assets in the area, but Darlington's score is very low, reflecting the low number of protected sites in the Darlington area.

1.3 Pollution and energy use

Table 14, below, shows the performance of County Durham and Darlington in terms of a range of environmental measures.

Table 14 – Measures of pollution and energy use^{iv}

Area Name	CO2 emissions: total per capita (2014)	Electricity sales: domestic (per hhd) (2011)	Electricity sales: industrial (per consumer) (2011)	Deprivation: Air quality (2010)	Green belt (%) (2012)
County Durham	5.64	3,711	77,734	0.67	3.95
Darlington	5.64	3,949	73,464	0.80	-
North East	8.05	3,703	92,849	0.81	8.52
England	6.10	4,266	73,365	0.97	12.58

County Durham and Darlington are very similar in terms of CO2 emissions and domestic electricity sales, and are lower than the national average on both of these measures. Industrial electricity sales are higher in County Durham than Darlington, reflecting the slightly heavier industrial structure. In terms of air quality, both areas

are significantly better than the national average, which should have beneficial health impacts. However, the amount of protected green belt is extremely low in the NE region generally and in these two areas in particular, although this is not unexpected as it reflects the low levels of major urbanisation. Overall this suggests a lower level of pollution and energy use in Darlington and County Durham.

1.4 Waste management

Table 15, below, gives the performance of Darlington and County Durham in terms of fly-tipping and waste management.

Table 15 – measures of waste management and recycling^v

Area Name	Fly-tipping: total incidents (2010/11)	Waste (household): collected per hhd (2012/13)	Waste (household): recycled (2012/13)	Waste (municipal): landfill (2012/13)
County Durham	7,564	538.50	43.56	37.54
Darlington	2,090	582.69	37.78	44.94
North East	64,745	602.10	35.89	28.33
England	819,571	503.13	41.59	30.33

Fly-tipping is the illegal dumping of waste. It is increasing across the UK, and much of the blame for this is placed on local authorities. In some areas the number of waste collections has been reduced, and restrictions and charges for large-item collections and use of recycling depots have increased^{vi}, meaning that patterns of fly-tipping vary considerably. In the NE region rates are high compared to the rest of the country (64,745 incidents, or 8% of the national average), but County Durham and Darlington are low compared to this.

In terms of household waste management, the amounts collected and not recycled from households are higher than the England average in both County Durham and Darlington, and landfill is therefore higher than the average in both areas. Recycling rates are higher than average in County Durham but lower in Darlington, although rates tend to reflect availability of recycling facilities, so this is not necessarily an indication of low local willingness to recycle.

1.5 Climate change and deprivation

The Joseph Rowntree Foundation has analysed which areas of the country are most likely to be affected by heat or flooding associated with climate change, and how resilient local communities are likely to be in the face of this, given their deprivation. They have produced maps which combine these factors to illustrate which areas are most climate disadvantaged^{vii}.

Their on-line mapping tool^{viii} indicates that the land West of the Wear from Durham City centre southwards to Sunderland Bridge is at extremely high risk of river and coastal flood disadvantage, while Chester-Le-Street, Bishop Auckland, Crook, West Darlington and East Newton Aycliffe are at relatively high risk.

Much of Weardale and Darlington Borough are at extremely high risk of heat disadvantage within the next 30 years.

The very high levels of flood and heat disadvantage suggest a need for action in those areas most at risk. These could include:

- identifying which groups of people in these areas are likely to be most adversely affected by flooding or heat, and least able to deal with that
- raising awareness of the potential issues
- engaging and empowering local people to respond should flooding or heat issues occur
- putting in place plans and resources to prevent flooding where possible and to ensure that local people are equipped to deal with flooding and heat should they happen.

1.6 Transport

Buses provide the only public transport in most parts of County Durham, providing over 24m passenger journeys each year. Most towns and villages have at least two buses per hour during working hours Monday to Saturday, with much more frequent services along major routes. However, in more rural areas the services are less frequent, and in the evening, services are reduced in most areas and stop quite early, limiting the options for people to use public transport to access evening activities^x.

Public transport in County Durham tends to be organised on a 'hub and spoke' model, meaning that travelling between places often involves having to go into a centre of population and back out again, adding to the time and cost involved.

Rural areas therefore tend to have a higher rate of car ownership than urban areas, simply to allow people to access work and education (the proportion of households with no car is 17% in Teesdale, 17.8% in Weardale and 22.7% in Rural East Durham, compared to over 27% in the county as a whole^x). Those without cars may have very limited options in terms of accessing amenities not available in their immediate community.

In areas with lower car ownership, such as Stanley and East Durham^{xi} people are more reliant on public transport, and the costs can add up. For instance, if someone living in Stanley worked in Durham it would cost them £25 per week just to get the bus to work and back each day – a significant proportion of their wages if they are on minimum wage, and probably a deterrent for many looking for work.

In East Durham, villages sprung up to reflect coal deposits, meaning there is no coherent pattern to them and the road network is therefore underdeveloped. Communities have traditionally operated in isolation, being largely self-contained, each with their own facilities. As a result, people tended not to travel between communities, resulting in low car ownership and low use of public transport. This is starting to improve now as schools are closing or merging, meaning young people grow more used to travelling, and as more people move into the area who work elsewhere.

1.7 Conservation and biodiversity

There are many statutory and third sector organisations involved in conserving the natural assets across County Durham and encouraging their sustainable development and use for the benefit of the area as a whole.

Natural assets

Durham Wildlife Trust works across County Durham and Darlington as well as Gateshead, South Tyneside and Sunderland, protecting over 800 hectares of natural resources. Across their patch there are 35 nature reserves including Hannah's Meadow in Teesdale, Low Barns Nature Reserve near Bishop Auckland, Redcar Field Nature Reserve outside Darlington and Rabbitbank Wood outside Consett. The Trust also works across Sites of Special Scientific Interest (SSIs). There are over 80 of these in County Durham including Crag Gill and Hesledon Moor^{xii}. In addition, there are a large number of designated landscapes including the North Pennines Area of Outstanding Natural Beauty (AONB), 17 Parks and Gardens of Special Historic Interest, the Durham Heritage Coast and Durham Castle and Cathedral World Heritage Site.

The Durham Biodiversity Partnership has developed an action plan with five objectives:

- To support and encourage the conservation and enhancement of biodiversity and the delivery of the Durham Biodiversity Action Plan.
- To promote and develop a landscape-scale approach to biodiversity in County Durham.
- To promote an integrated approach to action on landscape and biodiversity, using Natural Area Partnerships.
- To secure a 'positive audit' for biodiversity in new development.
- To promote biodiversity in landscape design.

Biodiversity

The National Biodiversity Network has established an interactive atlas to record sightings of animals, birds and plants by location. Counts for the main groups are given in table 16 below.

Each of the counts is for a 10km radius from the centre of the area, so there will be overlaps between areas and therefore in counts, while other areas will not have been captured here (including large parts of County Durham). Nevertheless, the figures suggest a wide range of animals and plant-life exist across Darlington and County Durham.

Table 16 – Counts of species within 10km of location centre^{xiii}

	County Durham	Darlington
Mammals	35	27
Birds	177	162
Reptiles	4	0
Amphibians	5	5
Fish	18	17
Molluscs	78	96
Arthropods	1144	682
Plants	252	150
Fungi	142	973
Chromista	1	8
Protozoa	17	15
TOTAL	1873	2135

Natural growth

The Durham Tourism Management Plan 2012-16^{xiv} states that the visitor economy is worth £659m to Durham and supports over 10,600 FTE jobs. The plan sets eight priorities for the period 2012-16, including:

- Extending visitor stays by developing the attractiveness of market towns and into rural and coastal destinations.
- Increasing the value of rural areas to the tourist economy, animating rural areas so there is more to see and do and they can be better marketed.

Key actions identified to help achieve these aims include:

- increasing awareness of and visitor numbers to parks and gardens
- developing a better understanding of the county's rural assets (such as the North Pennines and Hamsterley Forest) to better market them and to attract new operators to offer related services
- improving accessibility and condition of walks and cycleways
- making more of the diverse range of species and nature assets, including wildlife and flora
- development of agricultural shows as tourist attractions.

The plan includes a list of local partners identified to help achieve these aims, including local retailers, providers and communities, all of whom can play an important part, which will in turn help the growth of the rural economy. Where local communities are seeking philanthropic support to develop activities aimed at visitors it would make sense for these to be allied to the county's plan to maximise the potential for match funding and strategic support.

Natural health and wellbeing

As well as being a destination for visitors, green areas also provide opportunities for local people to volunteer, relax and exercise. Durham County Council promotes walking for health and running programmes to encourage local people to use green spaces for exercise.

Natural England, together with Mind, have carried out a significant amount of work on the positive impact of engaging with nature on physical and mental health. They identified three main ways that the natural environment contributes to mental health benefits: i) directly through the restorative effect of nature; and indirectly by, ii) providing opportunities for positive social contact; and iii) providing opportunities for physical activity^{xv}. This approach has been adopted at The Breathing Space in Witton Gilbert which offers a wide range of health and wellbeing projects including guided walks and cycle rides.

They also reported a strong relationship between the proximity of urban open green spaces, how frequently people visited them, how long they stayed, and users' stress levels. Other researchers have also found a link between the quantity of green space available and longevity, a reduced likelihood of mental health problems, and lower levels of health inequality even where there is a high level of income-deprivation.

Nationally, Natural England found that in 2015-16 42% of people had visited green space in the previous week, and 47% of these visits were for health and exercise^{xvi}, suggesting that 19.7% of the population use green space for health and exercise.

Table 17 below compares the amount of green space available in County Durham and Darlington and the proportion of the population who use it.

County Durham has more green space than most areas of the NE region, with nearly 94% of land classed as this, while the proportion in Darlington is slightly lower at 88%. However, the proportion of local people using the space for health and exercise is low, at 14.1%, compared to 17.3% across the NE region and 20.3% in Darlington.

Table 17 – green space and frequency of use

	% land classed as green space	% using outdoor space for health and exercise
Co Durham	93.9	14.10%
Darlington	88.27	20.30%
NE region	92.15	17.30%

This suggests that there is potential for philanthropy to support activity to encourage more people in County Durham to get out and about and enjoy the green space around them.

Potential roles for philanthropy

County Durham includes some of the most beautiful green space in England, but higher densities of houses and roads in some areas mean parts of the county and the Darlington area score less well on some measures, and lack of protected and designated assets mean that the more urban areas are ranked low for natural beauty.

There are roles for local communities and organisations to work in the conservation and sustainable development of green resources and to encourage environmentally friendly actions by local households and businesses.

Specific actions that philanthropy could support include:

- Encouraging recycling where this is available, to reduce landfill.
- Encouraging local communities to support actions to increase sustainable green tourism.
- Putting in place plans and actions to prevent and mitigate the effects of flooding and heat associated with climate change for the most disadvantaged.

- Developing alternative ways to provide transport to enable people to access work, learning and leisure opportunities.
- Increasing use of green spaces for leisure and exercise purposes, particularly across County Durham.

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