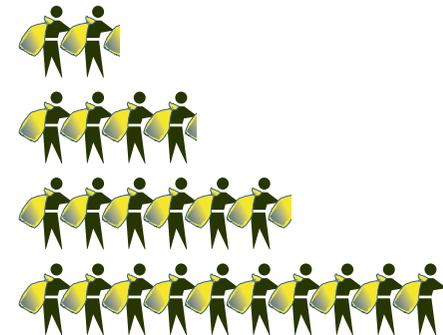


# National Benchmarking Report

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HERE  
LOVE  
HERE**



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Charity Keep Northern Ireland Beautiful is inspiring people to create **cleaner, greener and more sustainable communities**. Through behaviour change campaigns and education on local, national and global environmental issues we are **improving the quality of people's lives, the places they live in and the places they love**.

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# Foreword

Keep Northern Ireland Beautiful's 2016 Benchmarking Report provides the first detailed analysis of Local Environmental Quality data since the establishment of the eleven new councils.

Covering littering and dog fouling, education, campaigning, public engagement, enforcement and more it compares 2015 with the three previous years of legacy council data.

This report contains some good news. Litter levels dropped significantly in 2015, compared to 2014. This shows the focus on removing litter was not lost during the difficult and ongoing merging of councils. It is not all good news though. That most hated of 'litter' types, dog fouling, saw an increase in 2015. Councils participating in the Borough Cleanliness Survey can access and interrogate additional detail online. Also, apart from having one in every eight streets fail the cleanliness standard the cost of keeping our streets clean has risen above £40million for the first time. This means every ratepayer is already forking out for close to the average amount recovered from a fixed penalty, whether they litter or not.

The old saying, prevention is better than cure, is certainly true in this subject area and investing to save is a must if we are to boost our economy and prosperity through increased tourism. Such investment in prevention will have other benefits too. An independent report commissioned by Keep Northern Ireland Beautiful shows a host of other substantial hidden costs of litter, affecting not only tourism but also our health and wellbeing, house prices, crime levels, costs to business, flooding, road traffic accidents and other disamenity costs.

Our results, where possible, are compared with other close neighbours and the short section on marine litter reminds us all that we cannot tackle the litter issue alone – it is a problem truly global in scale. Working together is critical to success. Most councils already do through Live Here Love Here. This is just the beginning as we work to create an environment that stigmatises litterers and builds confidence in the public to challenge the anti-social behaviours they no longer wish to see.

So please do take the time to read this report and carefully consider how best to utilise scarce resources to make the biggest difference. With a little luck and a lot of hard work, maybe we can further improve on the litter reduction success achieved in 2015.

**Dr. Ian Humphreys**  
CEO  
Keep Northern Ireland Beautiful



# Key facts and figures at a glance for the period 2015-2016

**Average litter levels improved during 2015**



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Although there is no proof of causality it is interesting to note that the first significant drop in litter levels in 8 years took place in the year when *Live Here Love Here* began it's above the line media campaign

**12%**

Despite the improvement in average litter levels, 12% of streets and public spaces still have unacceptable levels of litter and/or dog fouling



In winter, people are less likely to clean up their dog fouling in secondary retail and high density housing areas. Other types of land showed almost no difference.



**£40m**

Spending on street cleansing exceeded £40 million for the first time in 2014-15



**1 in 3**

transects which fail to meet the standard for litter do so because of high levels of dog fouling

**1 in 5**

Almost one in five spaces has unacceptable levels of either litter; detritus; graffiti, or flyposting

**128**

schools were awarded a prestigious *Eco-Schools Green Flag* in recognition of their work on environmental and anti-litter education.



**95%**

of streets and public spaces surveyed in Northern Ireland have at least some litter on them

**x2**

Just two councils issued over two out of every three fixed penalties for littering during 2014-15

These two highly effective councils gather more than twice as much in fees per fixed penalty on average than less well performing councils

**1 in 7**

recreational areas have unacceptable levels of litter

# Introduction

Keep Northern Ireland Beautiful is independently commissioned by central government and most local Councils to assist in assessing local environmental quality and cleanliness of our towns and countryside.

Our work has grown beyond that to managing the largest single civic pride and volunteering campaign in Northern Ireland – over 100,000 people supported our Live Here Love Here campaign in some shape or form during 2015.

This report is based on a number of sources. Litter and cleanliness data comes from a survey of 2,140 individual transects covering over 107km (or 66 miles) of streets and parks across all 11 councils. Fixed penalty data and spending data was collected by the Department of the Environment. Information on enforcement and education activities was provided by the councils themselves. It provides the first assessment of the new Councils on the established national performance indicators for litter, dog fouling and other markers of anti-social behaviour in Northern Ireland.

The cost of street cleansing in Northern Ireland for 2014-15 was £40,012,315<sup>2</sup>. This figure includes all the litter picking and street sweeping of council land. It would pay the wages of 1,863 new nurses<sup>3</sup>. It does not include the cost to other land owners such as the National Trust or Ulster Wildlife, who allow the public access to their land, and must clear up after them.

There is just a one in twenty chance that any given 50m stretch of street or green space in Northern Ireland will be completely free of litter. We are all working to shorten those odds but need to pool scarce resources if we are to make the biggest impact.

## Interpreting this report

**Benchmark** in this report refers to the process of comparing the performance of one council against another, or of comparing NI results to those of other regions of the UK.

**Weighted baseline** refers to the average of the results of the NI Litter Surveys carried out in 2012, 2013 and 2014 with the data mathematically weighted to reflect the amended landuse ratios used in the 2015 survey. Consequently, 'weighted baseline' figures may be different from those given in previous NI Litter Survey reports.

**Transect** is the term given to an individual survey site. For this survey it is a length of pavement 50m long, extending from the backline into the gully. In recreational areas it is either a 50m length of path plus 1m into the grass on either side, or an area of open space approximately 100m<sup>2</sup>, depending on which is more appropriate.

**Pollution Indicator** is the main score used in Northern Ireland to measure the prevalence of a particular indicator. It is the percentage of transects which are deemed unacceptably affected by the indicator. For example, a Litter Pollution Indicator of 12 means that 12% of transects fail to meet the accepted standard for litter. A lower number equates to better performance.

**LEAMS** is an alternative measure of the prevalence of an indicator used in other parts of the UK. It stands for Local Environmental Audit and Management System, and is scored out of 100 but is not a percentage fail rate as the Pollution Indicator is. A higher number indicates improved performance.



# Keep Northern Ireland Beautiful



Keep Northern Ireland Beautiful is the charity that inspires people to create cleaner, greener and more sustainable communities.

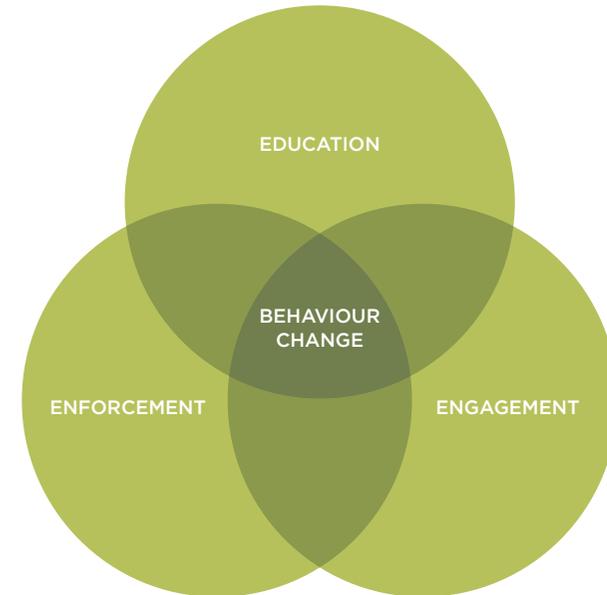
Through our behaviour change campaigns and education on local, national and global environmental issues we are working to improve the quality of people's lives, the places they live in and the places they love.

Keep Northern Ireland Beautiful provides a range of programmes, services and initiatives that include:

**Education:** Eco-Schools is the world's largest education programme. Focused on behaviour change, it encourages pupil led action. Northern Ireland is the first country in the world to have all its 1,163 schools participating and 20% fly the green flag, having reached the international standard.

**Volunteering:** The BIG Spring Clean, now part of Live Here Love Here, mobilises tens of thousands of people every year in cleaning up their parks, sports pitches, streets and beaches. Live Here Love Here is raising the bar on anti-social behaviour by building civic pride and stronger communities.

**Local Environmental Quality Standards:** Blue Flag for beaches and marinas, Seaside Awards, Green Flag for Parks, TIDY Business and the NI Environmental Quality Forum all help raise and maintain the quality of the places we live in and visit by setting national and international benchmarking standards.



For more information on our work contact:  
**ian.humphreys@keepnorthernirelandbeautiful.org**  
 or telephone **028 9073 6920**

# Northern Ireland Litter Survey

Keep Northern Ireland Beautiful have been collecting information about the amount and distribution of litter for over ten years.

Recognising in 2012 that litter was not the only 'indicator' of the quality or cleanliness of a space, monitoring began on graffiti, flyposting and pavement staining, as well as specific information about dog fouling. This has enabled production of baseline figures for each of these indicators, which covers the three-years between 2012 and 2014. Although the Councils under which this baseline was recorded no longer exist it can be appropriate, where it will help to inform the work of the new councils, to compare new data to this baseline.

**Table 1** shows how each transect is graded for the indicators. The percentage of C and D grades provide the basis for the Pollution Indicator scores shown in **Figure 1**.

Readers should note that many of the statistics relate to the presence or absence of the indicator (eg litter or dog fouling), rather than the volume or amount dropped. However, the standard against which sites are graded as "acceptable" or "not acceptable" does take into account the volume and distribution present. Surveys are a snapshot of a site at the time surveyors arrive,

so the results are sensitive to how thoroughly or how recently the survey site has been cleansed before data is recorded. Over the course of the 2,140 individual surveys any effect this may have had can be assumed to have been evened out.

Seasonal effects are controlled for by having two survey windows, with 1,040 individual surveys between January and March, and 1,100 between August and October.

The surveys after March 2015 (post-RPA) were carried out using a new ratio of the eight landuses than in previous years. The new ratio was chosen by the councils participating in the Borough Survey programme to provide more useful data upon which to base cleansing and enforcement policy.

Councils which participate in the Keep Northern Ireland Beautiful Borough Cleanliness Survey receive additional detail, support and interpretation of this information online. Currently six Councils are participants in this programme – see **Table 2**.

**Figure 1: The percentage of transects which meet the standard for each indicator**



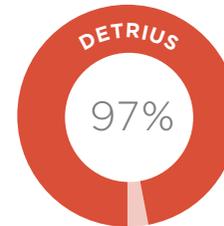
**Litter** is anything that is dropped, discarded or thrown down by anyone. It includes cigarettes, crisp bags, bottles and cans, receipts and many more things as well as dog fouling.



**Anthropic** is what the picture of litter would be like if we do not include dog fouling. We measure this because dog fouling is much more difficult for street cleansing to collect than other types of litter.



**Staining** is all the substances that mark a pavement, and commonly includes chewing gum, oil, drinks stains and heavy discolouration.



**Detritus** comprises small, broken down particles of synthetic and natural materials and includes dust, mud, soil, rotted leaf and vegetable residues, and fragments of twigs, glass, plastic and other finely divided materials.



**Graffiti** is writing or drawings scribbled, scratched, or sprayed illicitly on a wall or other surface in or visible from a public place. Murals and cultural artworks are not considered graffiti.



**Flyposting** is the placing of unauthorised advertising or posters in a public place, and includes stickers, bills and large posters.



**Perception** is the lowest figure of all the indicators for a particular transect. We use this as a measure of how a layman would view it – they will not consider if there is no litter if the transect is heavily graffitied; they will just perceive it to be dirty.

**Table 1: Grading system used for litter**

An explanation of the grading system used for litter, detritus and other indicators.

	Grade Awarded	Description of Grade
Acceptable	<b>Grade A</b>	Completely free of indicator
	<b>Grade B</b>	Predominantly free of indicator apart from some small items
Unacceptable	<b>Grade C</b>	Widespread distribution of indicator with minor accumulations
	<b>Grade D</b>	Heavily affected with significant accumulations

**Table 2: Councils participating in the Borough Cleanliness Survey**

Councils that have access to additional information:

Antrim and Newtownabbey
Ards and North Down
Belfast
Derry City and Strabane District
Fermanagh and Omagh
Mid and East Antrim

**Table 3: The percentage of transects which fall below the required standard**

Anthropic litter is the presence of all litter other than dog fouling. The Perception of Pollution Index is the cumulative lowest indicator for each transect, and as such gives an impression of how a member of the public is likely to view a transect. The margin for error with this number of transects is  $\pm 3\%$ . \*England record two other measures which are not recorded in Northern Ireland, weed growth and leaf fall. These are not included in this table, and account for the failing grades not shown. England is the only other region of the UK to collect and report these markers in a manner which allows comparison.

	Litter Pollution Index	Detritus Pollution Index	Anthropic Pollution Index	Staining Pollution Index	Graffiti Pollution Index	Flyposting Pollution Index	Perception of Pollution Index
Antrim and Newtownabbey	12	2	8	4	2	0	18
Ards and North Down	14	6	9	4	3	0	24
Armagh City, Banbridge and Craigavon	10	2	7	4	1	0	15
Belfast	9	4	5	11	9	1	27
Causeway Coast and Glens	7	2	4	1	1	0	10
Derry City and Strabane District	15	1	10	7	7	0	24
Fermanagh and Omagh	7	1	5	3	1	0	13
Lisburn City and Castlereagh	8	2	5	1	3	0	13
Mid and East Antrim	21	4	15	1	1	0	24
Mid Ulster	10	2	9	2	1	0	15
Newry, Mourne and Down	14	3	11	5	3	2	24
<b>Average</b>	<b>12</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>18</b>
England	10	27	N/A	10	2	0	50*

# Comparison with other countries

Due to differences in the way in which surveys are planned and scored, comparisons with other countries are not strictly accurate.

However, **Table 4** shows the reported figures for the other regions of the UK. While the Republic of Ireland report similar headline figures, the methodology and landuses surveyed to determine those figures is too dissimilar to be comparable.

Surveys in the other three regions of the UK have a significantly higher proportion of low density housing areas. For example, in Scotland this one landuse accounts for 60% of all transects, while in Northern Ireland it was just 16%. In this land use in Northern Ireland just 3% of transects failed to meet the accepted standard for litter.

**Figure 2** shows the performance of the four countries of the UK since 2010. While not strictly comparable due to differences in the relative amounts of different landuses included in the surveys, comparing the trends is a useful indicator of wider trends. We can see that over the three years between 2012 and 2014 Northern Ireland was the only country of the UK to record a significant fall in the percentage of transects which were considered acceptable, and the only region to record a significant improvement during 2015. Note that the other countries report on a financial year, while Northern Ireland reports a calendar year.

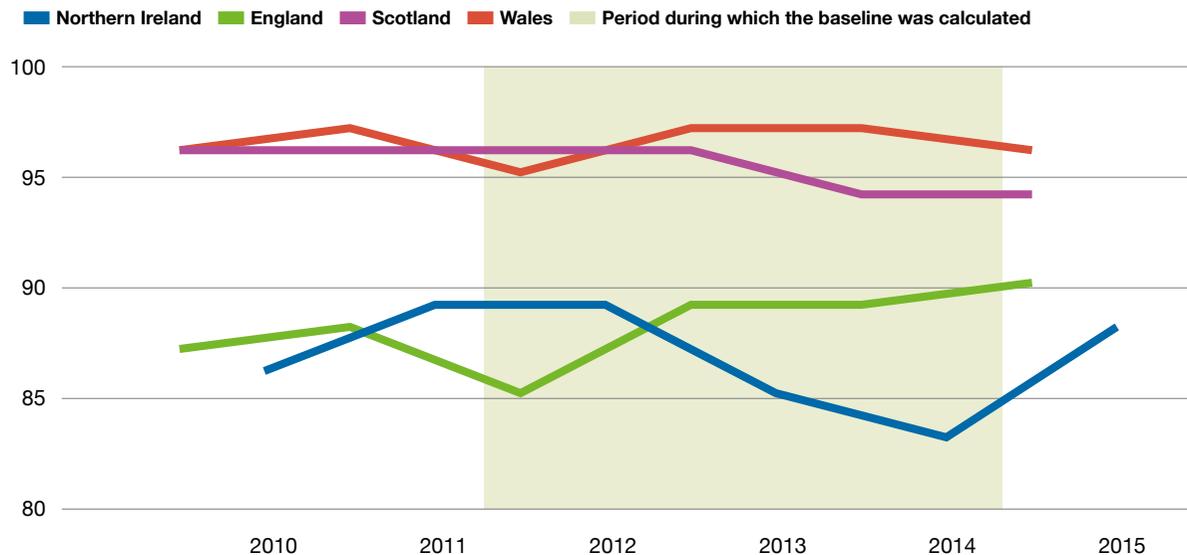
**Table 4: Comparison of indicators between England, Wales and Northern Ireland**

Similar grade structures are used, but with different methods for choosing survey areas. Surveys in the other three regions of the UK have a significantly higher proportion of low density housing areas, which are generally very clean areas.

	Northern Ireland	Scotland	England	Wales
Transects with no litter (Grade A)	5%	21%	3%	7%
Transects which meet standard	88%	94%	96%	90%
Transects with dog fouling	12%	9%	14%	7%
Average of transects which meet standard 2012-1014 (baseline)	84%	95%	96%	87%
Trend	Improved	Steady	Steady	Improved

**Figure 2: The trend for litter levels in each of the UK countries**

The trend for percentage of transects which are considered to have acceptable levels of litter in each of the UK countries. Northern Ireland reports these figures on a calendar year basis, while the rest of the UK reports based on a financial year, hence the slightly longer trace for Northern Ireland. The trend in both Northern Ireland and in England is upward, suggesting improving performance, although in England the trend has lasted longer. Neither Scotland nor Wales have a strong trend, and both could be considered steady at around 5. The highlighted area indicates the period used to compute a baseline figure for Northern Ireland.



# Survey results for each Council

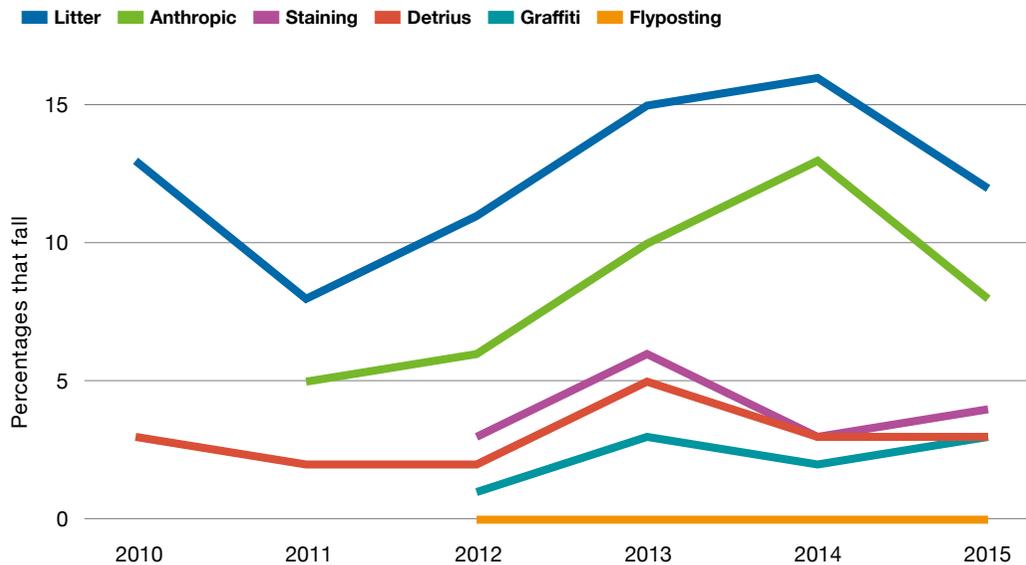
Keep Northern Ireland Beautiful gathers information on a range of other Local Environmental Quality Markers,

## Levels of litter pollution in each landuse

The pattern of littering in each landuse remains relatively constant from year to year in Northern Ireland. Rural and industrial areas are affected by littering as much because cleansing is less frequent in these areas as because people drop more litter on them. Low obstruction housing remains the cleanest landuse other than primary retail, which is subject to a high frequency of cleansing.

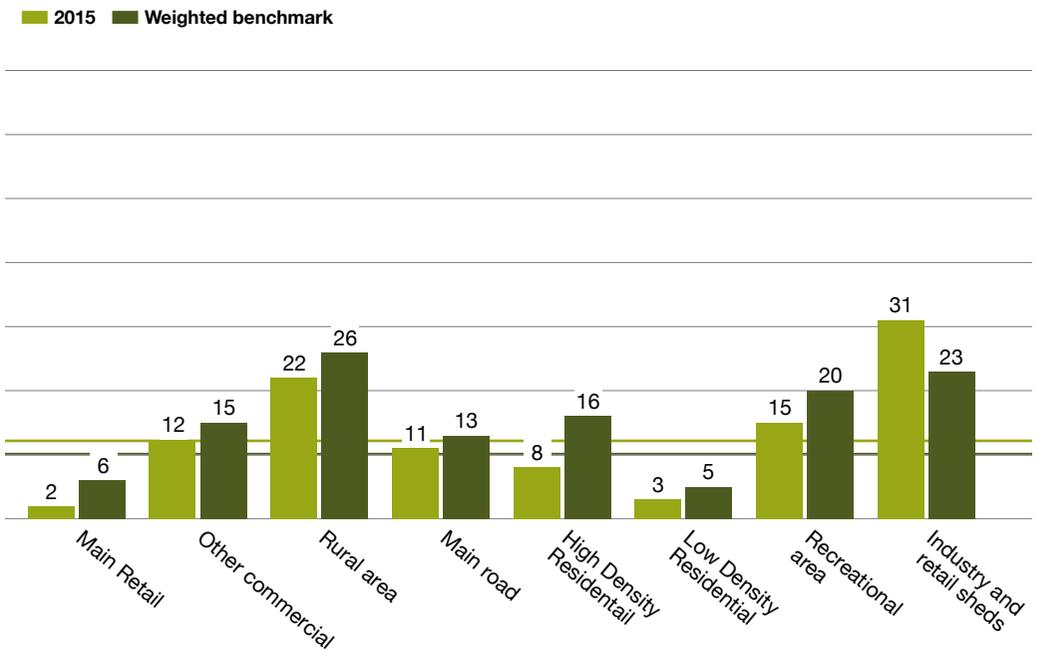
**Figure 3: Trend in Litter Pollution Indicator over five years**

The trend in Pollution Indicators over the past five years, with figures from 2011 to 2014 weighted to match the new landuse ratio. The Anthropogenic Indicator was only added to the survey in 2011, while staining, graffiti and flyposting were only added in 2012.



**Figure 4: The Litter Pollution Index (% of transects which fail) in each landuse**

Zero is the best score possible. Around a quarter of rural transects fail, while just 3% of low density housing transects failed in 2015. The only landuse which was worse in 2015 was industrial and retail shed areas. The red line is the mean for the weighted baseline measurement, while the blue is the mean for the 2015 data.



### Local Environmental Audit and Management System (LEAMS)

LEAMS is an alternative method of measuring litter and other indicators which is used in both Scotland and Wales. Unlike the pass/fail 'Performance Indicator' used in Northern Ireland, LEAMS scores are generated by assigning a value to each grade, and then calculating the

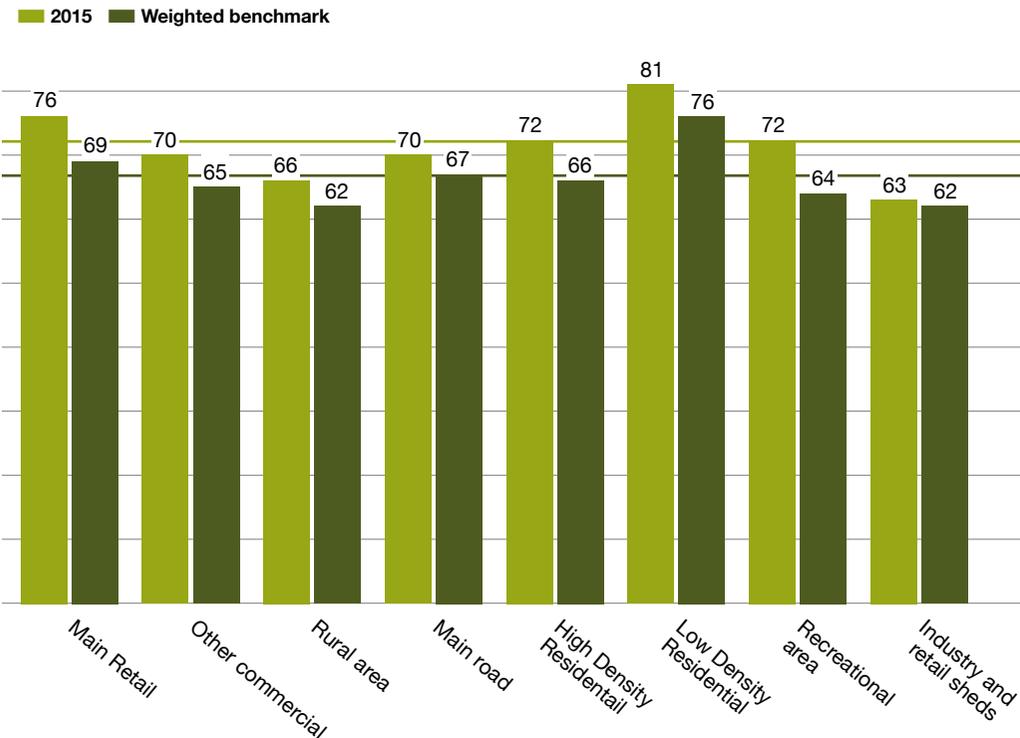
average value of all the grades assigned. It differs from the Performance Indicator in that a LEAMS score takes account of how clean or littered a transect is, rather than just whether it is a pass or fail. Scores closer to 100 indicate better performance. It is easier to set a target under the LEAMS system; 66 is the point at which performance is considered acceptable, as it equates with an average grade B.

Figure 5 suggests that Primary Retail areas and Low Density Residential areas were generally cleaner than other landuses. That the LPI and LEAMS scores are the same for Low Density Residential suggests consistently high standards of cleansing (B+ and A grade) across this landuse. In Primary Retail areas the relatively smaller LEAMS score in comparison with the LPI suggests that while more transects pass than on

average in all of the landuses, a high proportion of them are B grade. As the LPI for Industrial and Retail Sheds is considerably further below the average than the LEAMS score, we can say that although many of the transects failed, there was a high proportion which were just below a pass standard (B grade).

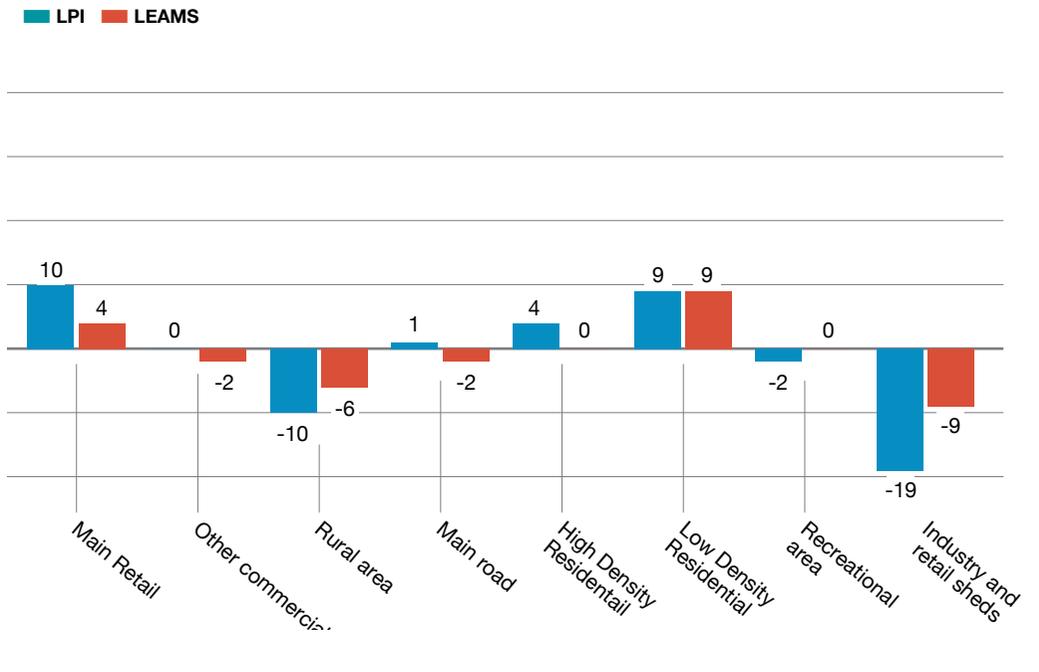
**Figure 5: LEAMS Scores for each landuse**

The maximum score is 100, while a score of 66 is considered acceptable. Industry and retail areas and rural areas are the worst performing landuses, below the average of all landuses in both 2015 and the weighted baseline.



**Figure 6: A comparison of the LPI and LEAMS Litter in 2015**

The central axis indicates the mean for each grading system (LPI of 12, LEAMS Litter of 72). Bars above the central axis indicate that performance in that landuse in 2015 was better than it was for the average of all the landuses. Large differences between the LPI and the LEAMS in one landuse indicate a less consistent cleansing routine, or that the majority of the transects are clustered close to the pass fail divide.



## Dog fouling

One in three transects which fail to meet the standard for litter do so because of high levels of dog fouling. Dog fouling was observed on 12 % of all transects surveyed, almost twice the percentage of affected sites as in Wales (7%) but less than in England (14%).

See **Table 3** for context.

As well as being generally unpleasant, parasites and bacteria which may be present in dog fouling are potentially hazardous to the health of humans and dogs.

**Table 5** shows that dog fouling was observed on 12% of transects, while the weighted baseline figure is 11, suggesting that dog fouling has not become noticeably worse. Where surveys suggest that dog fouling is becoming more of an issue is within Secondary Retail areas (where the percentage of affected transects rose from 8% to 13%, and on Main Roads (where it rose from 11% to 16%).

The data on dog fouling continues to appear to show clustering behaviour. While a relatively low proportion of transects is affected by dog fouling, they tend to be heavily affected, with an average of 1.8 deposits observed on these transects. The highest number recorded was 18 separate deposits on one industrial and retail shed area. This supports the idea that a failure to clean up dog fouling is influenced by ‘signalling’: the presence of dog fouling indicates to other owners that fouling is accepted in that area, and they do not need to clear up after their pet.

One in three transects which fail to meet the standard for litter do so because of high levels of dog fouling.

**Table 5: Prevalence of dog fouling in each landuse**

*Dog fouling was observed on 2% of main retail sites, but 19% of high density housing.*

	Number of transects	Number of transects on which dog fouling observed	Percentage of transects with dog fouling	Total number of dog fouling observed	Average number of fouls on transects with fouling
Main retail/commercial	263	4	2	5	1.3
Other retail/commercial	173	23	13	23	1.0
Rural area	230	15	7	24	1.6
Main road	243	39	16	66	1.7
High density residential	351	68	19	101	1.5
Low density residential	352	38	11	65	1.7
Recreational area	343	53	15	138	2.6
Industry and retail sheds	185	25	14	58	2.3
<b>Total</b>	<b>2,140</b>	<b>265</b>	<b>-</b>	<b>480</b>	<b>-</b>
<b>Average</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>1.8</b>



*This poster is very similar to one which reduced dog fouling by an average of 46% at 120 sites during a trial in England. Selecting a specific tagline for the landuse increased the effect. Keep Northern Ireland Beautiful offers these and other posters as well as offering support and advice on their optimum use.*

## Survey results for each Council

### Bins

Lack of an available bin is often cited as a reason for dropping litter. Surveyors make a note of the number, placement and condition of any bins present on any transect, and also if they feel it is likely to be a cause of the litter, either because it is overflowing and people have left rubbish around it, or because it is blowing out of the bin. Of the 957 bins observed only 19 were judged to be overflowing (more than three-quarters full). Of those only 3 were judged to be contributing to the litter observed on the transect.

Our surveys indicate that there is a two out of three chance there will be a bin on any given 50m stretch of Primary Retail land. On secondary retail land it falls closer to one in two. Looking more closely at secondary retail, around one in four of transects with fast food outlets present are unacceptably littered, whereas less than one in ten transects without fast food outlets present is unacceptably littered. The presence of one or more bins on the transect has no statistically significant impact on this outcome<sup>4</sup>, suggesting that the bins are ignored by those using the fast food outlets. To improve this situation it would likely be as cost effective, if not more so, to encourage the use of bins in fast food outlets than to simply place more bins outside.

This suggests that these are prime sites for sustained action, both by Enforcement Officers and through education and suggestion campaigns. Having a prompt or nudge toward using those bins already provided in the form of a poster, or simply making the bin more salient – making it stand out from its surroundings by for example painting it green – could be a highly cost effective means of tackling littering in this landuse.

**Table 6: Prevalence of bins and how full they were in each landuse type**

*There is no correlation between availability of a bin and the average cleanliness of a particular landuse. \*There were only 4 beaches surveyed during the bathing season, which is not enough to provide a reasonable analysis of this recreation type.*

Landuse	% with bins present	% of transects with unacceptable levels of litter
Main retail/commercial	66	2
Other retail/commercial	55	12
Rural area	2	22
Main road	14	11
High density residential	4	8
Low density residential	1	3
Recreational area	71	15
Beach	N/A*	N/A
Public park	77	20
Children's play area	93	10
Sports pitch	51	19
Industry and retail sheds	6	23

**Table 7: Transects with fast food (FF) outlets and bins available**

*The percentage of transects with various combinations of Fast Food outlets (FF outlet) and bins available. None of the Secondary Retail transects surveyed were completely free of litter (grade A). None of the 8 heavily littered transects (grade D) had a Fast Food outlet on them.*

Grade	Number of transects	Bins present		No bins present		
		FF outlets	No FF outlets	Number of transects	FF outlets	No FF outlets
A	0	-	-	0	-	-
B	166	45%	55%	172	45%	55%
C	31	72%	18%	23	78%	12%
D	3	100%	0%	5	100%	0%



### Obstructions preventing sweeping

A significant issue in any cleansing routine is the ability to fully exploit the cleansing resources available. If a mechanical sweeper is unable to access an area then the choice becomes: to leave any litter and detritus; task a sweeper on foot to an area, or schedule a return to an area within a reasonable timeframe in the hope that the pattern of obstructions will change. The majority of obstructions are parked cars preventing access to the kerb, but other obstructions, especially in retail areas, include fixed signs, movable signs, inappropriately placed street furniture and poorly designed sites which would prevent access.

Derry City and Strabane District experience the highest level of obstructions that impact cleansing, with three out of five transects completely blocked to mechanical sweeping. This is 50% more obstruction than experienced in Belfast or Antrim and Newtownabbey; Councils that would be expected to have broadly similar characteristics and housing densities. This undoubtedly makes cleansing in Derry City and Strabane District more dependent upon manual cleansing and likely less efficient.

**Table 8: The level of obstructions that would prevent a mechanical sweeper from cleaning a transect in each council**

	Unobstructed	Partially Obstructed	Mostly Obstructed	Completely Obstructed
Antrim and Newtownabbey	36%	9%	14%	41%
Ards and North Down	36%	7%	7%	50%
Armagh City, Banbridge and Craigavon	28%	11%	6%	55%
Belfast	39%	12%	6%	41%
Causeway Coast and Glens	34%	10%	6%	50%
Derry City and Strabane District	27%	10%	4%	59%
Fermanagh and Omagh	38%	6%	5%	49%
Lisburn City and Castlereagh	32%	9%	12%	48%
Mid and East Antrim	31%	7%	6%	55%
Mid Ulster	33%	10%	10%	47%
Newry, Mourne and Down	40%	8%	12%	40%
<b>All Councils</b>	<b>34%</b>	<b>9%</b>	<b>8%</b>	<b>49%</b>

# Impact of spend on cleansing

## The total average spend on street cleansing in Northern Ireland in 2014-15 was £40 million.

The total average spend on street cleansing across all of Northern Ireland in 2014-15 was £40,012,315. In other words every man, woman and child pays an average of £21.87 per year through their rates for this service.

By looking at the outcome of the spend on cleansing – the LEAMS data – we can see that councils with similar expenditure per head of population can have very different outcomes, and that **simply spending more on street cleansing does not correlate with better Local Environmental Quality.**

The most recent figure available for average spend per person per annum was reported as between £13.50 and £16 in England<sup>5</sup>, £15 in Scotland<sup>6</sup> and as £22 in Wales<sup>7</sup>. Figures were not available for smaller areas such as within larger cities or largely rural areas.

**Table 9: Extrapolated new council spend on street cleansing per annum**

*The figures given for each council are averaged between 2011/12 and 2013/14. The LEAMS score is included as a measure of performance for spend. Only three councils spent less in 2014-15 than they did in 2013-14.*

	Street cleansing	Spend compared with 2013-14	Against average of 2011-14	Spend per head of population in 2014-15	Litter LEAMS
Antrim and Newtownabbey	£2,160,554	£202,298	−£67,433	£15.48	71
Ards and North Down	£2,635,621	£163,728	−£54,576	£16.69	69
Armagh, Banbridge and Craigavon	£2,947,710	£121,423	−£40,474	£14.39	73
Belfast	£14,658,793	£161,955	−£53,985	£52.04	73
Causeway Coast and Glens	£2,599,945	£59,736	−£19,912	£18.35	74
Derry and Strabane	£3,686,444	−£480	£160	£24.81	69
Fermanagh and Omagh	£1,597,555	−£52,267	£17,422	£13.98	74
Lisburn and Castlereagh	£2,463,402	£493,752	−£164,584	£12.97	75
Mid and East Antrim	£2,057,965	£47,068	−£15,689	£15.13	68
Mid Ulster	£2,052,675	£199,962	−£66,654	£14.38	75
Newry, Mourne and Down	£3,151,651	−£24,619	£8,206	£18.28	70
<b>Total</b>	<b>£40,012,315</b>	<b>£1,372,556</b>	<b>£457,519</b>	<b>-</b>	<b>-</b>
Mean	£3,637,483	£124,778	£41,593	£21.87	72
Median	£2,599,945	£121,423	£40,474	£15.48	-

# Marine litter

In January 2015 the last survey of a three year study designed to provide a baseline figure for litter washing up on beaches around Northern Ireland.

The study allows Northern Ireland to measure progress toward what is termed “Good Environmental Status” (GES) under the European Marine Strategy Framework Directive. Good Environmental Status in the case of marine litter is defined as “Properties and quantities of marine litter do not cause harm to the coastal and marine environment”

The results of the baseline survey were reported during the summer to considerable media attention, highlighting the public interest in environmental narratives.

The major point of note in the surveys was the variability in the amount of litter, even on the same beach, and the apparent lack of a pattern. Over the course of the 10 baseline surveys an average of 4,421 items of litter per kilometre (7,115/mile) was recorded. The report highlighted the more affected beaches and called for action to be concentrated in these areas.

Between 2013 and 2015 information was collected from a total of 270 beaches around the UK and Ireland under various initiatives

**Figure 7: Average breakdown of all surveys for each beach**

Showing the average number of items per kilometre and breakdown of litter types as a percentage

Location	Ardglass	Ballyhornan	Balls Point	Ballywaite	Cloughey	Drains Bay	Hazelbank	Kilkeel North	Portavogie	Rathlin	Rostrevor	Runkerry	Tyrella	White Park Bay
Plastic (%)	63	89	65	82	86	76	30	72	65	91	82	87	86	83
Metal (%)	9	3	6	2	3	9	5	15	9	1	8	2	3	1
Glass (%)	11	0	5	0	1	1	44	0	2	0	3	0	0	0
Sanitary (%)	1	4	2	10	4	3	12	0	13	4	2	7	2	14
Other (%)	16	4	21	6	7	11	9	12	11	4	5	3	8	2
<b>Average number of items/km over the 10 surveys</b>	<b>8,430</b>	<b>12,013</b>	<b>1,266</b>	<b>1,309</b>	<b>1,414</b>	<b>805</b>	<b>887</b>	<b>9,378</b>	<b>6,313</b>	<b>4,286</b>	<b>1,801</b>	<b>3,098</b>	<b>5,354</b>	<b>5,451</b>

and programmes and recorded in the OSPAR database. The equivalent figure for the UK and Ireland is 931 items/km. However, many of the beaches listed as being surveyed in the UK and ROI are amenity beaches and are therefore subject to frequent cleaning by local authorities. None of the beaches surveyed in Northern Ireland are amenity beaches, as the driver for the survey was to study litter washing ashore rather than being dropped in situ.

While this was the last of the surveys in the baseline study, follow-up surveys must be undertaken to check progress toward the target of Good Environmental Status.

Reports specifically about marine litter around the coast of Northern Ireland can be found at [www.keepnorthernirelandbeautiful.org/marinelittersurveys.aspx](http://www.keepnorthernirelandbeautiful.org/marinelittersurveys.aspx)



Information about litter is collected by trained surveyors four times per year, with the data averaged to give the figures quoted.

# Live Here Love Here

Live Here Love Here is a nationwide initiative seeking to build a strong sense of local ownership and community pride.

It is administered by Keep Northern Ireland Beautiful and supported by the majority of local Councils (listed below) as well as the Department for the Environment and Tourism Northern Ireland.

Live Here Love Here is a positive, people powered campaign focused on improving our local environment and building a sense of pride

in our local communities, and supported by the majority of Northern Ireland Councils.

Live Here Love Here is about creating pride. About loving where you live. About caring for your surroundings, feeling responsible for the landscape around you and creating a better environment for our communities.

We all want to see positive changes to where we live. With the support of Councils and other organisations and the help of their communities, this campaign will grow the number of people willing to play a part. We'd all like cleaner streets, less dog fouling and graffiti, more green space and better use of unused and derelict buildings. Through Live Here Love Here we can all do one small thing to help make a big difference in our communities.



## Edible Picnic Area at An Creagán

The project at An Creagán has enabled the group to create a new picnic area/ rest point for walkers and visitors, construct seating and directional signage along the trails, clear sections of invasive self-seeding conifers at various points to both improve the habitat and the vistas and views from the paths. The work was done through community engagement with trained volunteers helping to fell and clear large, mature trees as well as pull out the invasive saplings from the marginal bogland.



The Centre's existing Community Garden Group planned and created the edible picnic area which included site clearance, creation of new planting beds, installing stone edging, building planters and then planting the various fruit trees, bushes, herbs and flowers to make it an 'edible' picnic area. The Centre's existing walking group assessed the signage needs around the paths as well as identifying areas where it would be beneficial to install seating and remove sections of trees.

Several events were also opened up to volunteers from the general public such as the Big Christmas Tree Tug, where people assisted in pulling out hundreds of small lodgepole pine seedlings from an area of wetland. Sprucing Up The Forest where volunteers were trained in the safe felling, snedding and removal of larger trees using hand tools. These larger trees were used to create seating and other features of interest around the walking trails. This three day event in particular attracted attention from the media and public and has fostered continued volunteer engagement in other projects since.

## Glas-na-Bradén Conservation Association



In October 2015 The Glas-na-Bradén Conservation Association in Newtownabbey received funding through the Live Here Love Here Small Grants Scheme to address the need for improved water quality in order to enhance the surrounding urban biodiversity. This is a unique urban river project that includes both cross community and educational elements.

This funding enabled the association to purchase high tech, scientific instruments required to monitor the quality of this urban river system. This has enabled them to examine the impact of urbanisation on the river's quality and link this to the life found in it.

Speaking at a recent community event, Dr Flynn from the School of Civil Engineering at Queen's University Belfast said: "Although the river been often perceived by many as 'dead', the project showed that this is not necessarily the case. In some areas the Glas-na-Bradén supports aquatic life, while elsewhere pollution has been detected and that needs to be tackled if the health of the river is to improve."

A spokesman from the association said: "We're extremely proud to see a return on our project which should lead to bigger projects within Newtownabbey & District. Our project has been about education and changing mind sets. We're grateful to have had the opportunity to deliver that."



**LIVE  
HERE  
LOVE  
HERE**

# Eco-Schools

Eco-Schools forms an important element of the anti-littering education package in almost every Council in Northern Ireland.

The Eco-Schools programme, operated here by Keep Northern Ireland Beautiful, is run by the Foundation for Environmental Education in 58 countries around the world and is acknowledged as the world's largest pupil led environmental education programme, engaging over 15 million young people. In Northern Ireland 128 schools were awarded the prestigious, internationally recognised Green Flag in 2014-2015. Schools must maintain a litter free environment to achieve the Green Flag award which is renewed every two years, ensuring that all participating pupils receive regular anti-litter messaging.

In 2015 Northern Ireland hosted the Eco-Schools National Operators Meeting, welcoming over 90 international delegates for a three day conference.

Litter is one of 10 topics that Eco-Schools choose to work on as they progress through the award programme. Eco-Schools Northern Ireland has participated in the international Litter Less campaign, run by FEE and supported by the Wrigley Foundation, for the past 5 years. 30 schools participated in the Wrigley's Litter Less campaign in 2014-15 and received £300 funding each to run a litter awareness campaign with practical and community outreach actions (this funding was available in all Council areas supporting the Eco-Schools programme).



At the heart of the Eco-Schools programme is a very simple 7-step process supporting long-term behavioural change and promoting the environmental message beyond the school gates into the surrounding community. Northern Ireland is the first country in the world to have every school registered in the programme.

*St Mary's Primary School, Draperstown, receiving their Ambassador Eco-School plaque from Minister for the Environment Mark H Durkan and Chief Executive Officer of the Foundation for Environmental Education Daniel Schaffer at the Eco-Schools 20th Anniversary Event in Magherafelt March 2015.*

**Table 10: The number of children actively learning about the impacts of littering in Northern Ireland**

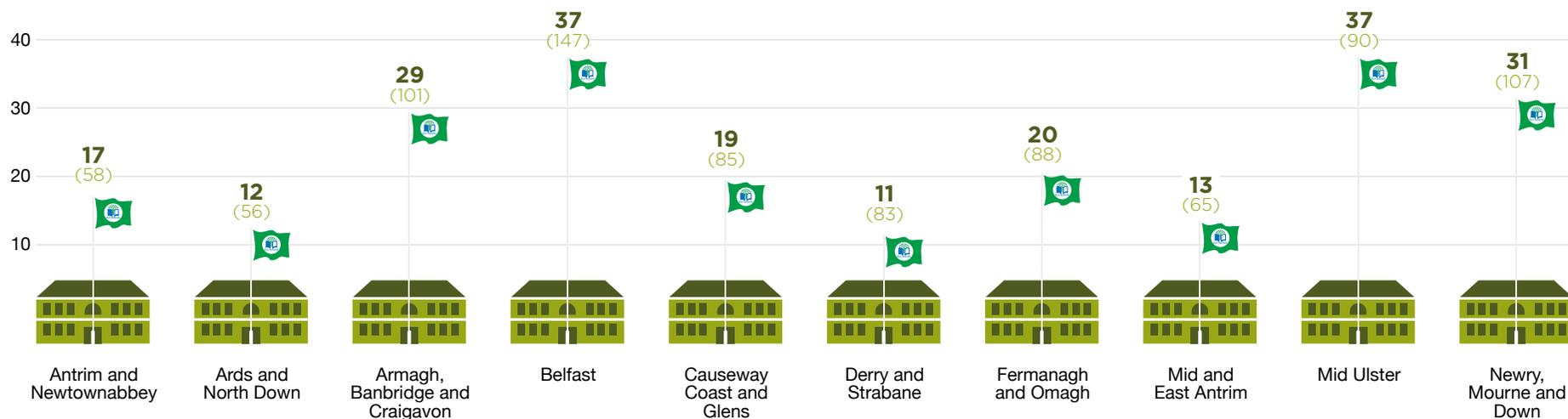
The number of Eco-Schools in Northern Ireland. Around seven out of ten Green Flag schools are actively encouraging a pupil-led anti-litter message at any one time. Years quoted are academic years. Pupil figures quoted are based on an average number of pupils per school and using the ratio of primary, post primary and nursery schools

Number of Green Flags	Year	% of schools looking at topic	Children receiving anti-litter education
103	2012-2013	76.7	24,000
113	2013-2014	85.0	25,000
128	2014-2015	70.3	25,500

**Figure 8: Number of current Green Flag Schools**

Number of Current Green flag schools and non-Green Flag schools for each supporting council area. Lisburn and Castlereagh does not support the Eco-Schools programme.

**Current Green Flag Schools** (Schools working towards a Green Flag)



# Education and awareness campaigns

Alongside the Live Here Love Here campaign Councils and community organisations run a range of education initiatives and workshops.

These help to develop awareness of littering as an issue and establish acceptable standards of behaviour.

By actively encouraging pro-environmental attitudes and opinion leadership in groups of school children, Councils can actively prevent the establishment of habits such as littering. Groups of school children are susceptible to strong internal normative pressures, where the opinion of a child's peer-group can strongly influence their behaviours. Once littering is established as an undesirable behaviour within these groups, they are likely to maintain this attitude because of a desire by members to be seen to fit in.

## Mid and East Antrim



Officers within the Environmental Health Department participate in a programme called BEE SAFE that is targeted at primary School children. During this annual event 750-800 children are given a short talk by various groups. Many teachers ask for the sessions to be re-run within the whole school.

The primary focus for the Council is to educate the children regarding the effects of litter on the environment/wildlife and the cost to Council for cleaning the litter.

The children are encouraged to interact and come up with answers to questions about litter and where it comes from. To help them put the issues into context the clean-up costs are related to things like the price of a car or an iPad.

The key learning point is that litter may be thrown down but it does not go away.

As part of the interactive session children take on the rolls of both the Offender and the Enforcer and of course the Teacher is always a target for a bit of fun. The Enforcer is given a jacket and body-worn camera for their part.

## Belfast City Council

Every two years Belfast City Council run the Brighter Belfast awards, which invites organisations/groups/businesses/schools to showcase their best practice in the area of the environment. The last awards took place in 2014 and the Council received 128 submissions in total over the five award categories. The Council used its website, Facebook and Twitter accounts to promote the awards and regularly send out reminders to the general public about the closing dates etc.

The winners of four of the award categories (Litter Heroes, Green Initiative, Nature Conservation and Education for Change) also received a prize of £500, with two Judges Special Awards winning trophies.

Belfast City Council developed an interactive science based show focusing on 'The Science of Litter,' with education specialist Sue McGrath or "Scientific Sue".

The show itself consisted of ten experiments and presentation taking place in late January and February 2016, with demos based around the scientific impact of littering and how science can be used to deal with littering. 46 Schools took part including 2346 pupils. Feedback from schools has been excellent.



## Armagh City, Banbridge and Craigavon

In January 2016 Armagh, Banbridge and Craigavon Borough Council launched a trial scheme to raise awareness and change attitudes and behaviour around the issue of dog fouling. An area with a high number of complaints in Drumnacanvy was selected for the trial. The road is half a mile long and has six housing developments with approximately 220 houses along it.

The baseline survey recorded 79 fouling locations which were sprayed with yellow water based paint and not cleansed for a week. Report Fouling banners were placed either end of the road and advice letters delivered to the 80 dog licence holders on the road. Week two had a further 33 locations which were sprayed purple and then cleansed. Week three saw 10 fouling incidents which again were cleansed and week four 6.

The initiative was promoted on the council Facebook page and received almost 82,000 hits in five days.



## Mid-Ulster District Council



Mid Ulster District Council enforcement officers carry out a regular programme of educational visits to primary schools throughout the District. They use a Powerpoint Presentation to cover various aspects of good citizenship in particular responsible dog ownership and best practice regarding litter.

The talk is very interactive using fake “dog poo” which they encourage the children to lift correctly using a bag. Children receive vouchers for the local leisure centres for participating, as well as novelty dog poo bags and other goodies.

As part of the package children are asked to design posters for display in local shops depicting the effects of litter and dog foul on wildlife. The talks have been very well-received by children and staff.

# Enforcement actions

Alongside education campaigns and awareness raising, enforcement is an integral part of the mix in tackling anti-social behaviours.

All councils in Northern Ireland are required to keep records of their enforcement operations and provide this information to the DoE for monitoring. These provide one measurement of a council's efforts to tackle litter and improve the local environmental quality for their residents.

Table 11 presents the numbers of Fixed Penalty Notices (FPN) issued by each new council. As the preceding organisations may have had different enforcement strategies it would not be appropriate to analyse them against previous years.

Across Northern Ireland there were on average 22 fixed penalties issued for every 10,000 people between April 2014 and March 2015 – this is equivalent to one in every 455 people. However, the activity in Belfast, which has unique issues as the largest city in Northern Ireland, skews this figure, being twice the rate of the next largest

**Table 11: Issue of Fixed Penalties extrapolated for each council**

*Belfast City Council issued almost half of all Fixed Penalties in 2014-15. The average recovered from each fixed penalty issued is £52.67, despite many councils having set the undiscounted level at £80.*

	Rate per 10,000 people per year	Percentage of total issued	Average return from each FPN issued	Litter LEAMS
Antrim and Newtownabbey Borough	13	4.3	£53.11	71
Ards and North Down	6	2.2	£49.95	69
Armagh City, Banbridge and Craigavon Borough	36	18	£70.04	73
Belfast City	72	49	£66.73	73
Causeway Coast and Glens District	9	3.0	£53.11	74
Derry City and Strabane District	25	9.1	£29.85	69
Fermanagh and Omagh District	8	2.2	£30.56	74
Lisburn and Castlereagh City	4	1.9	£47.37	75
Mid and East Antrim Borough	6	2.1	£54.47	68
Mid Ulster District	4	1.5	£56.35	75
Newry, Mourne and Down District	16	6.5	£44.63	70
<b>Average</b>	<b>22</b>	<b>100</b>	<b>£52.67</b>	<b>72</b>

issuer. If we discount Belfast the rate falls to just 13 Fixed Penalties issued per 10,000 people in Northern Ireland. Beyond that we see that two Councils – Mid-Ulster and Lisburn and Castlereagh – issue less than a third of even that average figure. However, both of these councils have high LEAMS values, suggesting that less littering goes on in these areas.



*Belfast issued as many Fixed Penalty notices as the rest of the country combined.*

# Recommendations

## For national policy makers

With street cleansing costing an annual £40million plus we need an Anti-Litter Strategy. Elements of such a strategy are already in place, such as Eco-Schools and Live Here Love Here, and much other good education, enforcement and public engagement activity. However, this would be better focused if part of a coherent Anti-Litter Strategy. It is worth noting that, in this void, several councils are now developing their own Anti-Litter Strategies.

Research carried out by Eunomia Research and Consulting Ltd showed millions more lost due to litter impacting on house prices, tourism, crime and mental health. Many other smaller costs were also identified. Given the additional massive hidden cost of litter to the Northern Ireland Economy, there is a strong argument for cross-departmental support for a national campaign to change behaviour.

Clear guidance is required for the treatment of littering by the courts. This should contain structured guidance against which fines, penalties and other options issued during court proceedings can be set. This would ensure that fair and reasonable penalties are applied consistently, removing the opportunity to game the system and take to court a defence case that is without merit on the possibility that the sentence will be less costly than paying Fixed Penalty.

Inclusion for the first time of litter in the proposed amendments to the EU Waste Directive is welcome. Consultation on how to effectively implement these changes in Northern Ireland must give careful consideration to the costs and benefits to be derived.

Independent, directed monitoring of marine litter levels should be ongoing to ensure there remains a credible source on which to base planning and reporting under the Marine Strategy Framework Directive .

The Department for Regional Development, in particular the Roads Service and the Rivers agency, should be required to account for their failure to provide a level of cleansing activity which will control the litter in areas within their remit. This includes actively managing and penalising contractors who fail to collect litter before cutting or clearing work is undertaken. The impact on tourism has been estimated in the millions (e.g. for beach litter disamenity the figure is between £17 and £36million annually) but is possibly higher. The impact on inward investment is incalculable.

## For local policy makers

Councils should use the Local Environmental Quality survey data to establish a key performance indicator that is very close to the hearts' of the public. This survey gives a broad understanding of the quality of an environment with indicators for litter, dog fouling, graffiti, fly-posting and detritus amongst others. This can be used to allocate resources effectively and to help inform community planning.

Schemes that reward desired behaviours should be promoted on an equal footing with enforcement. Positive messaging is an important and under-utilised element of a behaviour change campaign. Small scale examples of these schemes have already been successfully trialled in parts of Northern Ireland.

Councils should make increased use of the various communications channels available to them including via Eco-Schools and Live Here Love Here to get their anti-littering messages across to the public.

Councils should work for a consensus on harmonising support for and application of enforcement practices. An apparent 'postcode lottery' in enforcement and fixed penalty rates creates a resentment of the system, rather than a clear and unambiguous message to the public regarding the treatment of offenders.

# Conclusion

Ongoing budget cuts are a certainty. Even without these cuts, spending more and more money simply cleaning up after litterers is unacceptable.

At £40,000,000 a year this is £50 for every ratepayer – roughly the same as the average recovered for every fixed penalty. In other words, we are all paying a fixed penalty whether we drop litter or not. So our goal has to be preventing littering in the first place.

There is little point attracting people here if they then go away and tell people how dirty it is. Research has shown the huge hidden costs of littering, including the significant direct (£1,200,000) and indirect (>£41,000,000) impacts on tourism. Inward investment is also impacted negatively. With tourism now accounting for over 5% of GDP and growing, it is imperative that we ensure people leave wanting to come back or encouraging others to visit. At present, many leave shocked by the amount of rubbish strewn everywhere that they encounter. Whilst cleaning up is essential, it must not be at the expense of prevention, if we really want to grow our economy.

The hidden costs of littering also recognised many issues that are more immediate for all of us who live here, with those less well-off likely to suffer more. From poorer mental health and more car accidents to lower house prices and more crime – they are all taking their toll.

Despite all this, most people still do care. Often passionately. Every school here is an Eco-School - with its strong anti-littering message. Communities are taking action. Tens of thousands of people are getting involved in clean-ups such as Live Here Love Here's BIG Spring Clean. And most councils are now supporting this drive to change behaviour using more scientific approaches.

Litter levels dropped significantly in 2015. Is it a coincidence that Live Here Love Here advertising, grants and community support kicked off in 2015? Time will tell. What is obvious is that the numbers make a clear case for investment in order to save.



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