



**KEEP
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**Keep Scotland
Beautiful's Local
Environmental Audit
and Management
System Benchmarking
Report 2010/11
for the Scottish Local
Authorities**

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Foreword

“ I am pleased to present the results of the 2010/11 Local Environmental Audit and Management System (LEAMS) for Scotland. ”

This report provides a valuable insight into the standard of local environmental quality across the country and is the result of another year of partnership working between Keep Scotland Beautiful and all 32 Scottish local authorities.

As we move into the future it becomes increasingly vital to be able to measure trends in those areas that most affect the lives of Scotland's people.

LEAMS is an excellent illustration of how partners working together can support our vision of a clean, green, sustainable Scotland.

Keep Scotland Beautiful's Local Environmental Audit and Management System Benchmarking Report 2010/11 for the Scottish Local Authorities

Derek A Robertson
Chief Executive
Keep Scotland Beautiful.



Executive Summary

LEAMS (Local Environmental Audit and Management System) is a statutory Performance Indicator of street cleanliness for local authorities in Scotland. During the 2010/2011 financial year, 224 cleanliness surveys were conducted (128 conducted internally, 64 conducted by visiting a partner authority and 32 conducted by Keep Scotland Beautiful). Each survey represented a minimum 2% sample of the local authority area.

Of the 224 surveys, 16,657 individual transects were assessed for the following criteria; cleanliness grade, types of litter, sources of litter, litter bins and the local environmental quality. Percentages of all these attributes are calculated overall, by audit month and by priority zone. A Cleanliness Index is also calculated based on the range of cleanliness grades awarded. This cleanliness index (CI) is used as the indicator when measuring street cleanliness standards in Scotland.

The national cleanliness index was found to increase by one index point since last year, currently 74. Around one in every twenty three transects visited in Scotland recorded litter below the acceptable standard (C or D grade).

Indices and grade standards varied depending on the local authority grouping. With pedestrians found to account for the majority of litter, authorities with a high density population were found to generally have lower indices and a higher percentage of transects recording an unacceptable litter presence.

All 32 local authorities returned a cleanliness index above the minimum standard of 67. Almost half of the local authorities in Scotland improved on their cleanliness index since last year while 12 authorities returned an overall score lower, two thirds by only one point.

Town centres and high density residential areas generally recorded the lowest indices compared to less dense residential areas, which continue to record a good standard of cleanliness. There were mixed scores along the road based land types, with semi-rural roads in urban and mixed classed authorities returning close to one in ten transects below the acceptable grade standard.

The monitoring system did not detect a significant problem with business activity resulting in a litter issue, domestic waste spillage, construction waste or accidentally deposited litter.

Smoking related litter continues to be the main litter type affecting streets in Scotland with town centres and high density residential areas more severely impacted.

Drinks and confectionery affected a third of transects, fast food around one in every ten sites. These three litter types were all found to affect a high percentage of roadside verges.

The extreme winter conditions impacted on several variables. Dog fouling was more visible over this period while a high percentage of significant or severe detritus incidents were recorded.

Weed growth affected a third of transects, peaking over the summer and autumn months. Vandalism and fly-posting were rarely recorded whereas graffiti was mainly recorded in areas of high public use in urban authorities, predominately as small signatures on street furniture and utility boxes.

The results show that the majority of litter bins were well serviced in Scotland, only 3.5% of litter bins assessed were found to be overflowing.

Introduction

In June 2000, six local authorities participated in a benchmarking group managed by Keep Scotland Beautiful called the Local Environmental Audit and Management System (LEAMS). The aim was to measure and improve the cleanliness standards in the participating areas. In its second year the number of local authorities involved increased to eight. The level of cleanliness in these local authorities was monitored internally and externally over a year.

In April 2003, LEAMS was piloted on a national scale at the request of Audit Scotland. For the first time all 32 local authorities in Scotland took part in the programme, and comparative data on local environmental quality and cleanliness levels was collected from the Shetland Islands to the Scottish Borders, enabling a nationwide picture to be created.

Producing tables with all the individual local authority information facilitated comparison for sharing good practice. However, many local authorities expressed that it would be of greater value to compare authorities on like for like basis therefore since 2007/2008, the statistics have also reflected family groupings.

The three family groupings (urban, mixed urban and rural, rural) were derived in consultation with Audit Scotland and are defined by using two factors; population dispersion (the spread of population over an authority area) and the number of households within an authority area.

Following the success of the pilot year, LEAMS was chosen by Audit Scotland as the Performance Indicator on street cleanliness in 2004. This is therefore the seventh LEAMS report to be used as the basis of a Performance Indicator.

Family Groups

Rural

Aberdeenshire, Argyll and Bute, Dumfries and Galloway, The Highland Council, Orkney Islands, Perth and Kinross, Scottish Borders, Shetland Islands, Comhairle Nan Eilean Siar

Urban

Aberdeen City, Dundee City, East Dunbartonshire, City of Edinburgh, Falkirk, Glasgow City, North Lanarkshire, Renfrewshire, West Dunbartonshire

Mixed

Angus, Clackmannanshire, East Ayrshire, East Lothian, East Renfrewshire, Fife, Inverclyde, Midlothian, The Moray, North Ayrshire, South Ayrshire, South Lanarkshire, Stirling, West Lothian

Best Value

The Local Environmental Audit and Management System (LEAMS) was originally piloted in Wales to help local authorities meet their obligations under Best Value. This is done in the following ways:

- Provision of a base-line to establish at which point the authority is starting.
- Provision of self monitoring to assess continuous improvement.
- Provision of independent audits of the monitoring process by local authorities.
- Provision of annual validation by independent body (Keep Scotland Beautiful).
- Makes information on cleansing standards available in the public domain.
- Allows for comparison of results between local authorities.
- Allows for distribution of best practice between local authorities.

The LEAMS process is structured so that all authorities carry out exactly the same monitoring programme to enable full comparison between the results obtained.

Training

The process begins with training as each local authority in the LEAMS process must be fully briefed on the LEAMS process, the relevant legislation relating to street cleansing and litter, the survey methodology, and how to use the data obtained during the survey. From this training each successful delegate receives a LEAMS passport and certificate. The passport is only valid for two years after which update training is required.

Surveying

Following the training, each local authority begins bi-monthly surveys within their own area. These surveys cover a minimum random sample of 2% of streets and other relevant transects within their area. The following criteria are assessed during each of the surveys:

- Cleanliness grade; (A, B, C, D).
- Litter bins; count of public use bins and count of overflowing bins)
- Types of litter; smoking, drinks, confectionery and fast food related
- Sources of litter; pedestrians/individuals, business, domestic, construction, animal faeces, other
- Adverse environmental quality indicators; dog fouling, vandalism, graffiti, weeds, detritus, fly-posting
- Any other comments that are thought to be useful for that transect.

A data summary sheet is completed following each of the surveys to keep an exact record of the survey findings.

Every six months each local authority carries out a 2% sample survey within another local authority area. This process allows for independent audits to be carried out and allows an exchange of information and best practice to take place.

All audits are returned to Keep Scotland Beautiful for analysis, where a full statistical summary sheet is produced and sent back to the local authority.

In addition, an annual validation survey is also carried out by Keep Scotland Beautiful, also assessing a 2% sample survey within each of the local authority areas. This provides the external, independent evaluation recommended under Best Value.

Keep Scotland Beautiful also facilitates LEAMS forum meetings as necessary to discuss the development of the LEAMS process, compare results and share best practice. Update training is provided on an annual basis to ensure that those involved in the LEAMS process are surveying to the same standard.

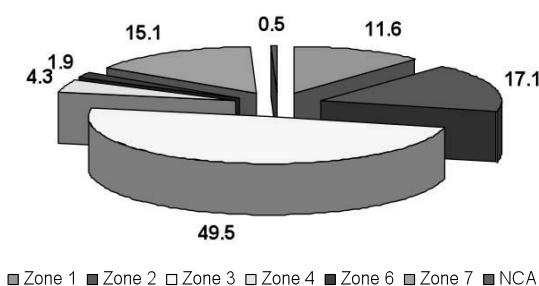
This report presents the findings of the LEAMS surveys carried out during the period from April 2010 to March 2011. For an explanation of how the audits are conducted please refer to the survey methodology section within this report, appendix 3.

1. Cleanliness standards

During the 2010/2011 audit year, 16,657 transects were assessed by Keep Scotland Beautiful and the 32 local authorities participating in the LEAMS programme.

Each transect was assessed for the presence of litter, graded as A or B (acceptable), C or D (unacceptable), standards which are set out in the Code of Practice on Litter and Refuse (Scotland) 2006. The range of grades recorded is then used to calculate the index, with a score of 67 set as the minimum standard. A full explanation of the cleanliness index and grades can be found in the survey methodology (appendix 3).

Figure 1. National distribution of transects



The predominant land type assessed was found to be low density residential (zone 3), where almost half of transects surveyed nationally were recorded within these areas. The percentage of road based transects assessed (zones 4, 6 and 7) depended on family grouping type, low for urban authorities (10.4%) to more than a third for rural authorities. Variations in percentage of transects assessed by land type will be a factor when comparing overall indices recorded for these family groups.

1.1 Overall cleanliness index

The national cleanliness index has improved by one index point since last year, currently standing at 74. The index score was derived from 95.7% of transects assessed at an acceptable standard (grade A or B) and 4.3% considered an unacceptable standard when audited (grade C or D).

Family Groups

Rural

Improvement of two index points this year. Currently standing at 78.

- 97.6% acceptable standard
- 2.4% unacceptable standard

Urban

No change in cleanliness index since last year, remains at 71.

- 94.1% acceptable standard
- 5.9% unacceptable standard

Mixed

Improvement of one index point since last year. Currently standing at 74.

- 95.4% acceptable standard
- 4.1% unacceptable standard

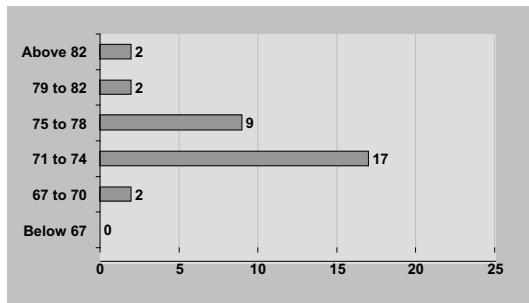
The national indices for the last three audit years suggest the overall standards are being maintained rather than improved, with the index fluctuating between 73 and 74 coupled with the acceptable and unacceptable grades awarded remaining within half a percentage point.

1.2 Local authority scoring

Despite a national index increase, 12 local authorities posted a decrease since last year, 9 of those by one index point. Of the 32 local authorities, 5 posted the same index as last year and 15 returned an increase, 6 of which were by 3 points or more.

All local authorities in Scotland achieved an overall index that either matched or exceeded the minimum standard of 67. The majority of local authorities posted scores between 71 and 74. Three of the four authorities recording an index above 78 were rural based whereas all nine urban based councils were found to record scores below 75, highlighting the expected difference in litter presence with population density.

Figure 2. Distribution of local authority indices



The national statistics show that 4.3% of transects assessed recorded an unacceptable C or D grade standard. Localised effects show that 11 of the 32 authorities recorded 6.0% and above of these grades for the audit year. In comparison, 14 local authorities recorded a relatively small percentage of unacceptable grades over the year (less than 4.0%). However, as has already been highlighted with the cleanliness index, this is family grouping dependent, with 7 out of 9 rural authorities recording unacceptable grades between 0.0% and 3.9% compared to 1 out of 9 population dense urban authorities.

The majority of local authorities maintained a fairly similar percentage of unacceptable grades since last year (14 authorities within 1 percentage point and a further 10 within 2 percentage points). A significant decrease in unacceptable grades assessed was observed for 6 local authorities (3.0 percentage points or better). Only 2 local authorities posted a significant increase in unacceptable grades (3.0 percentage points or more).

With only a small percentage of authorities recording a significant decrease in unacceptable grades, the increased cleanliness indices in Scotland appears to be a result of improving the standards of predominately litter free grade B transects into litter free grade A transects rather than a marked improvement of those transects that are generally perceived to be badly littered.



Heavy litter presence (grade D)

1.3 Seasonal variations

During the 2010/2011 audit year, the indices and distribution of cleanliness grades do not suggest any particular seasonal trend. The indices for the seven audits conducted were all within two index points (between 73 and 75) and all returning a similar percentage of unacceptable grades.

% at unacceptable	No. of Authorities
8.0 to 9.9	3
6.0 to 7.9	8
4.0 to 5.9	7
2.0 to 3.9	10
0.0 to 1.9	4

Over the last two LEAMS audit years, the winter period (between December and March) has provided a significant challenge to local authorities in keeping the streets and roads free from litter and refuse.



Pavement covered with grit

Widespread grit over a prolonged period and priorities to other services all impacted on the regular cleansing routines during this time. Despite these challenges, the national indices achieved over this period were not significantly affected, December and February audits within one index point of the overall national score and posting a similar percentage of unacceptable grades for both years.

This trend changes when looking at the rural family grouping, where a significantly lower index for the December audits (many carried over into January due to snow coverage) compared to the overall score (75 compared to 78) suggests an impact from the weather conditions at this time. The results show that a significant decrease in litter free transects converting to acceptable grade B standards were recorded over this period, suggesting removing small litter items was difficult especially with prolonged grit coverage on the streets. However, it is worth noting that a score of 75 still indicates a good standard of cleanliness, just does not match the higher standards set during other seasons.

1.4 Standards by land type

Although no overall seasonal trends were observed, distinct differences between the land types are found, which is expected considering the wide ranging public use levels between each zone.

Over the last three audit years, areas of high public use (zones 1 and 2) recorded the lowest cleanliness indices and percentage of litter free

transects (ranging from 69 to 71). These areas generally witness a constant flow of pedestrians and individuals which will impact on the ability to keep streets completely litter free for prolonged periods which in turn will impact on the index recorded.

The results also show the percentage of unacceptable grades in these areas over the last three audit years above the overall national statistics (5.1% zone 1, 5.9% zone 2).

Low density residential areas continue to return significantly high cleanliness indices, unacceptable grades below the national statistics and, in the current year, almost a third of transects assessed litter free.

As with the national statistics, the general trend within the family groups reflect lower indices and higher % unacceptable in urban type authorities in comparison with the rural and mixed authority groups.

Land types monitored

Zone 1

Town centres, shopping centres and busy transport centres

Zone 2

High density residential areas, such as flats and tenements

Zone 3

Low density residential areas, such as detached or semi-detached housing

Zone 4

Semi-rural areas, and those not falling into zones 1 to 3

Zone 6

Strategic routes and motorways

Zone 7

Rural roads linking towns and villages

Of the road based land types (zones 4, 6 and 7), strategic routes recorded the lowest index (72). During the June audits, the indices in these areas were found to fall below the minimum standard of 67. Although this indicates an issue during the spring/early summer months in these areas, the other audits for Scotland returned indices above the minimum standard, with the August audit, which is commonly the busiest period along A class roads with tourism, scoring an index of 80.

As 50 metre transects are conducted for every 500 metre stretch (to a maximum of 3) along these usually long routes, a resulting high variance in scores is commonly observed. These routes also tend to be the most difficult to keep completely litter free due to the hazardous nature of the land type. Rural roads linking towns and villages recorded the highest index (78). Semi-rural roads recorded a national index of 75.



Litter free transect (zone 3)

When analysing the ratio of unacceptable grades nationally along road based land types, a different picture emerges, with strategic routes recording the lowest percentage of C and D grade transects (3.6%) compared to semi-rural roads, where 6.7% of transects were assessed as unacceptable. Therefore, despite recording the lowest cleanliness index between road based land types, strategic routes appear to be mainly affected by

sporadic litter. This is in comparison to zones 4 and 7 which return a higher percentage of litter free grades as well as transects found to be unacceptable due to litter accumulations and/or consistency.

Family group variations

	Rural	Urban	Mixed
Zone 4 Index	82	68	74
% Unacceptable	0.4	12.5	8.3
Zone 6 Index	72	70	73
% Unacceptable	5.6	3.8	1.6
Zone 7 Index	82	71	73
% Unacceptable	1.5	7.3	6.6

Despite rural roads linking towns and villages recording the highest index, this statistic masks family grouping variations where urban and mixed authorities recorded lower indices and a significantly high percentage of grades below the acceptable standard. The statistics also suggest that for these authority groups, semi-rural roads are providing a challenge in keeping litter levels at an acceptable standard, returning a high percentage of C and D grade transects.



Consistent litter (zone 7)

2. Litter sources

Determining where the litter originates is key when planning strategies to improve standards. The following section breaks down sources into six main categories.



2.1 Pedestrians/individuals

Throughout the audit year and in all land types, the results show that the general public contribute the majority of litter recorded on the streets of Scotland. To illustrate, of transects that recorded litter in Scotland, 98.4% recorded the general public as a contributing factor. This statistic is mirrored in all seven benchmarking monitoring years.

These statistics are not family group dependent, all authorities in Scotland recorded pedestrians as their main source of litter. This highlights why, for those authorities with a higher density of population, return lower cleanliness indices.

2.2 Business

Throughout the audit year and in all land types, the percentage of sites affected by business activity resulting in a litter issue was found to be relatively low nationally, the highest recorded less than one in twenty transects visited, suggesting in Scotland this source of litter was not a significant issue during 2010/2011. Comments from the raw data suggest that a significant proportion of business waste was found to be a result of red elastic bands used by the Post Office.

Additional statistics

- Nationally, business sources of litter and refuse has fallen since last year, from 4.1% to 2.6% of transects assessed
- Family groupings all recorded a low impact; rural 2.4%, urban 3.2%, mixed 2.3%
- 6.5% of semi-rural roads for urban authorities recorded business litter
- Within rural authorities, strategic routes returned 7.4% of transects affected by business activity resulting in a litter issue.

2.3 Domestic



Since the majority of domestic waste collection changed from black bags to containerisation, the percentage of sites impacted by this litter source has remained comparatively low (2.3% for 2010/2011). Comments from the data sheets indicate spillage from recycling bins and uncontained waste in bags account for a proportion of domestic waste on the streets. As expected, weather conditions in part dictated the level of problem particularly blustery conditions on recycling bin collection days.

Over the last three audit years, the percentage of domestic waste on the streets of Scotland has fallen from 2.8% of transects in 2008/2009 to 2.3% in the current audit year. The results throughout the audit year (between 0.7% and 4.9%) and for all land types (between 1.1% and 3.0%) nationally are consistently low, emphasising this source of litter is not reflecting an overall major issue nationally.

2.4 Construction

Over the eight years LEAMS has been a statutory performance indicator, refuse resulting from construction works has rarely been recorded in areas in which local authorities are duty bound to remove litter. The current audit year shows that less than one percentage of transects assessed recorded this litter source (0.3%).

2.5 Animal faeces

The presence of animal faeces has remained similar to last year, affecting 7.4% of transects monitored. Of sites that recorded faecal matter, the vast majority (93.3%) were found to be a result of dog fouling.

The impact is found to be slightly skewed to high density residential areas (12.4% impact), the winter months (11.3% of transects affected during the December audits) and in urban based authorities where almost one in ten transects visited recorded an incident (9.5%).

2.6 Other

Litter or refuse deposited accidentally was recorded infrequently during the current audit year, affecting one in a hundred sites visited. Considering vehicle parts make up the majority of accidental litter in Scotland, unexpectedly, strategic routes recorded no transects affected.

3. Types of litter

The composition of litter found on the streets of Scotland is monitored, broken down into four main types. By collating these statistics, the impact of a campaign on litter abatement can be analysed.



3.1 Smoking related

Smoking related litter continues to impact on over a half of transects assessed in Scotland over the last three years, increasing slightly in 2010/2011 from last year (currently 52.4%). This litter type was a persistent problem throughout the audit year, affecting between 49.2% and 55.2% of transects assessed.

3.2 Drinks related

Just under a third of transects assessed recorded drinks related litter in Scotland (31.6%), a slight fall since last year where 33.9% of sites recorded a presence. A consistent presence was recorded throughout the audit year (between 27.3% and 36.4%). Almost a half of transects along strategic routes recorded an incident of drinks related litter (48.1%), significantly higher than any other land type (ranging from 28.1% in town centre areas to 37.5% within high density residential locations).

As found with smoking related litter, the impact from drinks items were found to be skewed towards the urban authorities, where 37.1% of transects recorded an impact compared to 33.6% in mixed authorities and 23.3% for rural authorities. Strategic routes showed the same high impact in the family groups. Rural roads linking towns and villages in urban and mixed authorities also recorded a high percentage of transects affected (53.0% and 47.6% respectively).

Additional Statistics

- Areas of high public use (zones 1 and 2) recorded a significant higher presence of smoking litter (70.4% and 67.2% respectively)
- Of sites that recorded litter in town centre areas, 85.5% observed smoking related litter (mainly cigarette ends)
- Since the smoking ban, the percentage of sites affected by cigarette related litter has decreased
- Urban authorities recorded the highest impact (63.4%) compared to rural authorities (42.5%). Mixed authorities had just over a half of sites recording a presence (50.8%).

3.3 Confectionery related

Confectionery related litter was found to affect just under a third of sites nationally (32.7%), a fall of 2.6 percentage points since last year. As expected, areas of high public use recorded a higher than overall percentage (36.6% town centre areas, 42.0% high density residential locations). As with the national drinks related statistics, strategic routes also recorded a high presence of this litter type (39.1%).

Additional Statistics

- All family groups returned a significant impact from confectionery related litter; rural 26.5%, urban 37.7%, mixed 33.4%
- Almost a half of semi-rural roads assessed in urban authorities recorded this litter type
- Mixed authorities recorded confectionery items on 43.0% of strategic route sites assessed

3.4 Fast food related

Over the last three audit years, fast food related litter has affected one in ten transects assessed in Scotland, skewed towards road based land types (13.3% semi-rural roads, 19.2% strategic routes, 15.2% rural roads linking towns and villages). In areas of high public use, fast food related litter was found to affect 11.3% of sites visited.

As expected, urban authorities recorded a slightly higher percentage of sites recording fast food related litter compared with the other family groups (13.1%), specifically along road based sites where between a fifth and a quarter of transects assessed recorded a presence. A similar impact along these land types were recorded in the mixed family grouping, with 20.7% of transects along rural roads linking town and villages recording this litter type.

4. Adverse environmental quality indicators

Using the broken window theory, small problems that are detrimental to the local environment can easily become more significant or severe if not tackled. This chapter looks at the presence levels of six common issues affecting the local environment within communities.

4.1 Dog fouling

The impact from dog fouling on the streets of Scotland has remained similar since last year, affecting 6.9% of sites visited. The majority of dog fouling was found to be minor (one or two small incidents along the transect), only 0.2% of streets monitored nationally recording either a significant or severe presence.

The statistics suggest that over winter, the presence of dog fouling was more prevalent, with over one in ten transects during the December audits over the last two audit years recording an incident. It appears that auditing soon after a thaw from snow coverage, during which faecal matter will be hidden, is the main reason behind this spike in presence.

Additional Statistics

- High density residential areas were more acutely affected (12.0%)
- Urban authorities recorded the highest percentage of dog fouling (9.1%), compared with rural (5.2%) and mixed (6.5%).

4.2 Vandalism

The statistics indicate that vandalism is not a national issue, with only 1.0% of transects visited recording an incident and only 0.1% as a significant or severe impact. Similar statistics are observed for all family groups, ranging from 1.8% of transects in urban authorities affected to 0.2% of rural authorities. The comments from the raw data suggest a proportion of these vandalism issues are a result of etching, with panels on bus shelters commonly targeted.

4.3 Graffiti

As with vandalism, the overall statistics for graffiti in Scotland through the LEAMS monitoring programme suggests this local environmental quality issue is not a major problem nationally with only 2.8% of transects recording an incident.



When breaking the statistics into land types, it becomes apparent that there is an issue with graffiti in town centres and high density residential areas (5.6% and 6.4% of sites affected respectively) skewed towards urban authorities where around one in ten sites assessed in these areas recorded an incident.

The vast majority of graffiti incidents were recorded as minor, the comments indicating small signatures on street furniture and utility boxes a common target. Only 0.3% of transects nationally recorded graffiti on a significant or severe presence level, 0.7% in urban authorities.



4.4 Weed growth

Just under a third of sites visited in Scotland recorded a presence of weed growth, a slight increase since last year (from 29.6% to 32.6%). The majority of weeds were recorded as minor with 3.8% found to be at a significant or severe level, an increase of 1.5 percentage points since last year.

The seasonal impact from weed growth was found to vary between local authorities, with differing methods of management partly contributing. In general for Scotland over the last three audit years, the percentage of sites recording a presence of weed growth is found to increase over the early summer to late autumn (peaking at 48.3% during the August audits) before falling over the winter period (24.1% for the December audits).

Additional Statistics

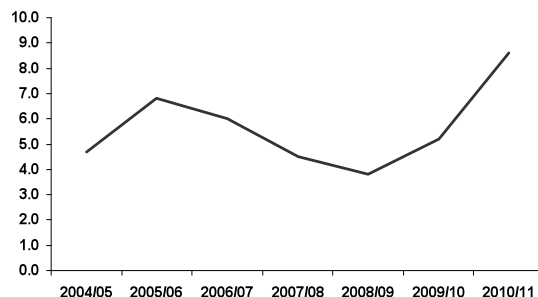
- Weed growth was more prevalent in residential areas (high density 39.1%, low density 35.2%)
- Urban authorities recorded a significantly higher percentage of weed growth (44.4%) compared with rural (29.3%) and mixed (24.9%)
- The overall significant or severe presence levels of weed growth was also higher for urban authorities (6.2%)

4.5 Detritus

Detritus was a widespread and consistent issue on sites in Scotland (affecting between 48.0% and 54.5% during the seven audits conducted and between 39.0% and 58.1% for all land types monitored).

The current audit year reflects the highest percentage of transects monitored affected by a significant or severe presence of detritus. For 2010/2011, 8.6% of transects assessed nationally recorded this level of detritus, the second consecutive increase.

Figure 3. Percentage of significant/severe detritus



Despite the percentage of sites affected by detritus during the audit year remaining fairly consistent, there is evidence that grit to counteract the ice and snow conditions over the winter period has had an impact. The significant/severe incidents of detritus are slightly skewed to the December and February audits, with almost half of the 8.6% transects affected recorded during this season. This indicates that although the percentage of sites observing detritus over the winter was not much higher than any other season, the impact was greater.

Additional Statistics

- Over a half of transects monitored nationally recorded a presence of detritus (52.3%), an increase of 5.6 percentage points since last year
- Rural authorities observed the highest increase in detritus since last year (from 37.5% to 49.4%)
- Urban authorities recorded the highest overall impact (64.3% of sites visited, increasing from 58.8% in 2009/2010) and the highest significant or severe incidents (10.6%).
- Mixed urban and rural authorities maintained a similar overall percentage of sites affected by detritus (44.2%) with 7.3% of transects recording a significant or severe presence

4.6 Fly-posting

The overall impact from fly-posting was found to be minimal, affecting less than one percent of sites visited nationally (0.8%) and only 1.8% of town centre areas where fly-posting is more likely to have an impact. Even in urban authorities, the percentage of sites affected was low (1.4%) with only 2.9% of town centre areas affected. Nationally and in all family groups, the percentage of sites recording fly-posting as significant or severe did not exceed 0.1%.



5. Litter bins

When public use litter bins exceed three quarters capacity, this is termed as exceeding the maximum serviceable limit. At this point, a litter problem in the area is likely to result therefore monitoring the level of bin use can assist in managing servicing schedules.

Overall, the servicing of litter bins in Scotland is good, with only 3.5% of public use litter bins observed to be over the maximum serviceable limit.

Almost one in ten bins along strategic routes over the last two audit years were recorded as overflowing which would normally flag up a potential issue however, only 11 public use

litter bins were recorded in these areas (which is not unusual considering these are normally A class roads) with 1 found to be over three quarters full, not a big enough sample to draw an indicative conclusion. Encouragingly, the percentage of litter bins over the maximum serviceable limit in town centre areas has fallen over the last three audit years, with just over 1 in 40 bins in the current audit year recorded as overflowing.

A good provision of litter bins is observed in town centre areas for Scotland, with around a third of transects assessed found to have at least one public use litter bin available.



Conclusions

Since LEAMS was adopted as the national performance indicator in 2003/2004, there is clear evidence that the cleanliness standards have improved significantly. The first four audit years showed that the initiatives and changes in resource allocation were effective. This resulted in reducing the impact of many local environmental quality issues while tackling those streets deemed to be below an acceptable grade standard. The last three audit years reflect a period of maintaining the standards that were initially achieved, with very little change in the national standards since 2008/2009.

This report highlights the general public as the biggest contributor to litter on the streets in Scotland. This is not an unexpected statistic and shows why almost all campaigns on litter abatement are directed at this audience. The most consistent litter dropped is cigarette ends, continuing to blight the streets of Scotland, primarily in urban town centres. It is worth noting though that the percentage of sites affected by cigarette litter has not increased since the smoking ban was implemented in 2006. Many organisations have a vested interest in the appearance of town centre areas therefore a partnership approach may provide additional resources for local authorities in tackling specific issues.

The last two winters have witnessed some of the harshest weather conditions of a generation, providing a significant challenge to local authorities. A heavier presence of grit

has been used over this period and due to the prolonged nature of the conditions, left on the streets reducing mechanical sweeping methods. This appears to have impacted on the litter free transects, with smaller litter items such as cigarette ends being more prevalent. More dog fouling appeared on the streets, hidden and accumulating for weeks under snow coverage.

The results show that roadside litter is still a problem in Scotland. Litter clearance along these routes is generally very hazardous and expensive. Recently, the Transport Litter Group has been set up by the government to work in partnership with those duty bodies with a common interest in this issue.

Despite this report highlighting continuing problems, there are also many other statistics which show that issues have been tackled and brought to manageable levels. Litter resulting from business activity has halved and fly-posting in town centre areas for urban authorities has been reducing over the last three audit years. Public use litter bins continue to be well serviced and visible in our town centre areas.

The conclusions reached in this report focus primarily on the national statistics and there will be significant variations in results between individual local authorities. It is recommended that, in terms of sharing good practice, the tables of individual local authority scores be consulted to determine whether your authority could benefit from exchanging experiences with another authority within your family group.

Appendix 1 – Supporting photographs

Zone 1



Fly-posting on disused building doorway



Cigarette ends accumulating by public use litter bin



No litter or refuse along 50 metre transect



Refuse collecting around recycling bins



Litter forced into building vent guard, collected over a prolonged period



Consistent cigarette litter along the channel

Zone 2



Graffiti on lamp post and utility box



Graffiti on bus shelter, panels vandalised (etched writing)



Litter and detritus accumulating in the channel, cars routinely parked by kerbside.



Significant accumulation of detritus along 50 metre transect



Public use litter bin past the maximum serviceable limit



Significant weed growth in the channel



Weed growth impacting along gaps appearing between kerbstones and pavement

Zone 3



Heavy litter accumulation close to domestic refuse area



No litter or refuse over 50 metre transect, minor detritus



Litter and detritus accumulation in car parking bay, built up over time



Litter consistent along the backline beside hedge which shows signs of recently being cut



Litter consistent along backline, partly between the private householders fence and kerbstones



Telephone booth with missing glass panel (vandalism)



Significant weed growth along backline as well as cigarette ends



No litter or refuse over the 50 metre transect

Road based land types



Drinks, confectionery and fast food related litter along verge



Fly-tipped waste in wooded area 2 metres from the roadside



Fast food related litter along verge



Drinks, confectionery and fast food related litter along verge



No litter or refuse over the 50 metre transect



Litter along verge, drinks, confectionery related and a newspaper



Grit on the paved surface by rural road



Fly-tipped waste in ditch close to the roadside

Appendix 2 – Supporting tables

Background

Distribution of transects sampled by zone

Zone	National		Rural		Urban		Mixed urban and rural	
	Transects Audited	% Overall	Transects Audited	% Overall	Transects Audited	% Overall	Transects Audited	% Overall
1	1926	11.6	486	9.7	718	13.4	722	11.5
2	2845	17.1	493	9.8	1433	26.6	919	14.7
3	8254	49.5	2184	43.6	2653	49.2	3417	54.6
4	721	4.3	243	4.8	200	3.7	278	4.4
6	312	1.9	54	0.1	130	2.4	128	2.0
7	2510	15.1	1481	29.6	232	4.3	797	12.8
NCA	89	0.5	68	1.4	21	0.4	-	-

Cleanliness indices and grades

Overall cleanliness index

National cleanliness indices (last eight years)

<i>Cleanliness Indices</i>							
2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
69	70	70	71	73	74	73	74

National cleanliness indices per audit/zone/overall

	Zone							Overall
	1	2	3	4	6	7	NCA	
April	71	70	75	72	72	76	67	74
June	72	70	76	75	66	79	73	75
August	70	69	77	76	80	80	-	75
October	71	71	76	75	70	77	73	74
December	72	69	74	73	68	76	79	73
February	73	69	77	75	69	80	75	75
KSB Validation	67	69	76	79	78	79	-	74
Overall	71	70	76	75	72	78	74	74

*Audits in red conducted by external surveyors, highlighted green below 67

Rural cleanliness indices (last three years)

<i>Cleanliness Indices</i>		
2008/2009	2009/2010	2010/2011
76	76	78

Rural cleanliness indices per audit/zone/overall

	Zone							Overall
	1	2	3	4	6	7	NCA	
April	71	75	77	78	60	80	67	77
June	71	74	77	76	58	83	73	77
August	70	67	80	83	76	83	-	79
October	74	73	76	81	67	79	73	76
December	71	71	73	81	67	80	79	75
February	71	71	81	84	71	85	-	80
KSB Validation	69	74	80	94	100	84	-	81
Overall	71	72	78	82	72	82	74	78

*Audits in red conducted by external surveyors, highlighted green below 67

Urban cleanliness indices (last three years)

Cleanliness Indices		
2008/2009	2009/2010	2010/2011
71	71	71

Urban cleanliness indices per audit/zone/overall

	Zone							Overall
	1	2	3	4	6	7	NCA	
April	67	68	73	66	75	69	-	71
June	70	67	74	72	68	73	-	71
August	67	67	76	74	67	65	-	72
October	69	68	77	69	71	76	-	73
December	70	68	73	67	67	68	-	71
February	72	67	74	61	70	73	75	71
KSB Validation	67	66	71	66	71	72	-	69
Overall	69	67	74	68	70	71	75	71

*Audits in red conducted by external surveyors, highlighted green below 67

Mixed urban and rural cleanliness indices (last three years)

Cleanliness Indices		
2008/2009	2009/2010	2010/2011
73	73	74

Mixed urban and rural cleanliness indices per audit/zone/overall

	Zone							Overall
	1	2	3	4	6	7	NCA	
April	74	72	75	72	71	69	-	73
June	74	72	77	78	67	74	-	76
August	73	72	76	72	87	76	-	75
October	70	75	75	74	70	74	-	74
December	75	71	75	73	71	73	-	74
February	75	70	76	76	67	71	-	74
KSB Validation	66	71	76	76	76	74	-	74
Overall	72	72	76	74	73	73	-	74

*Audits in red conducted by external surveyors, highlighted green below 67

Overall cleanliness grade distribution

National percentage distribution of cleanliness grades awarded (last three years)

Audit Year	Acceptable		Unacceptable	
	Grade A %	Grade B%	Grade C%	Grade D%
2010/2011	27.8	67.9	4.1	0.2
2009/2010	24.7	70.8	4.3	0.2
2008/2009	25.9	70.1	3.8	0.2

Family grouping percentage distribution of cleanliness grades awarded (last three years)

Year	Rural Grade %				Urban Grade %				Mixed urban and rural Grade %			
	A	B	C	D	A	B	C	D	A	B	C	D
2010/2011	36.3	61.3	2.3	0.1	19.7	74.4	5.5	0.4	28.0	67.4	4.5	0.1
2009/2010	31.0	66.5	2.5	0.01	20.2	73.7	5.7	0.4	23.5	71.6	4.6	0.3
2008/2009	31.2	66.2	2.5	0.1	21.3	74.1	4.3	0.3	24.4	70.5	4.8	0.3

Local authority index and grade distribution banding

Range of cleanliness indices for local authorities by family grouping

Index	Rural		Urban		Mixed urban and rural	
	No of Authorities	%	No of Authorities	%	No of Authorities	%
Above 82	1	11.1	0	0.0	1	7.1
79 to 82	2	22.2	0	0.0	0	0.0
75 to 78	4	44.5	0	0.0	5	35.7
71 to 74	2	22.2	7	77.8	8	57.2
67 to 70	0	0.0	2	22.2	0	0.0
Below 67	0	0.0	0	0.0	0	0.0

Range of index change since last year for local authorities by family grouping

Index Change	Rural		Urban		Mixed urban and rural	
	No of Authorities	%	No of Authorities	%	No of Authorities	%
3 to 5	3	33.4	1	11.1	2	14.3
2	1	11.1	0	0.0	2	14.3
1	1	11.1	1	11.1	4	28.6
0	1	11.1	2	22.2	2	14.3
-1	2	22.2	3	33.4	4	28.6
-2	0	0.0	1	11.1	0	0.0
-3 to -5	1	11.1	1	11.1	0	0.0

Range of % unacceptable grades recorded for local authorities by family grouping

% Unacceptables	Rural		Urban		Mixed urban and rural	
	No of Authorities	%	No of Authorities	%	No of Authorities	%
8.0 to 9.9	0	0.0	1	11.1	2	14.3
6.0 to 7.9	0	0.0	4	44.5	4	28.6
4.0 to 5.9	2	22.2	3	33.3	2	14.3
2.0 to 3.9	3	33.3	1	11.1	6	42.8
0.0 to 1.9	4	44.5	0	0.0	0	0.0

Range of % unacceptable grades recorded since last year for local authorities by family grouping

% Unacceptables Change	Rural		Urban		Mixed urban and rural	
	No of Authorities	%	No of Authorities	%	No of Authorities	%
3.0 to 4.9	1	11.1	0	0.0	1	7.1
2.0 to 2.9	0	0.0	0	0.0	0	0.0
1.0 to 1.9	1	11.1	3	33.3	4	28.6
-0.9 to 0.9	5	55.6	5	55.6	4	28.6
-1.0 to -1.9	0	0.0	0	0.0	2	14.3
-2.0 to -2.9	2	22.2	1	11.1	1	7.1
-3.0 to -4.9	0	0.0	0	0.0	2	14.3

Seasonal cleanliness index/grade variations

National cleanliness indices by audit month (last three years)

	Cleanliness Index						
	April	June	August	October	December	February	KSB Validation
2010/2011	74	75	75	74	73	75	74
2009/2010	74	73	75	74	73	72	72
2008/2009	74	74	77	74	73	74	71

*Audits in red conducted by external surveyors

National distribution of cleanliness grades by audit month (last three years)

	Acceptable						Unacceptable					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	25.2	24.5	25.0	71.5	72.2	70.8	3.2	3.2	4.0	0.1	0.1	0.2
June	26.7	23.2	27.5	70.3	72.8	69.3	2.8	3.9	3.2	0.1	0.2	0.0
August	35.4	30.1	31.3	60.1	65.8	63.8	4.1	4.0	4.8	0.2	0.4	0.1
October	35.4	25.0	27.0	60.1	71.2	69.3	4.1	3.6	3.7	0.2	0.4	0.0
December	24.8	23.7	24.4	72.2	71.8	71.3	2.9	4.4	4.0	0.5	0.1	0.3
February	23.3	22.9	30.1	73.0	71.3	65.7	3.6	5.2	3.9	0.3	0.1	0.3
Validation	28.7	23.8	29.4	66.1	69.7	65.0	4.9	6.0	5.3	0.1	0.3	0.3

*Audits in red conducted by external surveyors

Rural cleanliness indices by audit month (last three years)

	Cleanliness Index						
	April	June	August	October	December	February	KSB Validation
2010/2011	77	77	79	76	75	80	81
2009/2010	76	76	77	76	75	73	80
2008/2009	75	76	80	76	75	76	76

*Audits in red conducted by external surveyors

Rural distribution of cleanliness grades by audit month (last three years)

	Acceptable						Unacceptable					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	28.7	31.1	32.8	68.7	67.4	64.6	2.5	1.5	2.5	0.1	0.0	0.1
June	30.8	30.5	33.6	67.0	66.5	64.5	2.1	3.0	1.9	0.1	0.0	0.0
August	44.2	32.4	41.0	52.7	66.5	56.6	3.1	1.1	2.3	0.0	0.0	0.1
October	28.9	28.8	31.6	69.5	69.2	66.1	1.6	2.0	2.3	0.0	0.0	0.0
December	28.2	26.9	26.4	69.9	70.0	71.9	1.8	3.1	1.7	0.1	0.0	0.0
February	33.6	24.0	43.0	61.7	71.9	55.1	4.7	3.9	1.8	0.0	0.2	0.1
Validation	31.0	29.4	45.9	66.1	67.4	50.7	2.9	3.1	3.4	0.0	0.1	0.0

*Audits in red conducted by external surveyors

Urban cleanliness indices by audit month (last three years)

	Cleanliness Index						
	April	June	August	October	December	February	KSB Validation
2010/2011	71	71	72	73	71	71	69
2009/2010	72	71	73	71	72	71	69
2008/2009	74	74	74	73	71	73	67

*Audits in red conducted by external surveyors

Urban distribution of cleanliness grades by audit month/zone/overall (last three years)

	Acceptable						Unacceptable					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	24.1	20.3	17.0	72.8	75.2	78.2	2.9	4.5	4.4	0.2	0.0	0.4
June	24.3	17.7	18.7	72.5	76.9	76.7	2.8	5.0	4.6	0.5	0.3	0.0
August	27.3	25.7	23.8	68.4	68.5	68.1	3.8	5.7	8.0	0.5	0.1	0.1
October	21.4	19.0	22.6	75.3	76.0	74.1	3.1	4.4	3.2	0.1	0.7	0.1
December	18.2	20.2	17.9	77.3	74.6	76.8	4.4	5.0	4.4	0.2	0.3	0.9
February	24.5	22.0	21.8	70.0	70.4	71.1	5.3	7.3	6.3	0.2	0.3	0.8
Validation	10.3	17.0	16.3	81.9	73.6	76.0	7.3	8.1	7.2	0.4	1.2	0.5

*Audits in red conducted by external surveyors

Mixed urban and rural cleanliness indices by audit month (last three years)

	Cleanliness Index						
	April	June	August	October	December	February	KSB Validation
2010/2011	73	76	75	74	74	74	74
2009/2010	72	73	76	74	73	72	70
2008/2009	73	73	77	73	72	74	70

*Audits in red conducted by external surveyors

Mixed urban and rural distribution of cleanliness grades by audit month (last three years)

	Acceptable						Unacceptable					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	22.1	20.6	25.2	70.6	73.6	70.0	5.3	4.2	4.8	0.1	0.1	0.0
June	23.6	21.7	29.9	75.8	72.5	67.0	3.8	3.8	3.1	0.0	0.1	0.0
August	35.9	32.0	30.3	71.3	58.4	65.7	5.4	5.1	3.9	0.0	0.5	0.1
October	22.2	27.4	27.2	71.6	73.3	67.5	5.1	4.5	5.3	0.2	0.0	0.0
December	22.0	24.2	28.1	73.7	73.0	66.5	4.0	4.9	5.4	1.2	0.1	0.0
February	28.7	22.9	26.9	68.6	66.0	69.6	7.2	4.8	3.5	0.1	0.5	0.0
Validation	17.5	16.5	28.2	78.6	75.8	66.3	4.8	6.1	5.1	0.1	0.6	0.4

*Audits in red conducted by external surveyors

Cleanliness indices/grades by land type

National cleanliness indices by zone (last three years)

	Cleanliness Index						
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 6	Zone 7	NCA
2010/2011	71	70	76	75	72	78	74
2009/2010	69	69	75	76	71	76	75
2008/2009	69	70	75	73	70	76	73

National distribution of cleanliness grades by zone (last three years)

	Acceptable						Unacceptable					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	14.5	14.0	17.7	80.4	80.1	77.2	4.9	5.7	5.0	0.2	0.2	0.1
Zone 2	17.0	15.6	15.0	77.4	77.3	79.1	5.2	6.7	5.6	0.3	0.4	0.3
Zone 3	29.4	27.8	31.2	67.4	68.6	65.2	3.1	3.5	3.5	0.1	0.1	0.1
Zone 4	26.2	32.2	33.7	68.6	62.9	59.6	5.0	4.2	5.5	0.8	0.2	1.2
Zone 6	17.5	18.0	18.3	75.0	76.3	78.5	7.5	4.9	3.2	0.0	0.0	0.0
Zone 7	33.3	32.1	38.6	63.4	64.2	57.8	3.1	3.4	3.6	0.2	0.2	0.0
NCA	20.9	25.3	24.7	76.1	74.7	74.2	3.0	0.0	0.0	0.0	0.0	1.1

Rural cleanliness indices by zone (last three years)

	Cleanliness Index						
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 6	Zone 7	NCA
2010/2011	71	72	78	82	72	82	74
2009/2010	72	71	76	79	68	79	75
2008/2009	70	73	78	75	64	78	73

Rural distribution of cleanliness grades by zone (last three years)

	Acceptable						Unacceptable					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	12.6	20.2	17.3	85.1	76.9	79.0	2.3	2.9	3.7	0.0	0.0	0.0
Zone 2	20.4	18.0	21.5	77.1	78.5	74.0	2.2	3.5	4.1	0.3	0.0	0.4
Zone 3	34.0	31.4	35.6	63.2	65.8	62.0	2.8	2.8	2.4	0.0	0.0	0.0
Zone 4	28.6	37.6	46.9	69.4	61.4	52.7	2.0	0.5	0.4	0.0	0.5	0.0
Zone 6	7.7	10.3	20.4	73.1	82.8	74.0	19.2	6.9	5.6	0.0	0.0	0.0
Zone 7	38.4	38.7	48.0	59.8	59.6	50.5	1.7	1.7	1.4	0.1	0.0	0.1
NCA	22.1	24.7	22.1	74.4	75.3	77.9	3.5	0.0	0.0	0.0	0.0	0.0

Urban cleanliness indices by zone (last three years)

	Cleanliness Index						
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 6	Zone 7	NCA
2010/2011	69	67	74	68	70	71	75
2009/2010	68	67	74	72	72	71	-
2008/2009	69	68	74	72	70	73	-

Urban distribution of cleanliness grades by zone (last three years)

	<i>Acceptable</i>						<i>Unacceptable</i>					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	13.3	11.9	14.1	81.0	79.5	79.0	5.5	8.3	6.8	0.2	0.3	0.1
Zone 2	13.7	11.5	9.6	80.1	80.1	83.1	5.8	7.7	6.9	0.4	0.8	0.4
Zone 3	26.3	26.0	26.7	70.3	69.8	69.1	3.1	4.1	4.0	0.3	0.1	0.2
Zone 4	26.0	25.5	20.5	68.5	66.4	67.0	5.5	6.4	8.5	0.0	1.7	4.0
Zone 6	17.6	18.4	14.6	77.9	78.7	81.6	4.6	2.9	3.8	0.0	0.0	0.0
Zone 7	25.5	22.2	20.3	69.2	69.5	72.4	5.5	8.3	7.3	0.2	0.3	0.0
NCA	-	-	33.3	-	-	61.9	-	-	0.0	-	-	4.8

Mixed urban and rural cleanliness indices by zone (last three years)

	Cleanliness Index						
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 6	Zone 7	NCA
2010/2011	72	72	76	74	73	73	72
2009/2010	69	71	74	76	70	72	69
2008/2009	69	70	75	71	72	70	69

Mixed urban and rural distribution of cleanliness grades by zone (last three years)

	<i>Acceptable</i>						<i>Unacceptable</i>					
	Grade A %			Grade B%			Grade C%			Grade D%		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	16.9	11.9	21.6	76.4	82.6	74.1	6.3	5.3	4.2	0.4	0.1	0.1
Zone 2	19.0	19.5	19.8	74.0	73.2	76.0	6.6	7.1	4.2	0.5	0.2	0.0
Zone 3	28.6	27.0	31.8	67.9	69.4	64.2	3.4	3.4	3.9	0.1	0.2	0.1
Zone 4	24.1	34.0	31.7	68.1	60.9	60.0	7.4	5.1	7.9	0.5	0.0	0.4
Zone 6	22.0	20.0	21.1	72.4	72.8	77.3	5.7	5.6	1.6	0.0	1.5	0.0
Zone 7	19.8	22.5	26.5	72.5	71.4	66.9	7.0	5.7	6.6	0.7	0.4	0.0
NCA	-	-	-	-	-	-	-	-	-	-	-	-

Litter sources

National litter source percentages (last three years)

	Litter Sources %					
	Pedestrian/ Individual	Business	Domestic	Construction	Animal Faeces	Other
2010/2011	71.0	2.6	2.3	0.3	7.4	1.0
2009/2010	73.4	4.1	2.4	0.5	7.2	1.0
2008/2009	72.0	4.1	2.8	0.6	6.4	1.4

National litter source percentages per audit month/zone (last three years)

	Litter Sources %								
	Pedestrian/Individual			Business			Domestic		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	72.3	71.9	73.5	4.7	6.0	3.5	2.9	2.4	2.2
June	71.0	75.9	71.0	4.5	3.9	2.5	3.8	2.4	3.1
August	62.6	68.5	68.2	2.0	2.5	1.7	1.8	1.5	0.7
October	72.9	72.4	72.0	4.3	3.6	2.9	3.0	2.5	4.9
December	73.7	74.7	74.4	5.6	4.4	2.8	3.2	4.7	2.6
February	69.5	75.6	68.9	3.1	4.8	1.9	2.8	2.5	1.1
Validation	80.2	74.9	69.2	3.6	3.0	3.1	1.5	1.2	1.3
Zone 1	85.0	85.0	81.6	3.8	5.0	3.0	2.1	2.1	1.8
Zone 2	81.9	83.9	84.3	3.9	4.5	3.7	3.2	3.7	3.0
Zone 3	68.8	70.3	67.8	3.5	3.8	2.0	3.2	2.4	2.2
Zone 4	71.7	65.6	65.2	5.2	3.0	4.0	3.0	1.4	2.4
Zone 6	80.4	80.7	80.4	2.6	1.5	4.5	1.0	1.0	1.9
Zone 7	61.5	63.7	59.0	6.3	4.8	2.5	1.8	1.9	2.0
NCA	76.9	70.7	75.3	3.0	1.3	1.1	0.0	1.3	1.1
	Construction			Animal Faeces			Other		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	0.6	0.6	0.7	6.8	6.3	9.0	1.6	1.1	1.6
June	0.9	0.4	0.3	6.5	6.3	8.3	2.1	0.5	0.8
August	0.4	0.1	0.3	4.5	4.7	4.1	0.9	1.3	1.5
October	0.6	0.6	0.3	5.7	8.9	9.3	1.7	1.6	1.0
December	0.8	0.9	0.4	8.5	11.1	11.3	1.8	1.2	0.4
February	0.6	0.7	0.2	7.6	6.2	4.9	1.0	0.6	0.4
Validation	0.1	0.0	0.2	5.1	6.8	5.2	0.4	0.7	1.0
Zone 1	0.1	0.6	0.6	6.7	8.4	8.2	1.2	0.3	0.8
Zone 2	1.1	0.6	0.2	10.7	12.6	12.4	1.6	0.8	0.8
Zone 3	0.5	0.4	0.3	6.3	6.6	7.1	1.1	0.8	0.6
Zone 4	1.2	0.4	0.8	6.4	4.6	5.4	1.8	0.6	1.8
Zone 6	0.7	0.3	1.3	4.9	3.3	4.2	1.3	1.3	1.0
Zone 7	0.4	0.6	0.3	2.5	3.3	2.7	2.1	2.5	2.2
NCA	1.5	0.0	0.0	3.7	6.7	21.3	0.0	2.7	1.1

*Audits in red conducted by external surveyors

Rural litter source percentages (last three years)

	Litter Sources %					
	Pedestrian/ Individual	Business	Domestic	Construction	Animal Faeces	Other
2010/2011	62.5	2.4	1.6	0.3	5.7	1.0
2009/2010	66.6	3.3	2.1	0.6	5.3	1.2
2008/2009	65.6	4.3	1.8	0.2	4.4	0.8

Rural litter source percentages per audit month/zone (last three years)

	Litter Sources %								
	Pedestrian/Individual			Business			Domestic		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	67.7	64.0	66.9	6.2	6.6	3.2	1.5	0.6	1.5
June	66.3	68.5	65.1	4.0	2.9	1.4	1.7	3.3	1.6
August	52.5	66.1	58.3	1.7	1.1	1.4	2.3	1.8	0.6
October	66.5	69.2	66.8	4.8	2.8	3.8	1.3	1.7	1.6
December	68.1	71.6	71.6	6.1	3.1	4.0	2.8	1.6	4.4
February	64.8	72.9	55.9	3.4	3.4	1.1	2.1	5.7	1.4
Validation	68.5	56.0	52.6	1.8	1.5	1.8	1.3	0.9	0.4
Zone 1	87.2	79.2	81.9	1.0	1.5	1.9	1.2	1.7	1.0
Zone 2	78.1	81.2	77.5	3.5	2.6	2.8	1.5	2.4	3.0
Zone 3	64.2	66.5	63.4	2.4	2.3	1.9	2.5	2.3	1.6
Zone 4	68.3	60.1	52.7	5.0	3.3	2.1	2.5	2.3	2.5
Zone 6	90.4	89.7	77.8	1.9	0.0	7.4	5.8	5.2	7.4
Zone 7	55.6	57.3	50.2	8.0	5.9	3.0	1.3	1.6	1.2
NCA	75.2	71.2	77.9	3.5	1.4	1.5	0.0	1.4	0.0
	Construction			Animal Faeces			Other		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	0.1	0.3	0.4	4.4	5.9	5.4	0.7	2.6	0.3
June	0.1	0.7	0.0	5.0	6.0	5.9	0.4	0.5	0.5
August	0.2	0.2	0.3	3.9	4.7	2.3	0.4	2.2	2.3
October	0.4	0.5	0.0	2.7	7.5	7.1	1.2	0.5	1.6
December	0.4	0.6	0.3	7.2	5.3	11.0	1.0	0.7	0.1
February	0.4	2.2	0.7	4.5	4.8	5.6	1.7	0.7	0.7
Validation	0.0	0.0	0.1	2.4	2.8	2.7	0.0	0.7	1.3
Zone 1	0.2	0.6	0.2	3.9	6.5	8.2	0.0	0.2	0.8
Zone 2	0.0	0.4	0.0	4.5	7.1	6.7	0.5	0.7	0.6
Zone 3	0.3	0.6	0.3	5.8	6.6	6.5	0.6	1.3	0.7
Zone 4	0.0	1.4	0.4	10.1	5.6	6.6	1.5	0.9	2.1
Zone 6	0.0	0.0	0.0	1.9	1.7	1.9	3.8	3.4	0.0
Zone 7	0.2	0.5	0.3	2.3	2.5	2.5	1.2	1.5	1.4
NCA	1.8	0.0	0.0	2.7	6.8	27.9	0.0	2.7	0.0

*Audits in red conducted by external surveyors

Urban litter source percentages (last three years)

	Litter Sources %					
	Pedestrian/ Individual	Business	Domestic	Construction	Animal Faeces	Other
2010/2011	79.6	3.2	2.3	0.5	9.5	1.0
2009/2010	78.8	5.0	2.9	0.7	10.3	0.5
2008/2009	77.3	4.3	3.4	0.9	8.0	1.3

Urban litter source percentages per audit month/zone (last three years)

	Litter Sources %								
	Pedestrian/Individual			Business			Domestic		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	75.2	78.1	81.7	3.1	5.1	4.8	3.6	2.9	1.8
June	73.1	81.7	80.7	5.7	5.5	2.5	4.2	3.4	2.3
August	71.0	73.2	76.1	2.9	3.8	1.7	2.1	1.1	0.8
October	78.0	79.7	76.9	4.5	6.6	3.5	5.5	3.3	4.6
December	79.5	79.4	81.3	5.9	7.3	3.6	3.9	6.0	3.0
February	74.1	77.2	77.9	2.5	4.3	2.8	1.7	1.7	1.3
Validation	89.3	82.1	82.7	5.5	2.7	3.7	3.0	1.6	2.1
Zone 1	86.1	87.2	85.4	4.5	5.5	4.9	3.1	2.8	2.2
Zone 2	85.3	88.2	89.9	4.8	6.9	4.0	4.9	5.0	3.1
Zone 3	72.3	72.7	72.4	4.1	4.5	2.2	3.1	2.3	2.1
Zone 4	73.3	73.2	78.5	5.5	2.1	6.5	2.1	0.9	2.0
Zone 6	79.4	81.6	85.4	4.6	1.5	3.1	0.0	0.0	0.0
Zone 7	70.2	77.4	79.7	2.4	4.2	3.0	3.4	1.7	0.4
NCA	-	-	66.7	-	-	0.0	-	-	4.8
	Construction			Animal Faeces			Other		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	1.0	1.0	1.3	8.3	9.1	14.8	0.8	0.3	1.3
June	1.8	0.5	0.3	7.4	9.0	13.6	4.4	0.1	0.3
August	0.8	0.1	0.1	5.1	3.6	5.4	0.5	0.8	2.4
October	0.6	0.8	0.5	9.5	15.8	10.0	0.6	1.5	0.4
December	1.6	2.2	0.8	11.1	19.0	13.1	1.7	0.3	0.8
February	0.8	0.3	0.0	8.7	8.2	4.6	0.9	0.4	0.5
Validation	0.1	0.0	0.2	6.0	7.8	5.7	0.4	0.4	1.4
Zone 1	0.0	1.1	1.3	9.0	12.0	10.0	0.6	0.0	1.4
Zone 2	1.7	1.0	0.3	13.0	18.6	15.0	1.3	0.8	1.2
Zone 3	0.7	0.5	0.3	6.5	7.1	8.0	1.2	0.6	0.8
Zone 4	2.7	0.0	1.0	1.4	5.1	2.5	3.4	0.9	2.0
Zone 6	1.5	0.0	1.5	5.3	4.4	6.2	0.8	0.0	0.0
Zone 7	0.0	1.3	0.4	1.4	5.9	1.3	2.9	0.4	0.4
NCA	1.0	1.0	0.0	8.3	9.1	0.0	0.8	0.3	4.8

*Audits in red conducted by external surveyors

Mixed urban and rural litter source percentages (last three years)

	Litter Sources %					
	Pedestrian/ Individual	Business	Domestic	Construction	Animal Faeces	Other
2010/2011	70.4	2.3	2.8	0.3	7.0	0.9
2009/2010	74.2	3.9	2.4	0.2	6.0	1.2
2008/2009	73.8	3.7	3.1	0.6	7.1	2.0

Mixed urban and rural litter source percentages per audit month/zone (last three years)

	Litter Sources %								
	Pedestrian/Individual			Business			Domestic		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	75.3	75.6	72.0	4.4	6.1	2.5	3.9	4.0	3.1
June	74.9	77.1	67.4	4.3	3.4	3.6	6.0	0.8	5.1
August	62.8	66.2	69.1	1.5	2.5	1.9	1.3	1.6	0.8
October	76.9	68.6	71.9	3.5	1.7	1.7	3.2	2.5	7.8
December	75.3	73.2	70.9	4.9	3.1	1.4	3.1	5.9	1.0
February	68.8	76.0	71.5	3.5	6.0	1.6	4.1	1.2	0.7
Validation	81.4	81.9	70.0	3.5	4.4	3.4	0.5	1.0	1.4
Zone 1	82.4	86.7	77.6	5.4	6.6	1.9	2.1	1.8	1.9
Zone 2	80.1	79.8	79.1	2.9	2.4	3.6	2.1	2.6	2.8
Zone 3	69.3	70.9	66.9	3.8	4.1	2.0	3.7	2.6	2.7
Zone 4	73.6	63.2	66.5	5.1	3.6	4.0	4.2	1.2	2.5
Zone 6	77.2	77.4	76.6	0.8	2.1	4.7	0.0	0.5	1.6
Zone 7	77.5	71.7	69.4	2.3	3.1	1.5	3.0	2.5	4.0
NCA	-	-	-	-	-	-	-	-	-
	Construction			Animal Faeces			Other		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	0.9	0.7	0.5	8.5	4.3	6.9	3.2	0.2	3.0
June	1.3	0.1	0.6	7.7	4.2	5.6	2.2	0.8	1.6
August	0.1	0.0	0.3	4.4	5.5	4.3	1.7	0.9	0.2
October	0.7	0.5	0.5	6.5	4.0	10.4	3.2	2.6	1.1
December	0.7	0.1	0.1	7.9	9.2	10.1	2.7	2.4	0.2
February	0.5	0.2	0.0	8.8	5.7	4.5	0.6	0.6	0.0
Validation	0.1	0.1	0.1	6.2	8.7	6.8	0.6	0.8	0.4
Zone 1	0.0	0.3	0.3	7.0	6.6	6.4	2.5	0.6	0.3
Zone 2	0.0	0.1	0.1	11.8	7.6	11.5	2.8	1.0	0.3
Zone 3	0.3	0.2	0.3	6.5	6.2	6.9	1.4	0.6	0.4
Zone 4	8.8	0.0	1.1	6.5	3.2	6.5	0.9	0.4	1.4
Zone 6	2.4	0.5	1.6	5.7	3.1	3.1	0.8	1.5	2.3
Zone 7	0.4	0.6	0.1	2.5	3.3	3.4	4.6	4.9	4.0
NCA	-	-	-	-	-	-	-	-	-

*Audits in red conducted by external surveyors

Types of litter

National litter type percentages (last three years)

	Litter Types %			
	Smoking	Drinks	Confectionery	Fast Food
2010/2011	52.4	31.6	32.7	10.4
2009/2010	51.8	33.9	35.3	10.8
2008/2009	53.0	30.9	33.8	10.5

National litter type percentages by audit month/zone (last three years)

	Litter Types %											
	Smoking			Drinks			Confectionery			Fast Food		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	53.3	50.9	55.2	30.1	30.3	32.5	33.1	30.1	33.1	10.0	10.3	11.3
June	53.4	54.1	53.3	27.0	32.9	30.5	30.3	31.6	33.2	8.9	9.9	9.5
August	43.9	50.8	52.5	24.3	31.8	28.3	28.6	28.9	28.6	7.7	7.5	8.9
October	54.1	50.1	52.9	29.8	33.3	32.3	31.8	37.4	34.2	9.6	12.9	11.3
December	50.8	49.4	53.6	29.9	35.4	36.4	34.1	40.3	36.8	12.1	12.3	11.2
February	53.0	57.1	49.2	30.7	34.5	27.3	33.1	38.4	32.8	10.7	10.2	9.0
Validation	61.9	50.4	50.1	44.7	39.2	33.9	45.3	41.0	30.2	14.3	12.4	11.2
Zone 1	75.4	72.4	70.4	27.6	31.8	28.1	38.4	40.6	36.6	11.9	13.5	11.3
Zone 2	67.8	65.2	67.2	35.9	42.3	37.5	41.7	43.4	42.0	10.3	12.8	11.3
Zone 3	51.9	50.2	51.3	27.3	30.3	28.7	32.3	33.9	30.7	8.4	7.9	7.8
Zone 4	48.1	41.1	44.0	38.1	33.7	33.1	34.9	31.1	31.8	12.8	11.3	13.3
Zone 6	56.5	50.6	54.8	48.0	45.0	48.1	37.3	38.0	39.1	23.2	17.0	19.2
Zone 7	27.5	29.4	27.3	36.1	36.0	35.5	26.0	27.3	25.8	14.3	14.7	15.2
NCA	51.5	29.3	64.0	15.7	29.3	19.1	42.5	45.3	19.1	5.2	16.0	5.6

*Audits in red conducted by external surveyors

Rural litter type percentages (last three years)

	Litter Types %			
	Smoking	Drinks	Confectionery	Fast Food
2010/2011	42.5	23.3	26.5	8.7
2009/2010	40.7	25.1	31.3	10.5
2008/2009	43.6	24.4	27.5	9.5

Rural litter type percentages by audit month/zone (last three years)

	Litter Types %											
	Smoking			Drinks			Confectionery			Fast Food		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	44.2	35.9	45.0	25.6	22.7	22.6	28.8	23.9	25.7	10.7	11.3	11.3
June	47.3	46.4	45.4	19.4	23.4	21.8	27.3	29.0	28.0	8.4	9.6	11.1
August	27.2	44.6	39.4	18.0	22.0	20.9	19.7	32.7	22.0	7.1	10.1	5.8
October	43.9	42.6	48.4	24.9	24.5	24.6	25.7	36.8	29.2	8.5	12.3	8.5
December	42.6	42.8	50.1	23.1	29.3	31.6	27.8	35.3	33.8	13.0	14.4	11.9
February	46.1	47.5	35.8	27.4	28.0	18.6	28.4	41.3	26.9	10.7	9.4	6.6
Validation	49.9	28.1	33.3	34.7	26.8	23.2	34.6	25.6	19.5	7.0	5.7	5.2
Zone 1	76.2	66.4	71.0	19.5	18.5	19.3	33.5	36.1	32.5	9.5	12.8	10.5
Zone 2	65.0	57.1	61.5	19.4	28.8	22.3	36.2	38.8	33.9	6.3	12.6	10.5
Zone 3	47.5	42.6	45.9	21.0	24.0	22.3	29.0	33.9	28.7	7.8	8.6	6.8
Zone 4	49.2	39.9	40.3	30.7	21.1	19.8	30.7	32.4	23.9	4.0	4.7	3.7
Zone 6	53.8	58.6	55.6	50.0	44.8	50.0	44.2	50.0	29.6	40.4	29.3	16.7
Zone 7	21.2	23.6	20.6	30.9	27.0	26.3	19.3	21.7	19.2	12.6	11.4	10.9
NCA	47.8	30.1	67.6	15.0	28.8	17.6	44.2	45.2	20.6	6.2	16.4	5.9

*Audits in red conducted by external surveyors

Urban litter type percentages (last three years)

	Litter Types %			
	Smoking	Drinks	Confectionery	Fast Food
2010/2011	63.4	37.1	37.7	13.1
2009/2010	61.5	39.0	36.9	12.3
2008/2009	61.2	35.9	36.9	12.2

Urban litter type percentages by audit month/zone (last three years)

	Litter Types %											
	Smoking			Drinks			Confectionery			Fast Food		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	62.9	62.7	68.8	30.6	34.1	41.3	31.4	29.9	41.2	10.8	11.4	14.8
June	60.5	66.3	65.3	32.2	37.4	31.5	28.0	30.7	36.3	13.4	11.2	9.3
August	55.5	62.0	65.9	28.6	39.4	36.0	33.4	21.8	36.9	8.2	4.9	9.8
October	63.1	59.5	57.7	32.7	40.1	35.9	32.3	37.3	35.6	11.3	12.7	12.1
December	57.9	61.4	63.0	35.1	40.7	42.1	39.1	44.9	39.7	12.4	14.9	13.8
February	57.1	60.3	59.7	36.8	33.2	29.3	41.0	38.8	36.7	10.9	11.4	13.9
Validation	70.6	58.5	63.9	53.9	47.4	43.6	52.1	53.8	37.3	17.8	19.0	18.0
Zone 1	78.1	78.6	75.5	35.6	38.1	32.7	39.1	42.4	41.4	13.1	16.2	14.8
Zone 2	74.5	74.8	75.6	40.2	48.5	41.8	42.3	44.0	43.3	12.5	15.1	14.7
Zone 3	54.9	54.7	56.8	31.2	32.6	33.3	33.9	32.6	33.4	10.5	8.7	10.0
Zone 4	39.0	41.3	52.5	48.6	46.4	45.0	32.9	30.6	46.0	13.0	16.6	19.5
Zone 6	58.0	50.7	53.8	48.1	43.4	50.0	37.4	33.8	39.2	24.4	18.4	24.6
Zone 7	35.1	44.4	43.1	49.0	51.0	53.0	38.0	38.9	34.5	18.8	18.8	23.3
NCA	-	-	52.4	-	-	23.8	-	-	14.3	-	-	4.8

*Audits in red conducted by external surveyors

Mixed urban and rural litter type percentages (last three years)

	Litter Types %			
	Smoking	Drinks	Confectionery	Fast Food
2010/2011	50.8	33.6	33.4	9.3
2009/2010	52.4	36.5	37.2	9.7
2008/2009	55.7	33.3	37.3	10.1

Mixed urban and rural litter type percentages by audit month/zone (last three years)

	Litter Types %											
	Smoking			Drinks			Confectionery			Fast Food		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	56.1	57.6	52.2	35.0	35.7	33.5	40.0	39.4	32.5	7.6	8.7	8.3
June	55.1	50.4	49.7	31.9	36.8	37.1	41.4	35.7	35.0	6.8	6.0	8.4
August	46.0	45.6	51.2	25.2	32.3	27.4	37.7	30.7	26.6	7.2	7.7	10.6
October	59.7	47.5	52.4	33.6	34.0	35.3	36.5	39.5	37.0	7.7	9.7	12.7
December	54.5	44.6	48.6	33.6	35.8	35.5	36.8	37.1	36.9	8.8	10.9	8.7
February	54.4	60.3	50.9	27.8	39.1	32.8	46.5	29.9	34.1	8.8	10.4	6.5
Validation	63.6	59.1	50.8	44.6	40.9	33.7	43.1	47.8	32.0	7.4	16.7	9.9
Zone 1	72.7	71.0	64.8	27.8	34.8	29.5	44.2	41.7	34.5	11.3	12.9	8.3
Zone 2	60.9	57.0	57.2	41.6	41.4	39.0	44.3	44.6	44.3	7.7	10.2	6.3
Zone 3	52.6	51.5	50.4	28.8	32.4	29.1	38.0	33.3	29.9	5.0	7.2	6.8
Zone 4	53.2	41.9	41.0	38.0	32.4	36.3	43.4	40.3	28.4	11.6	20.8	17.3
Zone 6	56.1	48.2	55.5	47.2	46.2	45.3	41.8	34.1	43.0	12.5	14.6	14.8
Zone 7	44.8	35.7	35.0	47.9	48.7	47.6	39.8	42.9	35.4	16.2	18.0	20.7
NCA	-	-	-	-	-	-	-	-	-	-	-	-

*Audits in red conducted by external surveyors

Adverse environmental quality indicators

National AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	6.9	1.0	2.8	32.6	52.3	0.8
2009/2010	6.8	0.8	2.8	29.6	46.7	0.7
2008/2009	5.9	0.9	2.6	29.3	40.4	0.6

National AEQI percentages by audit month/zone (last three years)

	Adverse Environmental Quality Indicators %								
	Dog Fouling			Vandalism			Graffiti		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	6.5	6.1	8.4	1.2	0.5	1.2	3.1	3.2	2.7
June	6.0	5.9	8.0	0.9	1.0	1.2	3.0	3.1	2.5
August	3.4	3.8	3.8	0.2	0.4	0.9	1.9	2.2	3.8
October	5.3	8.3	7.9	1.1	0.9	1.3	2.8	3.9	3.7
December	8.2	10.7	11.1	1.0	1.2	1.0	2.9	3.0	2.3
February	7.2	6.0	4.6	0.7	0.8	0.1	1.9	2.0	1.1
Validation	4.7	6.4	4.8	0.6	0.7	0.9	2.5	2.3	3.3
Zone 1	6.3	7.9	7.6	1.9	2.1	1.3	7.2	7.1	5.6
Zone 2	10.0	12.1	12.0	1.8	1.8	2.2	5.1	6.2	6.4
Zone 3	5.9	6.3	6.7	0.7	0.4	0.7	1.7	1.4	1.7
Zone 4	5.9	4.0	4.9	0.4	0.3	0.4	0.9	0.9	1.7
Zone 6	4.9	3.3	3.5	0.3	1.0	0.3	2.3	4.1	3.5
Zone 7	1.8	2.5	2.1	0.0	0.1	0.4	0.2	0.6	0.2
NCA	3.7	6.7	18.0	0.0	0.0	0.0	1.5	0.0	0.0
	Weed Growth			Detritus			Fly Posting		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	31.2	31.7	27.2	38.5	41.3	48.3	0.8	1.0	0.8
June	40.2	43.0	39.8	41.1	48.6	48.0	0.7	1.3	0.5
August	36.3	39.4	48.3	30.4	40.3	50.4	0.4	0.6	0.8
October	33.5	36.0	39.5	44.4	49.0	52.3	0.5	0.6	0.6
December	23.4	27.9	24.1	36.2	50.6	54.5	0.8	0.5	1.0
February	27.2	20.4	25.9	43.3	44.3	53.1	0.6	0.7	1.7
Validation	13.0	9.7	24.0	47.8	53.2	58.9	0.3	0.3	0.3
Zone 1	22.8	21.3	26.4	29.3	38.2	44.2	2.1	2.2	1.8
Zone 2	35.2	37.9	39.1	45.5	52.4	58.1	0.9	0.9	1.2
Zone 3	35.0	32.2	35.2	46.4	49.7	56.0	0.3	0.4	0.6
Zone 4	31.2	34.5	32.5	50.3	53.8	58.0	0.0	0.4	0.6
Zone 6	17.3	23.4	25.0	43.5	50.1	51.0	0.3	1.0	0.6
Zone 7	12.4	17.4	22.5	22.7	33.9	39.0	0.2	0.5	0.4
NCA	22.4	32.0	27.0	26.1	61.3	28.1	1.5	0.0	0.0

*Audits in red conducted by external surveyors

National significant/severe AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	0.2	0.1	0.3	3.8	8.6	0.1
2009/2010	0.3	0.1	0.2	2.3	5.2	0.04
2008/2009	0.2	0.1	0.2	2.9	3.8	0.01

Rural AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	5.2	0.2	0.4	29.3	49.4	0.1
2009/2010	4.8	0.2	0.4	22.7	37.5	0.2
2008/2009	3.9	0.2	0.5	23.2	29.0	0.2

Rural AEQI percentages by audit month/zone (last three years)

	Adverse Environmental Quality Indicators %								
	Dog Fouling			Vandalism			Graffiti		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	4.3	5.5	5.1	0.1	0.4	0.4	0.9	0.4	0.1
June	4.8	5.8	5.5	0.3	0.4	0.1	0.8	0.5	0.3
August	1.4	3.0	1.3	0.0	0.0	0.0	0.0	0.2	0.1
October	2.5	7.2	6.8	0.1	0.0	0.1	0.2	0.3	0.6
December	6.9	4.6	10.6	0.2	0.1	0.0	0.3	0.1	0.1
February	3.9	4.6	4.8	0.2	0.0	0.0	0.4	0.2	0.1
Validation	2.1	2.5	2.1	0.5	0.4	0.4	0.7	0.7	1.1
Zone 1	3.9	6.1	7.6	0.4	0.8	0.0	1.0	1.3	0.8
Zone 2	4.3	6.9	6.3	0.5	0.2	0.2	1.3	0.0	0.4
Zone 3	5.6	6.1	6.1	0.3	0.2	0.2	0.5	0.4	0.4
Zone 4	9.0	5.2	5.8	0.0	0.0	0.0	0.5	0.5	0.4
Zone 6	1.9	1.7	1.9	0.0	1.7	0.0	0.0	1.7	0.0
Zone 7	1.4	1.7	1.8	0.0	0.0	0.1	0.1	0.1	0.1
NCA	2.7	6.8	23.5	0.0	0.0	0.0	0.9	0.0	0.0
	Weed Growth			Detritus			Fly Posting		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	24.3	19.5	26.3	29.1	29.4	40.9	0.2	0.7	0.3
June	31.6	35.3	33.2	28.0	42.9	47.2	0.4	0.3	0.3
August	29.7	24.2	33.8	26.3	22.8	40.9	0.0	0.0	0.1
October	24.7	36.8	32.1	28.6	50.7	49.4	0.2	0.2	0.1
December	20.3	21.6	24.2	26.4	45.1	55.6	0.1	0.0	0.0
February	14.3	12.7	33.4	29.9	38.1	67.5	0.6	0.0	0.0
Validation	12.9	8.5	22.8	36.4	36.1	44.4	0.0	0.0	0.0
Zone 1	22.2	16.8	23.5	23.6	31.5	39.7	0.6	0.0	0.2
Zone 2	28.4	25.3	31.0	30.1	41.8	52.3	0.3	0.2	0.2
Zone 3	34.9	30.2	36.7	41.5	45.7	60.9	0.0	0.2	0.1
Zone 4	27.1	31.0	28.0	39.2	46.5	58.0	0.0	1.4	0.0
Zone 6	15.4	34.5	44.4	46.2	63.8	75.9	1.9	1.7	0.0
Zone 7	7.2	10.6	19.6	13.6	22.2	33.3	0.2	0.0	0.1
NCA	26.5	32.9	27.9	27.4	63.0	23.5	1.8	0.0	0.0

*Audits in red conducted by external surveyors

Rural significant/severe AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	0.2	0.0	0.1	2.6	7.8	0.0
2009/2010	0.1	0.04	0.04	2.1	3.8	0.0
2008/2009	0.1	0.05	0.04	2.5	2.4	0.0

Urban AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	9.1	1.8	6.5	44.4	64.3	1.4
2009/2010	9.9	1.2	6.2	43.0	58.8	1.3
2008/2009	7.4	1.1	5.5	40.1	52.7	1.1

Urban AEQI percentages by audit month/zone (last three years)

	Adverse Environmental Quality Indicators %								
	Dog Fouling			Vandalism			Graffiti		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	7.4	9.0	14.0	2.8	1.0	2.9	6.8	7.8	6.9
June	6.5	8.5	13.4	1.1	1.4	2.6	6.6	7.5	6.1
August	4.6	2.8	5.4	0.5	0.3	2.5	3.9	4.4	9.7
October	8.6	15.1	9.2	2.2	0.9	1.6	7.3	7.8	8.5
December	10.5	18.5	12.8	0.6	2.7	1.7	4.9	7.1	5.8
February	8.7	7.8	4.5	0.2	2.2	0.4	2.7	4.5	2.4
Validation	5.4	7.4	4.9	0.6	0.4	1.0	6.1	4.3	5.8
Zone 1	8.6	11.4	9.2	2.0	1.4	1.4	13.1	12.2	10.0
Zone 2	11.9	17.8	14.7	2.0	2.9	3.8	8.2	11.0	11.0
Zone 3	6.0	6.8	7.5	0.7	0.6	0.9	3.4	2.9	3.8
Zone 4	0.7	4.3	2.5	0.0	0.0	1.5	1.4	1.3	1.5
Zone 6	5.3	4.4	6.2	0.8	1.5	0.8	2.3	9.6	8.5
Zone 7	1.4	4.6	0.9	0.0	0.0	1.7	0.0	3.8	1.3
NCA	-	-	0.0	-	-	0.0	-	-	0.0
	Weed Growth			Detritus			Fly Posting		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	45.3	46.0	36.9	51.9	58.4	65.4	2.3	1.8	1.6
June	57.1	63.3	60.4	61.3	65.5	60.3	0.8	3.1	0.7
August	42.1	59.0	68.1	31.4	50.7	67.5	0.3	0.5	1.6
October	51.0	51.3	53.2	64.4	58.0	66.8	1.2	0.5	0.9
December	31.3	43.4	29.4	56.7	62.0	67.5	2.3	1.1	1.6
February	32.0	27.6	34.7	44.6	56.9	53.9	0.5	1.1	3.5
Validation	23.3	12.2	29.5	57.2	59.7	69.1	0.4	0.6	0.4
Zone 1	28.0	31.0	35.9	32.3	44.4	54.9	3.5	3.2	2.9
Zone 2	42.9	48.9	45.4	51.7	61.9	66.8	1.5	1.4	1.9
Zone 3	43.8	44.4	47.9	56.5	59.5	66.9	0.6	0.8	1.0
Zone 4	32.2	41.7	46.5	62.3	60.9	66.5	0.0	0.0	0.5
Zone 6	21.4	28.7	24.6	59.5	64.7	60.8	0.0	0.7	1.5
Zone 7	31.7	36.8	35.8	55.3	66.5	50.9	1.0	2.1	0.0
NCA	-	-	23.8	-	-	42.9	-	-	0.0

*Audits in red conducted by external surveyors

Urban significant/severe AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	0.1	0.1	0.7	6.2	10.6	0.1
2009/2010	0.4	0.1	0.3	2.6	5.2	0.1
2008/2009	0.3	0.07	0.4	4.5	5.8	0.02

Mixed urban and rural AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	6.5	0.9	1.5	24.9	44.2	0.8
2009/2010	5.7	0.9	1.9	23.9	44.0	0.6
2008/2009	6.7	1.3	2.4	26.7	41.6	0.5

Mixed urban and rural AEQI percentages by audit month/zone (last three years)

	Adverse Environmental Quality Indicators %								
	Dog Fouling			Vandalism			Graffiti		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	8.3	4.2	6.3	1.1	0.2	0.3	2.9	2.1	1.2
June	6.9	4.0	5.5	1.6	1.2	0.8	2.7	1.6	1.3
August	3.7	5.1	4.3	0.1	0.9	0.3	1.5	1.8	1.7
October	6.1	3.3	7.7	1.5	1.5	2.1	2.4	3.1	1.9
December	7.9	9.1	10.0	2.2	0.8	1.3	4.2	1.8	1.2
February	8.1	5.6	4.5	1.5	0.3	0.0	2.3	1.3	0.6
Validation	6.1	8.3	6.6	0.7	1.2	1.1	1.0	1.8	2.9
Zone 1	6.5	6.1	6.0	3.1	3.4	2.2	7.5	6.3	4.4
Zone 2	11.5	7.5	10.8	2.3	1.3	0.9	3.6	3.3	2.5
Zone 3	6.2	6.0	6.5	0.9	0.3	0.8	1.4	0.9	1.0
Zone 4	6.5	2.8	5.8	0.9	0.8	0.0	0.9	0.8	2.9
Zone 6	5.7	3.1	1.6	0.0	0.5	0.0	3.3	1.0	0.0
Zone 7	3.2	3.4	2.9	0.0	0.4	0.4	0.5	0.5	0.1
NCA	-	-	-	-	-	-	-	-	-
	Weed Growth			Detritus			Fly Posting		
	08/09	09/10	10/11	08/09	09/10	10/11	08/09	09/10	10/11
April	28.2	32.8	19.6	38.7	39.4	39.7	0.4	0.6	0.5
June	37.0	32.8	27.3	40.6	39.6	37.9	0.9	0.6	0.5
August	36.2	33.4	42.6	32.3	44.0	43.3	0.6	1.0	0.7
October	30.3	22.2	33.5	48.0	40.0	41.9	0.2	0.9	0.7
December	20.8	20.2	19.8	31.1	45.5	43.3	0.4	0.4	1.3
February	32.2	19.8	11.9	51.4	39.2	40.5	0.6	0.8	1.4
Validation	5.1	8.4	20.3	48.6	59.7	61.1	0.3	0.2	0.4
Zone 1	19.4	15.9	19.0	31.3	37.0	36.7	2.2	2.6	1.7
Zone 2	29.7	30.4	33.5	47.9	45.5	47.7	0.6	0.7	0.8
Zone 3	28.5	23.7	24.3	42.4	44.5	44.3	0.2	0.1	0.5
Zone 4	34.3	30.8	26.3	52.3	53.4	51.8	0.0	0.0	1.1
Zone 6	13.8	16.4	17.2	25.2	35.9	30.5	0.0	1.0	0.0
Zone 7	22.1	24.2	24.0	40.0	46.0	46.0	0.2	0.9	1.0
NCA	-	-	-	-	-	-	-	-	-

*Audits in red conducted by external surveyors

Mixed urban and rural significant/severe AEQI percentages (last three years)

	Adverse Environmental Quality Indicators %					
	Dog Fouling	Vandalism	Graffiti	Weed Growth	Detritus	Fly Posting
2010/2011	0.2	0.1	0.1	2.6	7.3	0.1
2009/2010	0.3	0.1	0.1	2.2	6.3	0.05
2008/2009	0.3	0.1	0.1	2.1	3.7	0.02

Litter bins

National litter bin percentages for last three years (overflowing/coverage)

	Litter Bins					
	% Overflowing			% Coverage		
	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	3.8	3.4	2.6	31.7	33.9	32.1
Zone 2	3.7	4.9	5.2	11.5	12.7	14.6
Zone 3	6.4	4.5	3.1	6.3	5.8	6.5
Zone 4	3.0	7.7	7.0	5.0	5.3	6.1
Zone 6	0.0	9.8	9.1	5.6	6.7	3.2
Zone 7	12.1	3.8	3.9	2.2	2.6	2.3
NCA	14.3	11.1	0.0	5.2	9.3	15.7
Overall	4.8	4.2	3.5	9.2	9.7	10.2

Rural litter bin percentages for last three years (overflowing/coverage)

	Litter Bins					
	% Overflowing			% Coverage		
	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	3.6	0.9	2.0	23.4	29.0	25.5
Zone 2	1.9	0.0	5.9	7.1	8.6	8.7
Zone 3	4.5	1.0	5.3	4.6	4.0	3.2
Zone 4	0.0	9.1	4.8	2.0	4.7	7.0
Zone 6	-	33.3	33.3	0.0	6.9	3.7
Zone 7	13.9	3.0	4.0	2.0	1.6	2.5
NCA	0.0	14.3	0.0	1.8	8.2	17.6
Overall	4.5	1.8	3.6	5.6	6.3	6.1

Urban litter bin percentages for last three years (overflowing/coverage)

	Litter Bins					
	% Overflowing			% Coverage		
	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	3.7	4.7	3.6	35.8	37.1	35.2
Zone 2	5.9	4.7	5.9	13.7	15.5	19.3
Zone 3	8.3	4.8	3.8	6.5	6.5	9.3
Zone 4	0.0	7.1	4.8	5.5	6.0	7.0
Zone 6	0.0	5.6	0.0	6.1	5.9	3.1
Zone 7	0.0	12.5	10.0	1.0	2.5	3.4
NCA	-	-	0.0	-	-	9.5
Overall	5.4	4.8	4.5	11.4	12.3	14.9

Mixed urban and rural bin percentages for last three years (overflowing/coverage)

	Litter Bins					
	% Overflowing			% Coverage		
	08/09	09/10	10/11	08/09	09/10	10/11
Zone 1	4.0	3.5	1.8	34.9	34.2	33.4
Zone 2	0.8	7.4	2.7	11.5	11.2	10.4
Zone 3	5.9	5.7	1.6	7.2	6.4	6.4
Zone 4	6.3	7.1	13.3	7.4	5.1	4.7
Zone 6	0.0	5.9	0.0	7.3	7.2	3.1
Zone 7	10.0	2.6	0.0	3.4	4.6	1.6
NCA	-	-	-	-	-	-
Overall	4.3	4.8	2.0	10.9	10.3	9.4

Appendix 3 – Survey methodology

Grades of cleanliness

Each area of study (transect) was graded according to the standards outlined in the Code of Practice on Litter and Refuse (Scotland) 2006, which relates to Part IV of the Environmental Protection Act (EPA) 1990.

There are four grades of cleanliness, which are defined as follows:

Grade A	No litter or refuse
Grade B	Predominantly free of litter and refuse – apart from small items
Grade C	Widespread distribution of litter and refuse with minor accumulations
Grade D	Heavily littered with significant accumulations

This grading system is based on research into standards of cleanliness that most people regard as being acceptable or unacceptable. Under this system Grade C and Grade D are unacceptable and must be cleaned (in most cases to a Grade A condition) within a specified period of time (figure 3.2, pg 51). Grade A is the standard which a thorough conventional sweeping/litter-picking should achieve. The overall aim, however, should be to operate a management system where acceptable standards of cleanliness (Grades A and B) are maintained at all relevant times.

Cleanliness Indices

The method of measurement used to monitor litter in this survey is the Cleanliness Index Measurement System, developed by KSB and used widely by local authorities throughout the United Kingdom to monitor their performance and set targets for improving services. The Cleanliness Index (CI) provides an indication of the standards of cleanliness achieved throughout an area are used to calculate a

CI between 0 and 100. An area with a CI of 0 would consist of all heavily littered (grade D) transects, whereas a CI of 100 would represent an area completely free of litter or refuse (all grade A transects).

Points are awarded as follows for each cleanliness grade:

A=3 B=2 C=1 D=0

Calculate the actual points scored:

(Count of Grade A) x3 +
(Count of Grade B) x2 +
(Count of Grade C) x1 +
(Count of Grade D) x 0

Calculate the maximum score possible (i.e. if all transects were Grade A):

(Number of transects surveyed) x3

$$CI = \frac{\text{Actual Score}}{\text{Maximum Score}} \times 100$$

Given that a CI of 100 (all grade A transects) would be very difficult indeed to achieve, it is important to set a target which indicates an 'acceptable' result. The methodology used is a numerical calculation based on a notional result of a grade B in every transect surveyed within an area to create an acceptable result. This means that an area score of 67 is the acceptable standard. In reality, not all transects assessed will record a grade B standard therefore the Cleanliness Index will be a reflection of the range of grades awarded.

Cleanliness Standards

The Code of Practice on Litter and Refuse (Scotland) 2006, issued under the Environmental Protection Act 1990, defines maximum response times when a litter problem is reported within or to a local authority. For example, when a Grade D in Zone 1 is reported to the relevant officer in a local authority, that local authority has 1 hour to respond and to return the Grade D to a Grade A.

Category Zone		Cleanliness Standard			
		A	B	C	D
1	Town centre	← 6hrs			
		← 3hrs			
		← 1hr			
2	High density residential	← 12hrs			
		← 6hrs			
		← 3hrs			
3	Low density residential	← 2wks			
		← 12hrs			
		← 6hrs			
4	Roads not falling into zones 1-3	← 2wks			
		← 1wk			
		← 60hrs			
6	Motorways & strategic routes	← 4wks			
		← 1wk			
7	Rural roads	← 2wks			
		← 5days			

In summary, these maximum response times will only ensure minimum standards as defined by The Code of Practice on Litter and Refuse (Scotland) 2006

Sources of Litter

The following sources of litter are recorded for each transect visited.

- Pedestrian/Individual, e.g. drinks cans, confectionery wrappers, fast food packaging, lottery tickets, etc.
- Business Waste – any waste that has clearly come directly from a business, e.g. several pieces of headed paper, elastic bands and advertising flyers. This category does not

include items such as fast food - they should be included in the pedestrian/individual category.

- Domestic Waste – any waste which has escaped from domestic refuse, e.g. household packaging.
- Construction Waste – waste from construction work, e.g. sand bags, builders' rubble.
- Animal Faeces – any type of animal faeces (only dog faeces affect the cleanliness grade).
- Other – any other litter, which does not fit into the above categories, e.g. vehicle parts such as a wheel trim.

These sources of litter are either present (1) or absent (0). Therefore, the statistics relate to the quantity of streets affected rather a volume associated.

Types of Litter

Surveys carried out throughout the UK have shown that, of the above litter sources, pedestrian/individual is the most commonly found. The materials found are frequently those associated with eating, drinking and smoking. The four litter types recorded are therefore:

- Smoking related litter – cigarette ends, matches, matchboxes, cigarette packaging, etc.
- Drinks related litter – including cans, bottles, cups, straws and lids.
- Confectionery litter – including sweet wrappers, chewing gum wrappers and crisp packets.
- Fast food related litter – fish & chip wrappers, polystyrene cartons, burger wrappers, plastic cutlery etc.

Again, these litter types are recorded as either present (1) or absent (0).

Adverse environmental quality indicators (AEQIs)

In addition to the cleanliness of streets, absence or presence of the following AEQIs will play an important part in forming an impression of an area in the minds of residents, visitors and investors:

- Dog fouling – the only AEQI that must be considered alongside other litter and refuse when determining the cleanliness grade.
- Vandalism – defined as wilful and senseless damage of property which adversely affects the quality of life and the environment, e.g. smashed bus shelter windows, broken street seating.
- Graffiti – defined as unauthorised drawing or writing on surrounding buildings or street furniture such as benches, lamp posts, litter bins, etc.
- Weeds – the presence of weeds in the transect may indicate poor / infrequent sweeping and can trap litter.
- Detritus – debris from natural sources such as twigs, leaves, grass, sand etc. As with weeds, detritus can trap litter.
- Fly-posting – defined as stickers or posters placed in unauthorised places and not on billboards. Unauthorised places refers to buildings, bus shelters, fence posts, etc. within the transect.

Please remember that of the above indicators, only dog fouling influences the grade awarded (A to D) to the transect surveyed.

The presence of these indicators is recorded on a scale of 1 to 4 as follows:

- 1 = no presence
- 2 = small presence
- 3 = significant presence
- 4 = severe presence

Litter Bins

The number of litter bins within each transect is recorded during the survey. If a litter bin within a transect is overflowing, this is also noted. Overflowing litter bins are defined as those which are beyond their maximum serviceable limit of 75%, perhaps resulting in litter escaping onto the surrounding area. The transect is graded taking into account the escaped litter from the bin.

Comments

The comments section of the survey form exists for several reasons. Firstly, it can be used to record further detail on specific problems, for example to describe what kind of business waste was found, or to signpost the area of the transect that is most littered, such as the backline or the channel. Secondly, it can provide further information on the transect itself; if it is a functional transect, is it a shrub area, a car park or a grass verge? Perhaps the pavement surface is damaged and is an obstruction to cleansing. Thirdly, it can be useful to record any additional issues observed in the transect, such as the presence of a substantial amount of chewing gum or flytipping. Finally, the comments section should also be used to note good practice, such as a privately sponsored litter bin, or a well-maintained street or functional transect.

Acknowledgement

Keep Scotland Beautiful wishes to express its thanks for the co-operation and application given by local authorities, their elected members and employees throughout the country in this the seventh year of LEAMS as a Performance Indicator.

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