KEEP BRITAIN TIDY

How clean is **England?**

The Local Environmental Quality Survey of England 2013/14

About
Keep Britain Tidy

Where we live matters
Cleaner streets, parks and beaches provide the backbone for strong communities.

How we live matters
By preserving scarce resources, wasting less and recycling more, we create a healthier society and a healthier planet too.

Keep Britain Tidy campaigns to improve the environment
We are an independent charity, which fights for people's right to live and work in places of which they can be proud.

A single truth underpins our success – caring for the environment is the first step to a better society
Sixty years ago, we started with litter. Today we do much more. We work at the heart of business, government and the community to help people understand that what's good for the environment is also good for us.

But our future depends entirely on your support
If you care about the wellbeing of your family and you care about the world your grandchildren will inherit, join us in taking greater responsibility. Respect for our planet begins with respect for our neighbourhoods.

Love where you live. Keep Britain Tidy.

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An illustrated overview of the Local Environmental Quality Survey of England can be viewed online.

www.keepbritaintidy.org/howcleanisengland

Chief Executive's foreword

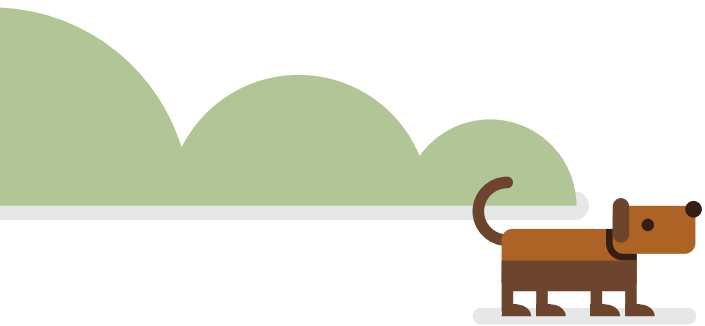
The Local Environmental Quality Survey of England (LEQSE) is an important report that tells us just how clean our country is in a scientific, statistically robust way. We often hear people saying that 'our country is getting dirtier'. This statement can be clouded by perceptions, politics or prevailing wisdoms. LEQSE offers a reliable picture based on evidence gathered by our survey team throughout the year and going back more than a decade.

So what does the survey tell us? According to this year's LEQSE, 89% of sites across England are either at or above an acceptable standard for litter. There has been a 4% improvement since we started the survey in 2001 but no marked improvement since last year.

Fast food and non-alcoholic drinks litter – for example – are increasing and there are wide variations between town and city centres, different housing types and rural roads. Cuts to local authority budgets continue and some indicators suggest that cleansing is beginning to suffer as a consequence. We cannot afford to be complacent.

If we want to keep our country clean and litter-free we cannot and must not rely on councils' capacity to 'clean up after us'. The large amount of public money we spend to keep England clean is unacceptable and a bill that we should not have to keep paying.

This year's LEQSE and the changes in the sampling methodology used to collect the data have, for the first time, given us the chance to look at the issues that affect the quality of our local environment alongside other national data.



This makes for some stark reading. Maybe we have always instinctively known that more deprived areas suffer from poorer environmental quality – higher litter levels, more graffiti and fly-posting for example. This report confirms this clearly and irrefutably. If you live in a more deprived area you are more likely to live in a place that has an unacceptable level of litter and dog fouling on the ground. The converse is also true; residents of more affluent areas enjoy better local environmental quality.

Allied to these findings is the link that we have now been able to establish between low-level environmental crimes - littering, graffiti and fly-posting - and more serious crime. By overlaying the data about crime risk with LEQSE data, we can see that on streets where litter, graffiti and fly-posting exist, there is also a higher risk of crime when compared with places where they are not present. This adds more weight to the 'broken windows' theory first developed in New York policing: if an area is neglected and badly maintained, crime and anti-social behaviour will increase, and vice versa. Safe communities require high quality environmental management.

At Keep Britain Tidy, we believe that every man, woman and child has the right to live somewhere that is clean and well-managed; a place of which they can be proud. Achieving this is a shared responsibility - local and central government, landowners, communities and businesses all have a role to play, as do householders, residents and visitors. It is only by working together that we can change this situation and make sure that nowhere does litter blight communities.

The economic and social impacts of poor local environmental quality are as important for communities as the environmental ones. Clean and tidy streets are not simply about physical appearance. The report has some positive findings, but Keep Britain Tidy would urge everyone with a stake in making our communities better, safer places to draw on the data from this survey and to take action to further improve our local areas.

Phil Barton
Chief Executive, Keep Britain Tidy

Ministerial foreword

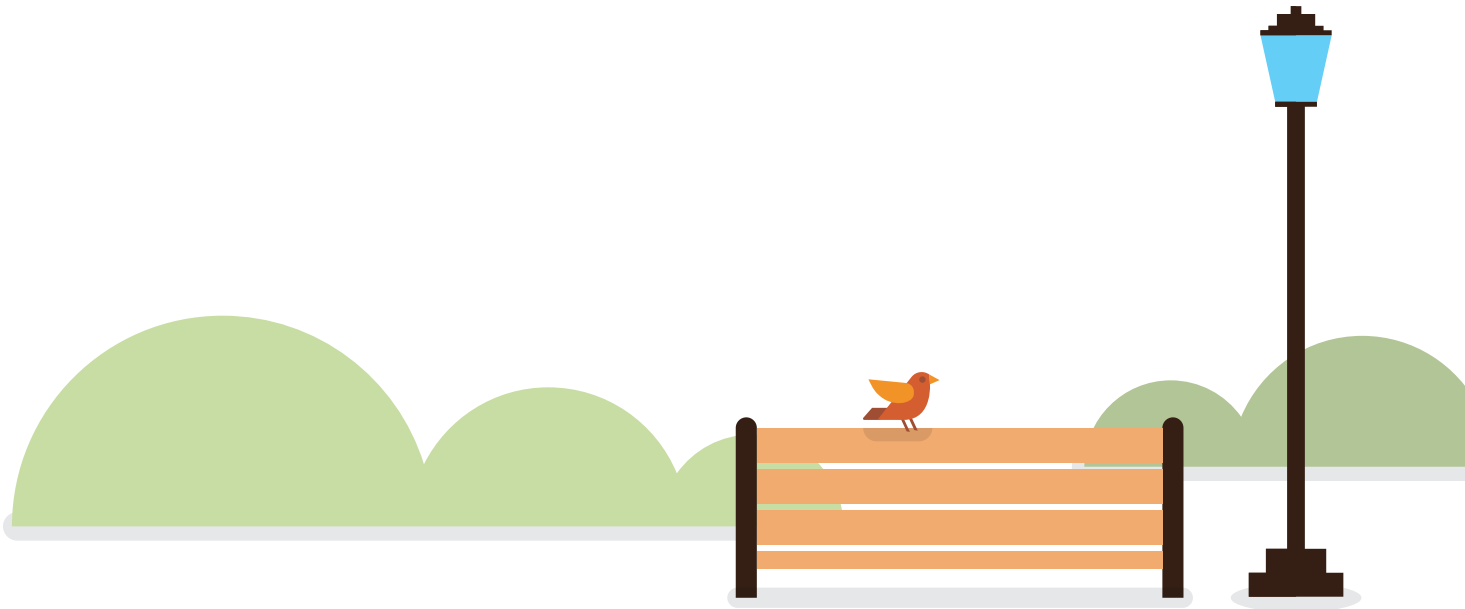
It is my pleasure to introduce another Local Environment Quality Survey of England report. Once again, the report demonstrates the achievements of local councils and land managers in maintaining our public spaces despite increasing pressure on financial and other resources. The picture overall is a positive one, showing that the majority of our public land is predominantly free of litter or other indicators of poor local environmental quality. This isn't to say that problems don't exist but where they do, they tend to be localised.

For the first time, the new survey methodology means that Keep Britain Tidy has been able to draw links between local environment quality standards and other indicators of deprivation, including crime. It is sad to see the correlation between poor local environment quality and deprivation, meaning that some of the most disadvantaged members of our society also tend to have reduced access to the benefits to physical and mental health associated with high quality, clean, and safe public spaces. At the same time, the evidence shows that poor levels of local environment quality are associated with increases in other low-level crime and social disorder, further compounding problems for the local community. I strongly encourage land-managers to bear this in mind when making decisions about local priorities.

The survey indicates a slight rise in the presence of littered plastic carrier bags. To counter this, our preparations are well advanced for the introduction of a 5p charge on single-use plastic bags with effect from October next year.

Finally, this year has also seen the launch of Keep Britain Tidy's National Litter Prevention Commitment. I welcome and endorse this initiative, which encourages businesses to make an active commitment to reducing litter and its associated clean-up costs through product design, labelling and influencing customers, as well as by supporting Keep Britain Tidy's valuable work. The increase in the prevalence of fast food-related litter over the past ten years is disappointing - packaging and litter associated with eating and drinking accounted for six of the ten most commonly littered items. While those that produce and sell packaging of course cannot be held responsible for consumers' bad behaviour, I call on the producers of these products to look even more creatively and seriously at what they can do to reduce the likelihood of their products becoming litter. I encourage them to read this report, and to sign up to the Commitment.

Dan Rogerson MP
Parliamentary Under-Secretary of State for Water, Forestry, Rural Affairs and Resource Management



1

Introduction to the survey

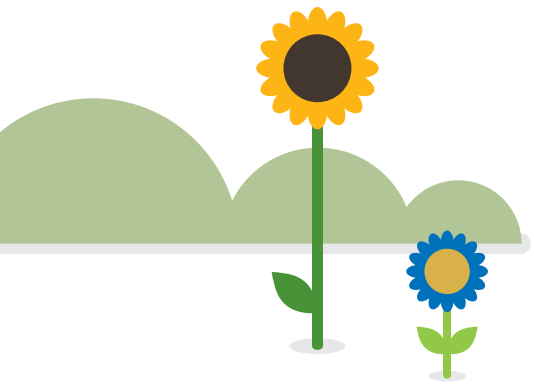
The Local Environmental Quality Survey of England (LEQSE) is carried out annually by Keep Britain Tidy on behalf of the Department for Environment, Food and Rural Affairs (Defra).

The survey is not simply a measure of litter, it also includes six other indicators of cleanliness: detritus, weed growth, staining, graffiti, fly-posting and recent leaf and blossom fall. Taken together, these headline indicators provide a means of assigning a quantitative score to the local environmental quality of an area, based solely on the presence or absence of the indicators.

The main aim of the survey is to provide information on the overall cleanliness of the country. This can be used to inform strategy and is therefore crucial to ensure government, local authorities, land managers, businesses, Keep Britain Tidy and others have the information they need in order to improve local environmental quality.

1.1. Sampling change

Due to advances in technology and the creation of Lower Super Output Areas (LSOAs)[1], this year's survey sampling methodology was improved to better reflect land uses and allow the survey data to be linked to other data sets.



Historic data has been weighted to fit with the new methodology. This allows a comparison over time but means that data may be different to figures published in previous LEQSE reports.

Survey methodology[2]

Surveys were carried out at 7,200 sites across England from April 2013 – March 2014. Five local authority areas were selected from each of England's nine regions[3].

To measure each indicator, a grading system is used. The grading system follows the same principles as the Code of Practice on Litter and Refuse[4], which identifies four grades of cleanliness: A, B, C and D. This survey uses these four grades, plus an additional three intermediate grades: B+, B- and C-.

Figure 1. LEQ grading system

Grade	Description
A	None of the issues present
B+	Not formally defined
B	Predominantly free with some minor instances of the issue
B-	Not formally defined
C	Widespread with some accumulations of the issue
C-	Not formally defined
D	Heavily affected by the issue

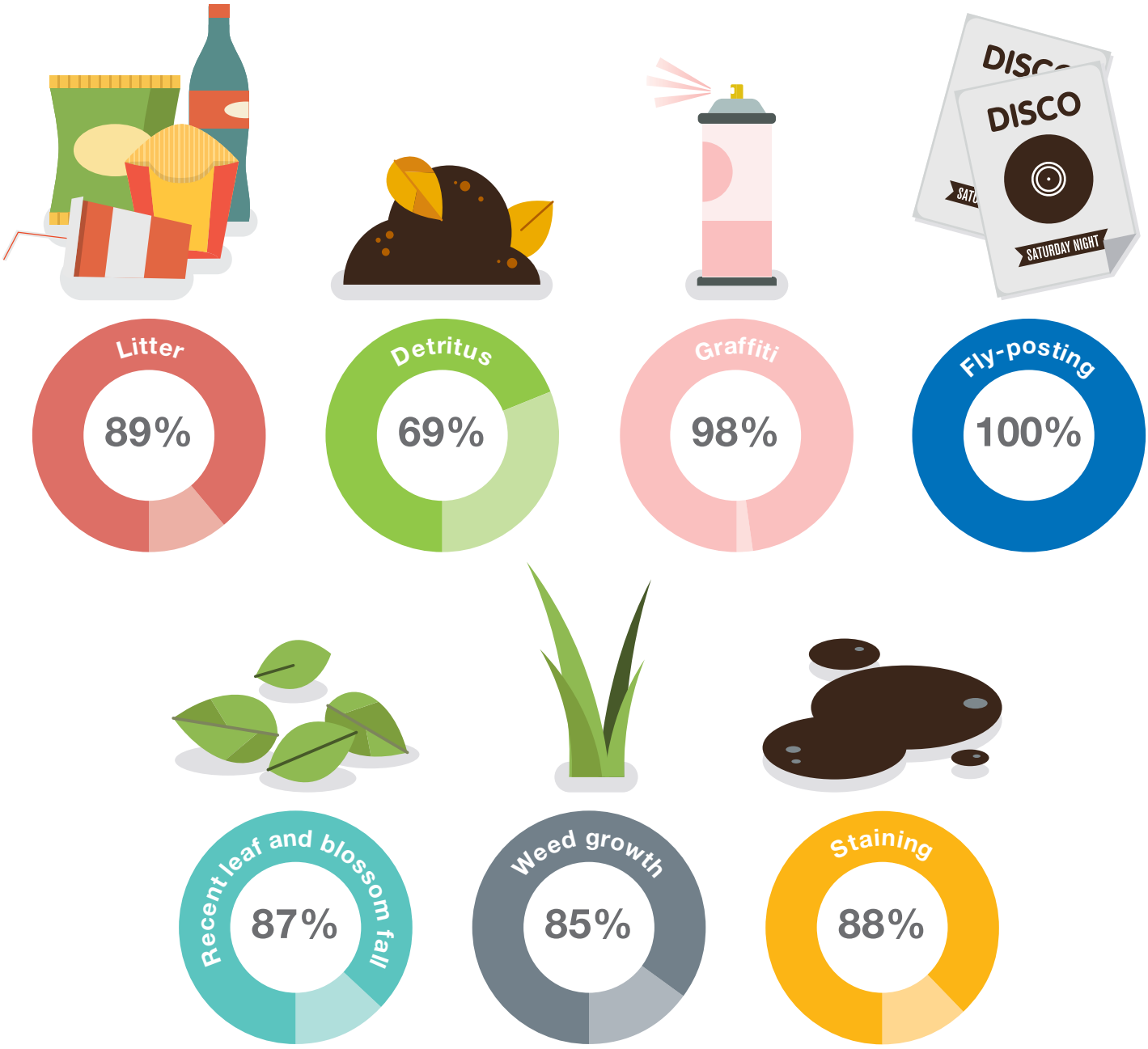
1. Boundary constructs created by the Office of National Statistics (ONS)
2. More detailed information on LEQSE methodology can be found at www.keepbritaintidy.org/howcleanisengland
3. England has nine regions with officially devolved functions within UK Government. These are the North West., North East, Yorkshire and the Humber, West Midlands, East Midlands, East of England, Greater London, South West and South East.
4. Code of Practice on Litter and Refuse, Defra (2006). www.gov.uk/government/uploads/system/uploads/attachment_data/file/221087/pb11577b-cop-litter.pdf

2 Headline results

2.1. Overall standard of local environmental quality across England

Headline indicators making the grade in 2013/14

Figure 2. Percentage of sites at or above an acceptable standard[5] for each headline indicator 2013/14

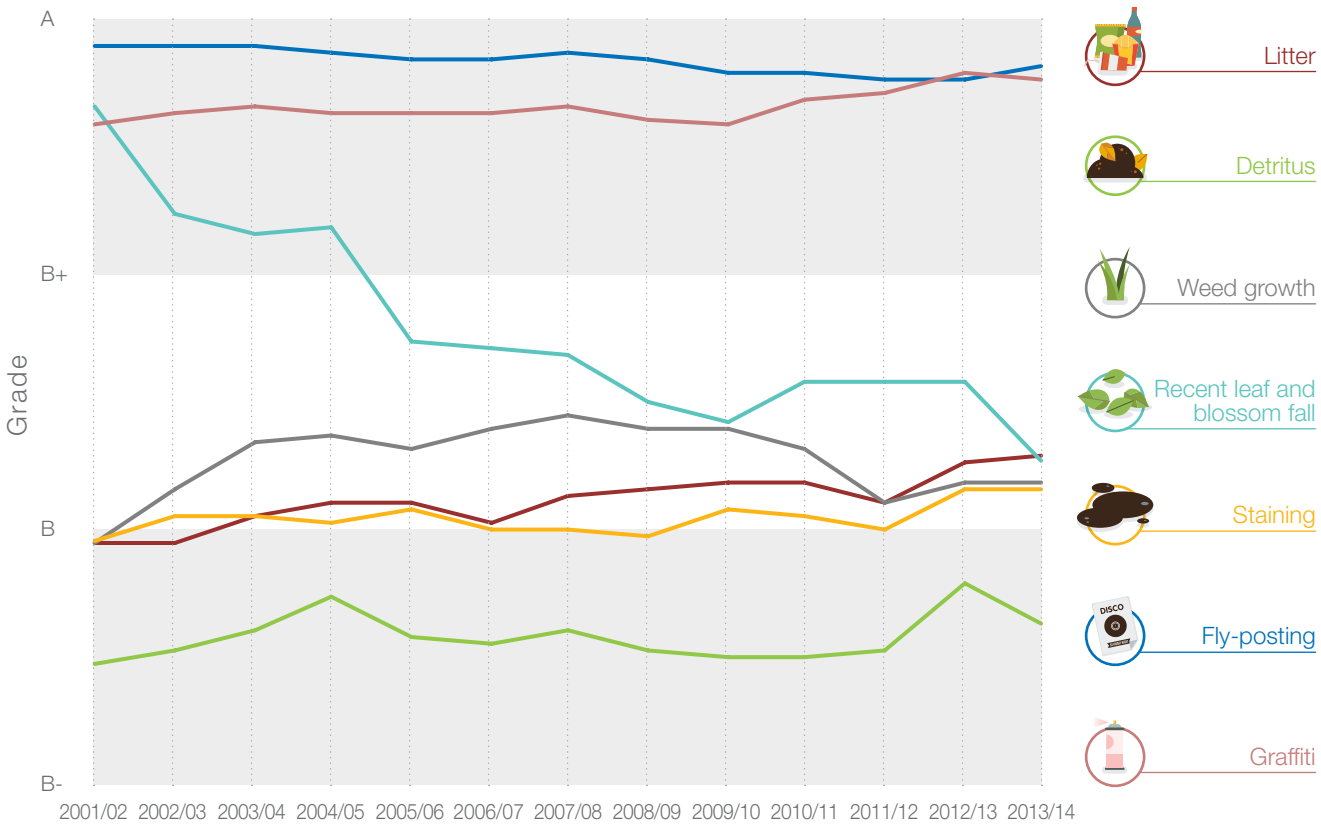


5. An 'acceptable standard' is grade B and above

2.2. Improvements and deteriorations in overall standards

When we review the average indicator grade of each site over time, we can analyse the changes in overall standard.

Figure 3: Average grade for each headline indicator over time



The overall picture is a positive one. Litter has seen an improvement in its average grade in 2013/14, while graffiti and staining have also been gradually improving over the years as well.

Detritus, which can sometimes be an early indicator of ineffective cleansing, was at its highest standard in 2012/13 but has seen a decline in standard this year and continues to be the worst performing indicator.

Fly-posting has consistently been the highest performing indicator since the survey began and has remained at a good grade.

The biggest decline in standard has been for recent leaf and blossom fall. This indicator has the largest variation out of all the key indicators.

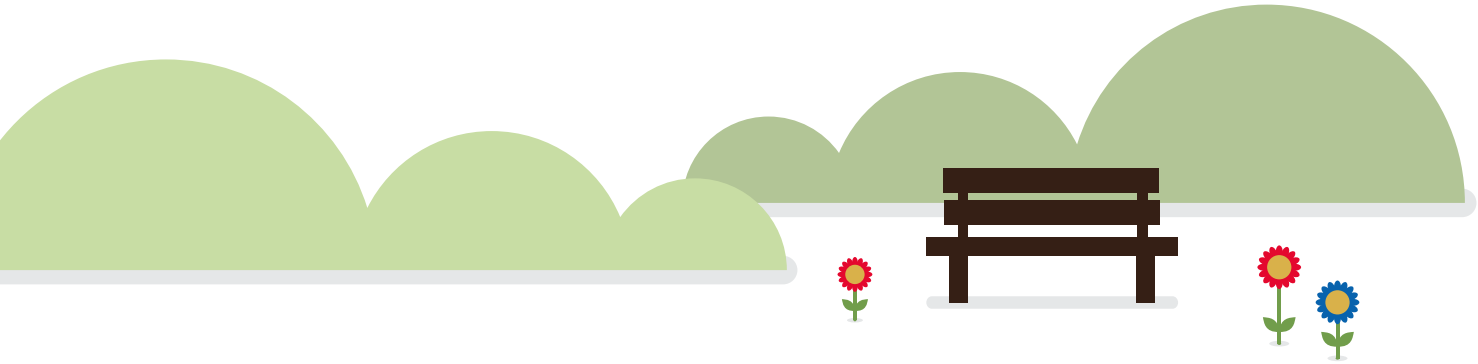
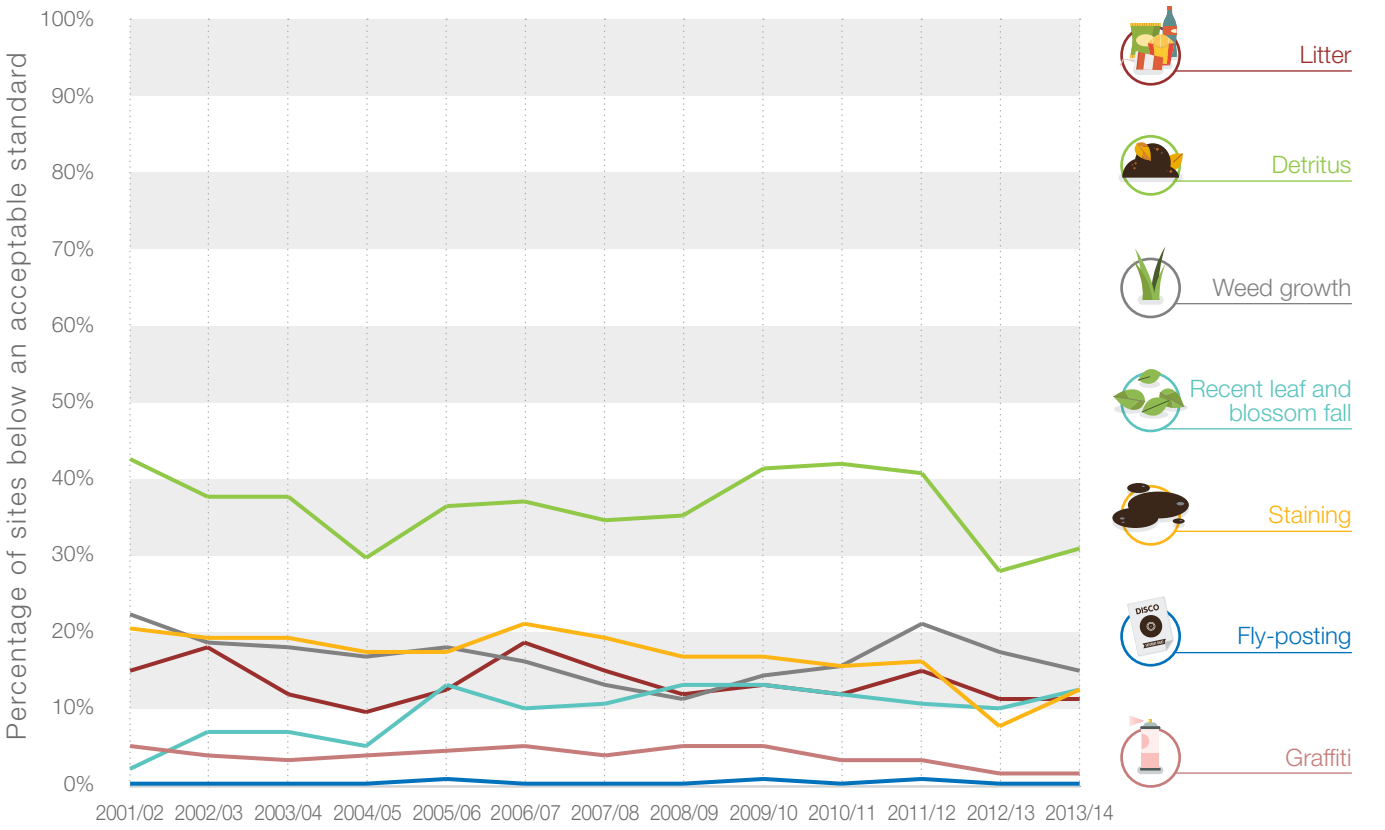


Figure 4: Percentage of sites below an acceptable standard for each headline indicator over time

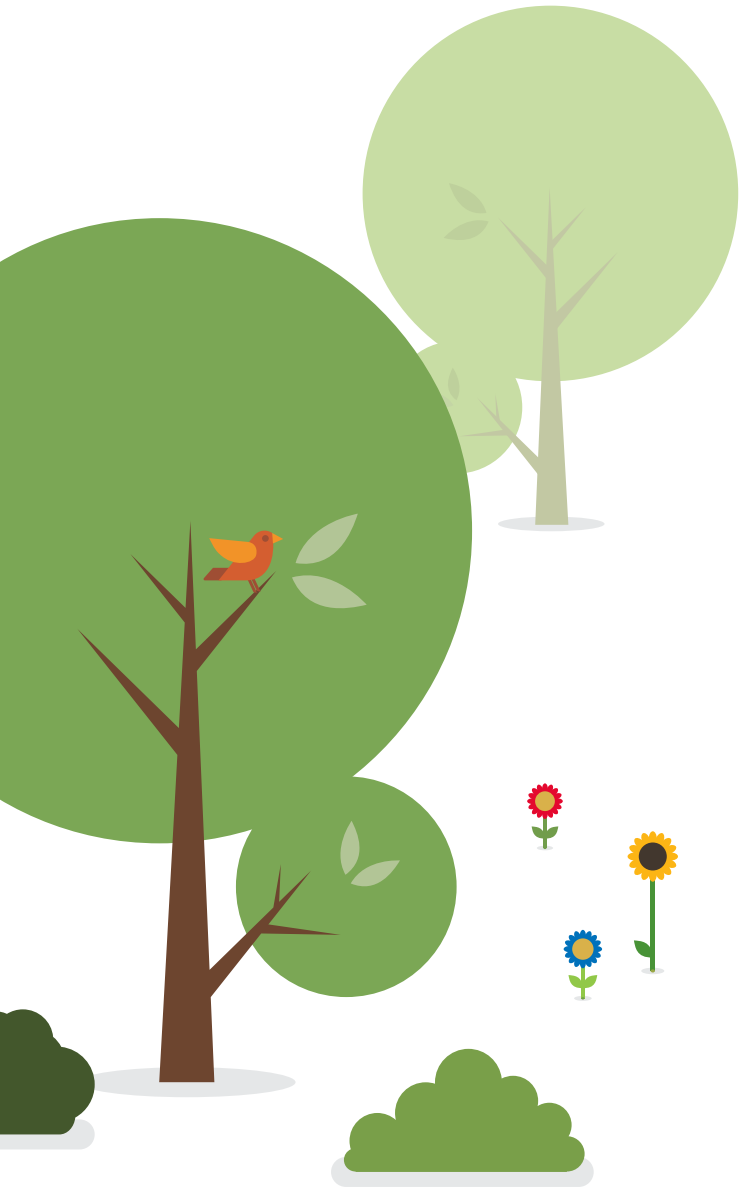


Overall, litter and graffiti have seen a long-term improvement in standards. Fly-posting scores consistently well and has very few unacceptable occurrences, while weed growth has had two years of improved standards. Recent leaf and blossom fall, detritus and staining have seen standards fall compared to last year.

2.3. Regional results

For the first time ever, this year's survey data has allowed us to produce a breakdown of results for each region of the country. This helps us understand regional problems and provides local authorities with regional insight.

However, when looking at overall LEQ across the regions, the results show that there isn't a significant variation in LEQ between the regions, therefore validating that the national benchmark is a suitable benchmark for all local authorities to use.



Key: Litter grade

1 = A	2 = B+	3 = B	4 = B-
5 = C	6 = C-	7 = D	

West Midlands

1st Rank

B+ 2.43

Average litter grade by region

Number of sites

A	B+	B	B-	C	C-	D
92	303	332	30	10	1	0

Number of sites achieving each grade

South West

2nd Rank

B+ 2.48

Average litter grade by region

Number of sites

A	B+	B	B-	C	C-	D
62	297	305	44	4	0	0

Number of sites achieving each grade

East Midlands

3rd Rank

B+ 2.49

Average litter grade by region

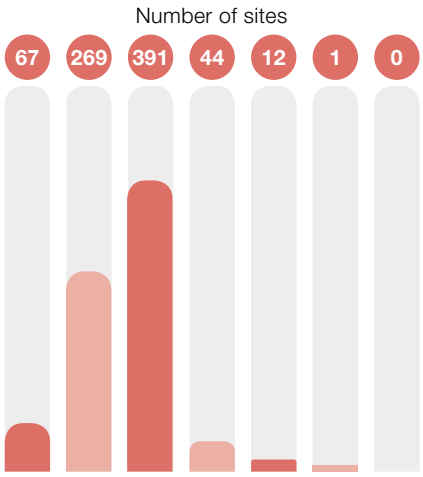
Number of sites

A	B+	B	B-	C	C-	D
72	226	266	33	9	1	1

Number of sites achieving each grade

East of England

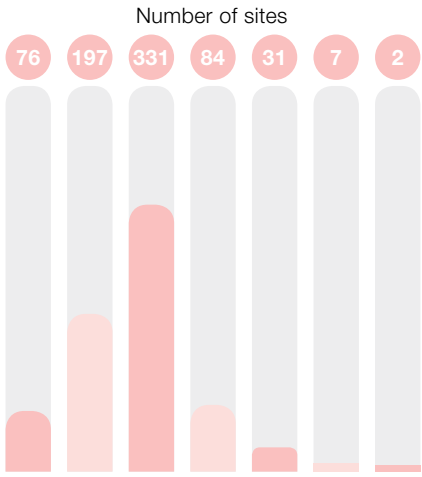
Average litter grade by region



Number of sites achieving each grade

Yorkshire and The Humber

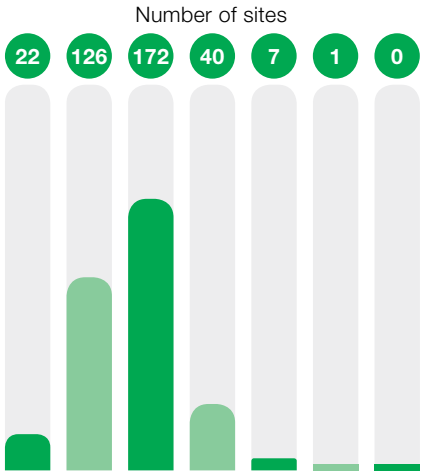
Average litter grade by region



Number of sites achieving each grade

North East

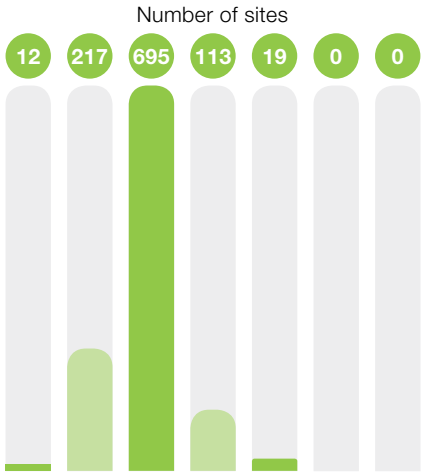
Average litter grade by region



Number of sites achieving each grade

Greater London

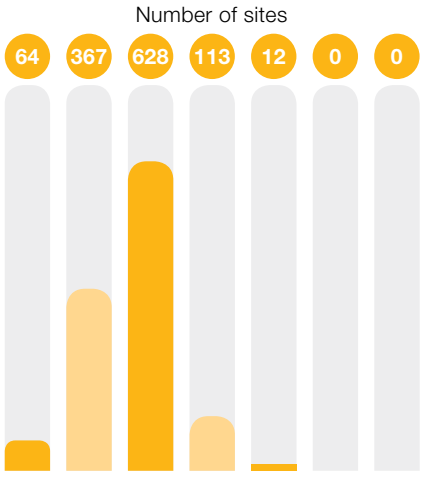
Average litter grade by region



Number of sites achieving each grade

South East

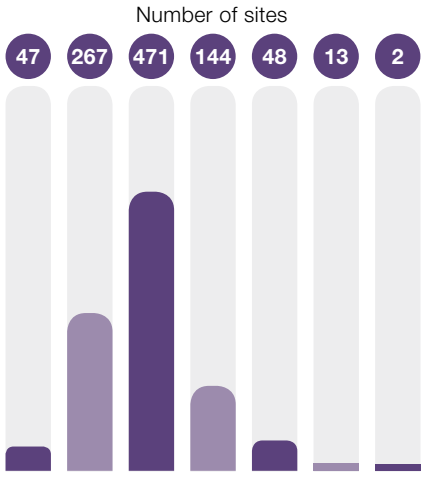
Average litter grade by region



Number of sites achieving each grade

North West

Average litter grade by region



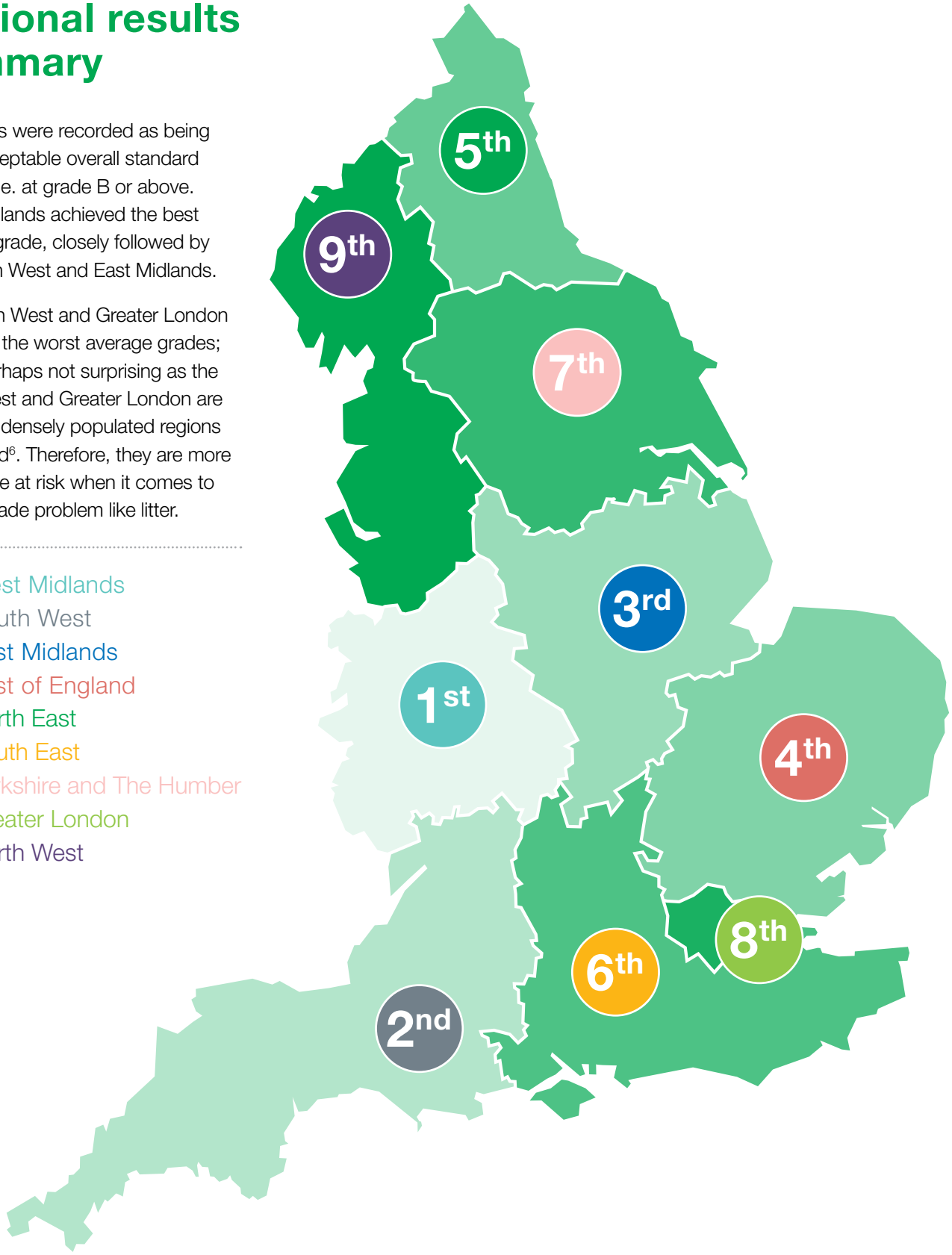
Number of sites achieving each grade

Regional results summary

All regions were recorded as being at an acceptable overall standard for litter, i.e. at grade B or above. West Midlands achieved the best average grade, closely followed by the South West and East Midlands.

The North West and Greater London recorded the worst average grades; this is perhaps not surprising as the North West and Greater London are the most densely populated regions in England[6]. Therefore, they are more likely to be at risk when it comes to a man-made problem like litter.

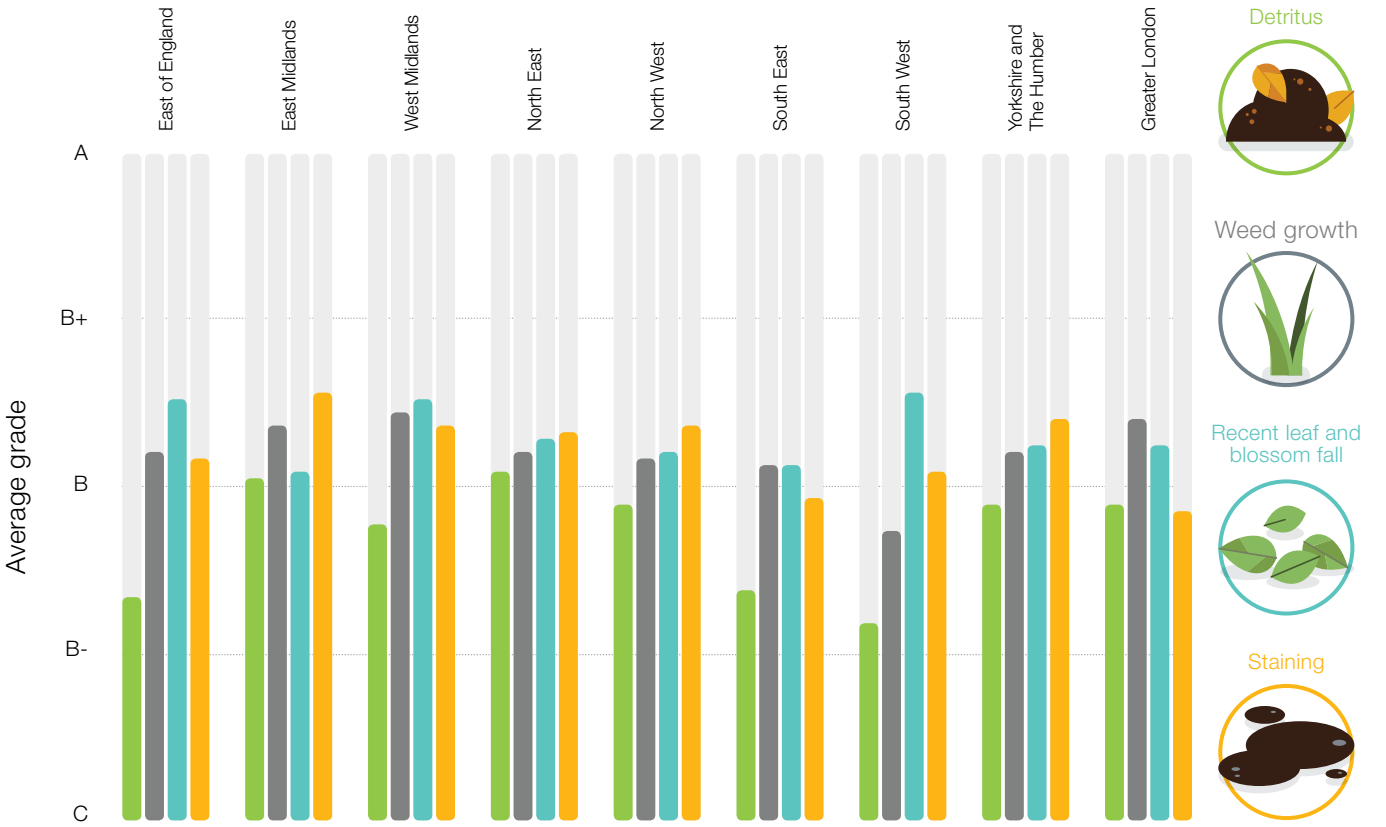
1st West Midlands
2nd South West
3rd East Midlands
4th East of England
5th North East
6th South East
7th Yorkshire and The Humber
8th Greater London
9th North West



6. 2011 Census: Population and household estimates for England and Wales (ONS)

Detritus, staining, weed growth and recent leaf and blossom fall

Figure 5: Average grade for detritus, staining, weed growing and leaf and blossom fall by region for 2013/14

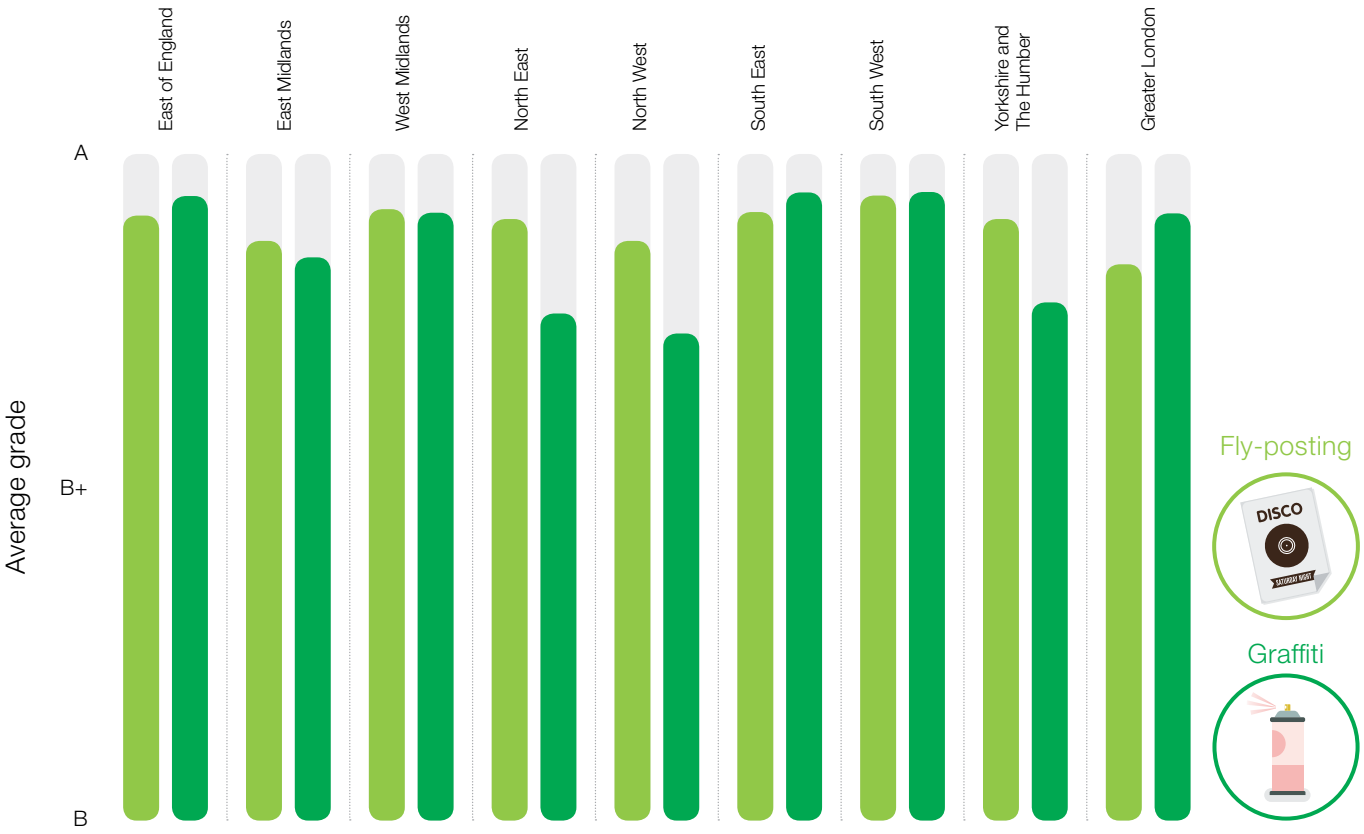


Detritus, weed growth and recent leaf and blossom fall occur naturally and levels are maintained by local authority street cleansing departments.

Staining can also naturally occur; however, like litter, some forms of staining are caused by people's activity, such as chewing gum staining.

Graffiti and fly-posting

Figure 6: Average grade for graffiti and fly-posting by region in 2013/14



Graffiti and fly-posting are low-level environmental crimes, which are monitored in the survey. They are linked to anti-social behaviour, which can often escalate into more serious forms of crime, as postulated in the 'broken windows' theory[7]. This is a criminological theory of the norm-setting and signalling effect of urban disorder and vandalism on additional crime and anti-social behaviour.

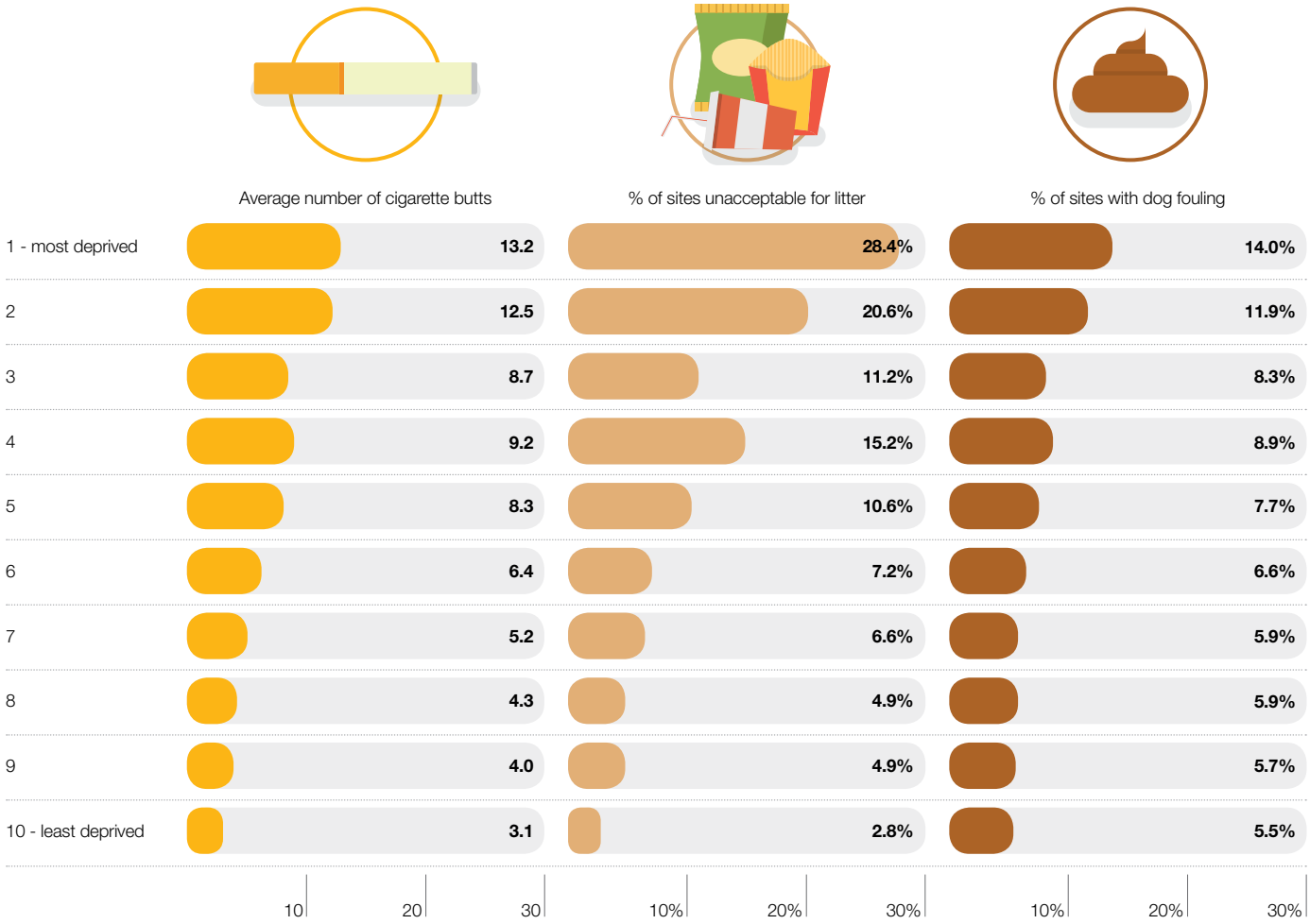
The theory states that maintaining and monitoring urban environments in a well-ordered condition may stop further vandalism and escalation into more serious crime.

Figure 6 shows that all nine regions across England had no failing average grades for either graffiti or fly-posting. Furthermore, not only were no failing grades recorded, all of the regions scored an 'A' grade for both indicators. This means that, on average, no instances of either issue were recorded on the sites surveyed. While this is good news, in the few places where these issues are present they tend to be very visible, leading to poor perceptions of an area and increased fear of crime. As this is a very localised issue, local authorities in these areas may benefit from further research that identifies the common characteristics of the areas affected and look to identify effective interventions. Figure 6 suggests that there is a link between graffiti and fly-posting, as the regions with the highest standards for graffiti tend to mirror similar standards in fly-posting.

7. Broken Windows: The Police and Neighbourhood Safety. Kelling and Wilson (The Atlantic, 1982)

Litter mapped with deprivation data

Figure 7: Average number of cigarette butts on site, percentage of sites below an acceptable standard for litter and percentage of sites affected by dog fouling by IMD deciles[8] 2013/14



This year's LEQSE data has been analysed alongside numerous external datasets in order to test for relationships that could affect local environmental quality or vice versa. One of the data sources is the Indices of Multiple Deprivation (IMD, 2010)[8].

This provides a measure of deprivation at small area level. Areas are ranked from least deprived to most deprived. The IMD measures deprivation by using data on income, employment, education, crime, living environment, health and disability and barriers to housing and services.

Figure 7 shows a distinct link between levels of deprivation and the level of litter, cigarette butts and dog fouling. Alongside the overall pattern for litter, which is an environmental crime, cigarette butts were chosen because they are the most common litter item found on England's streets, while dog fouling features highly in the public perception of serious litter issues[9].

Ultimately, the most deprived areas experience much poorer levels of cleanliness than the least deprived areas. Although there are occasional anomalies, the trend for all three types of issue support this claim and points to a need for further research into the relationship between deprivation and local environmental quality.

The percentage of sites recorded as unacceptable for litter decreases significantly[10] from 28% in the most deprived areas to just 3% in the least deprived areas. Similarly, there is a significant decrease in the average number of cigarette butts recorded on site, falling from 13 in the most deprived areas to three in the least deprived areas. The percentage of sites containing instances of dog fouling also falls noticeably from 14% in the most deprived areas to 6% in the least deprived locations.

8. www.gov.uk/government/publications/english-indices-of-deprivation-2010)
9. The View from the Street, Keep Britain Tidy (2012)
10. Unless otherwise stated, references to 'significant' changes have been tested at the 99% confidence level

3 Litter

How litter levels have changed

Statistical analysis shows that litter across England has reduced over the past 12 years, with an improvement of four percentage points in sites deemed to be acceptable for litter in 2013/14 compared to 2001/02 when the survey first began.

3.1. Types of litter

The top three litter types in England have remained consistent over the past decade. Smokers' materials are the most common, confectionery packs are second and non-alcoholic drinks-related litter is the third most common.

The trends for the top ten litter types are displayed in figure 8, which highlights a significant recent increase in the presence of fast food-related litter and 'other' packaging litter.

The most prevalent litter type, smokers' materials, has remained reasonably static over the past ten years. The percentage of sites affected by smokers' materials was at its highest in 2012/13. This year, however, while still high there was a drop from 80% to 73%, the lowest recorded result.

Figure 8: Top ten litter types present over time

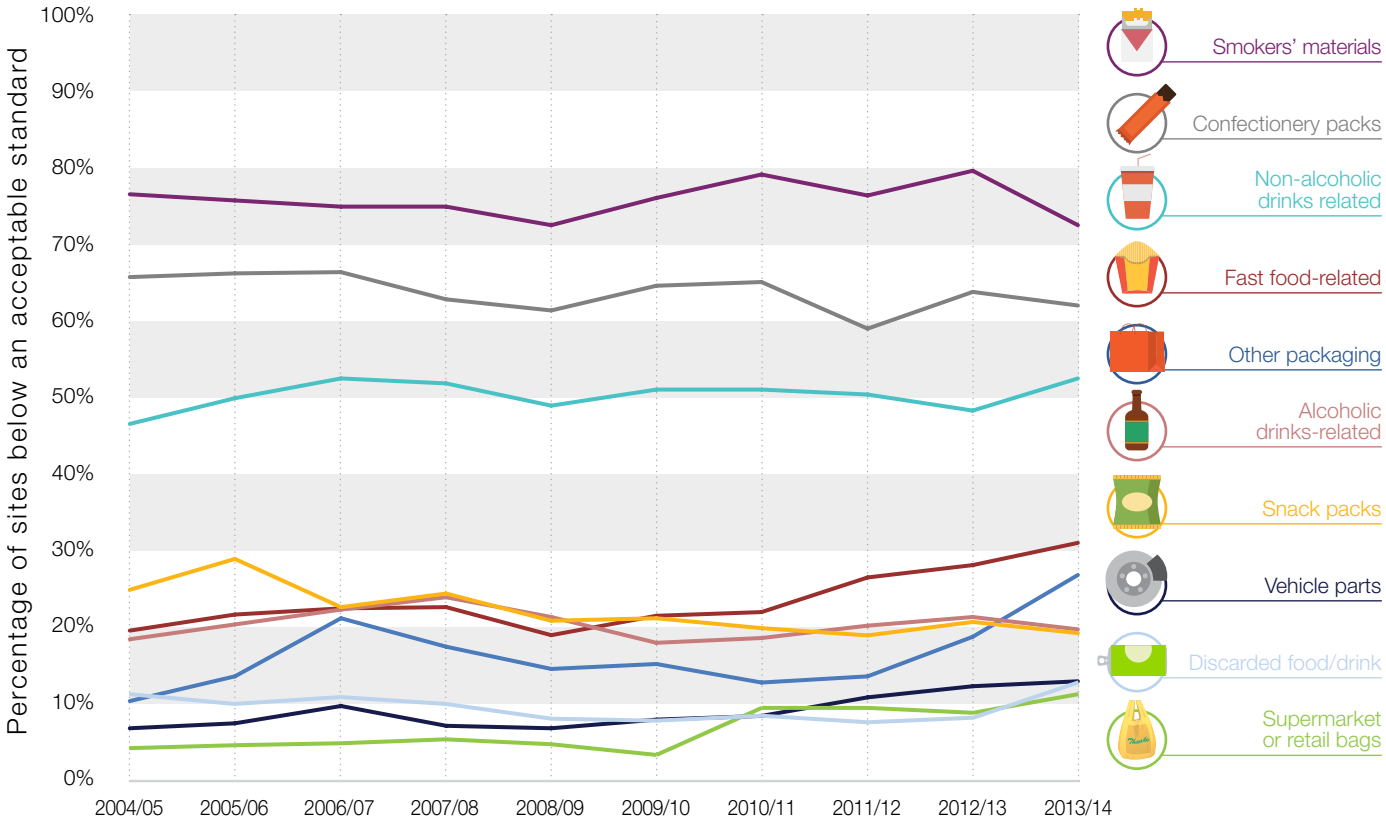
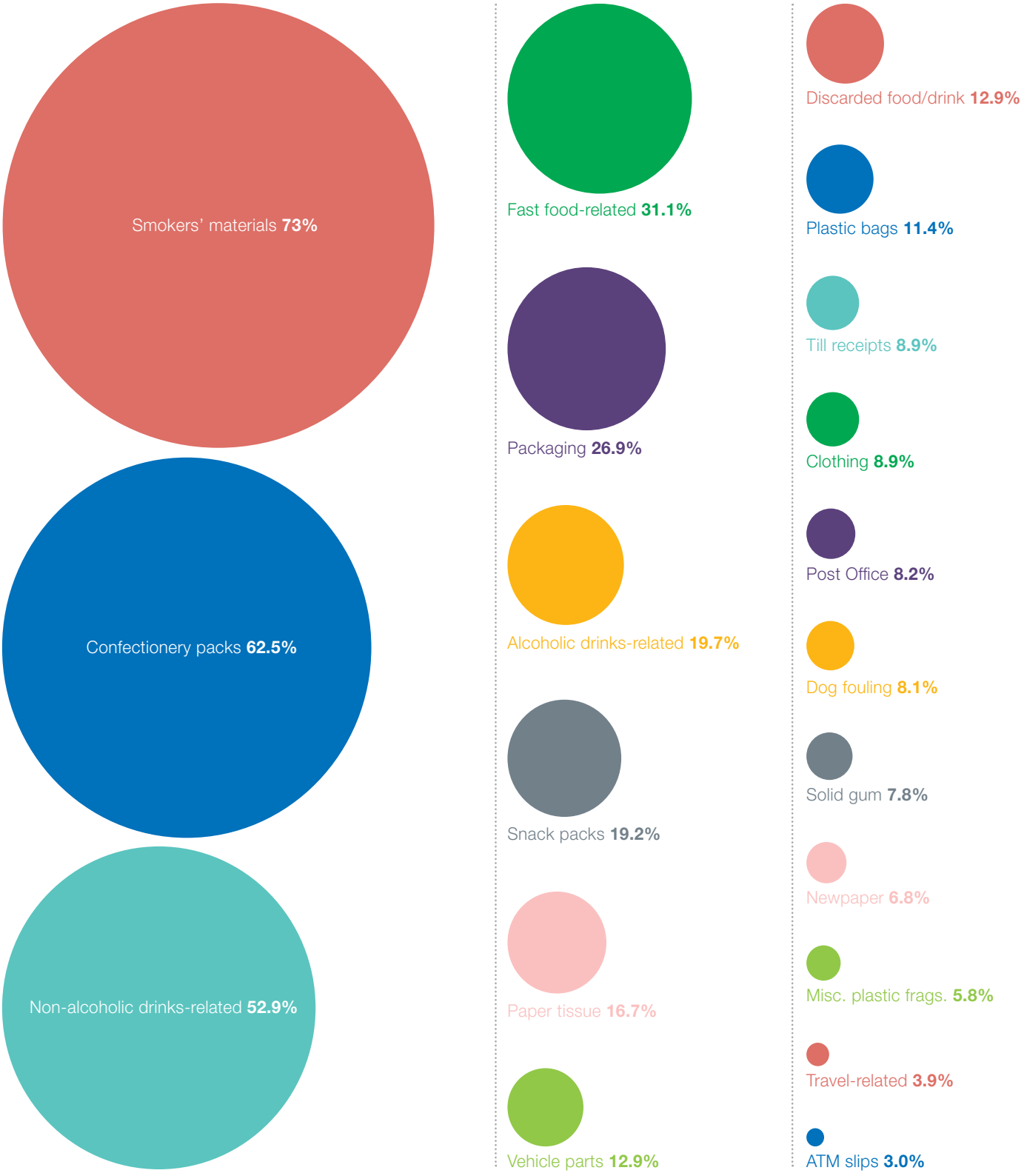


Figure 9: Percentage of sites affected by the top 20 litter items in 2013/14

In total, 81% of sites surveyed in 2013/14 had some form of food and drink-related litter. This included confectionery, alcoholic and non-alcoholic drinks, fast food-related litter, snack packs and discarded food and drink.

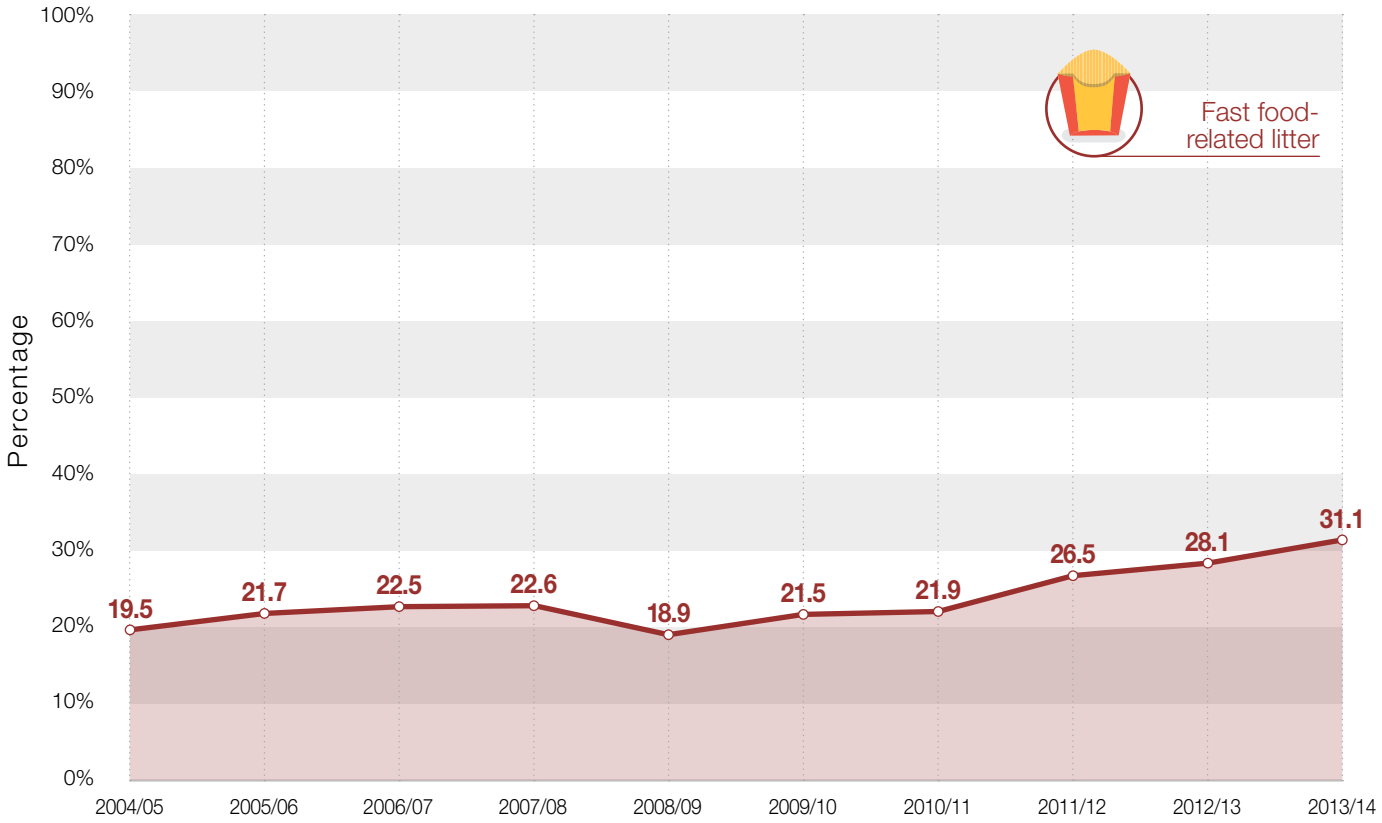
Some of the litter types[11] display a seasonal pattern; for example, confectionery packs and non-alcoholic drinks feature highly during the winter but significantly lower in spring and summer.



11. Definitions of all litter types monitored in the survey can be found at www.keepbritaintidy.org/howcleanisengland

3.1.1. Fast food litter

Figure 10: Percentage of sites affected by fast food-related litter over time



Over the past ten years, there has been an increase in the prevalence of fast food-related litter; this includes wrappings, boxes, drinks containers, plastic straws, plastic cutlery, branded paper napkins, all sandwich cartons, salt sachets, etc. It is now the fourth most common litter type in England and is increasing at a rate far exceeding that of the top three litter types. Fast-food premises include hot food takeaway premises, coffee shops and all other retail outlets that sell pre-prepared foods (with short shelf lives) in a way that can be consumed in public places.

Given the continuing rise in this type of litter, it is important to understand more about it - where it is most commonly found and whether there are any other factors that influence the amount dropped.

The percentage of sites with fast food-related litter was significantly higher on sites where a bin is provided; in particular, where the bin was a standard litter bin. This does not mean that the presence of a bin increases fast food-related litter, as bins are often placed in areas of the greatest need. However, the data does indicate that where a bin has been provided, it is not always being used. This could be down to bin design, bin capacity, the bin's location or the frequency with which it is emptied.

People don't like to use bins that look full or dirty[12]. This is because people don't want to touch rubbish inside the bin and don't want to touch a dirty bin. Bins can become dirty from food and drink staining, chewing gum being stuck to them, and general dirt and grime building up over time. Sites with clean bins had significantly less fast food-related litter on the ground compared to sites with dirty bins, which indicates that the cleanliness of a bin has an impact on whether people will use it.

Our work with local authorities suggests that bins with a large opening and the ability to drop rubbish into them, rather than post the rubbish through a narrow opening, are preferable to users, and that brightly coloured bins are seen to be more appealing and encourage greater use. Design is also particularly important with food-related rubbish, as having some form of top on the bin can prevent pests from scavenging and spreading the rubbish across the ground.

12. Little Book of Litter, Keep Britain Tidy (2012)

Figure 11: Percentage of sites affected by fast food-related litter, by land use[13], in 2013/14

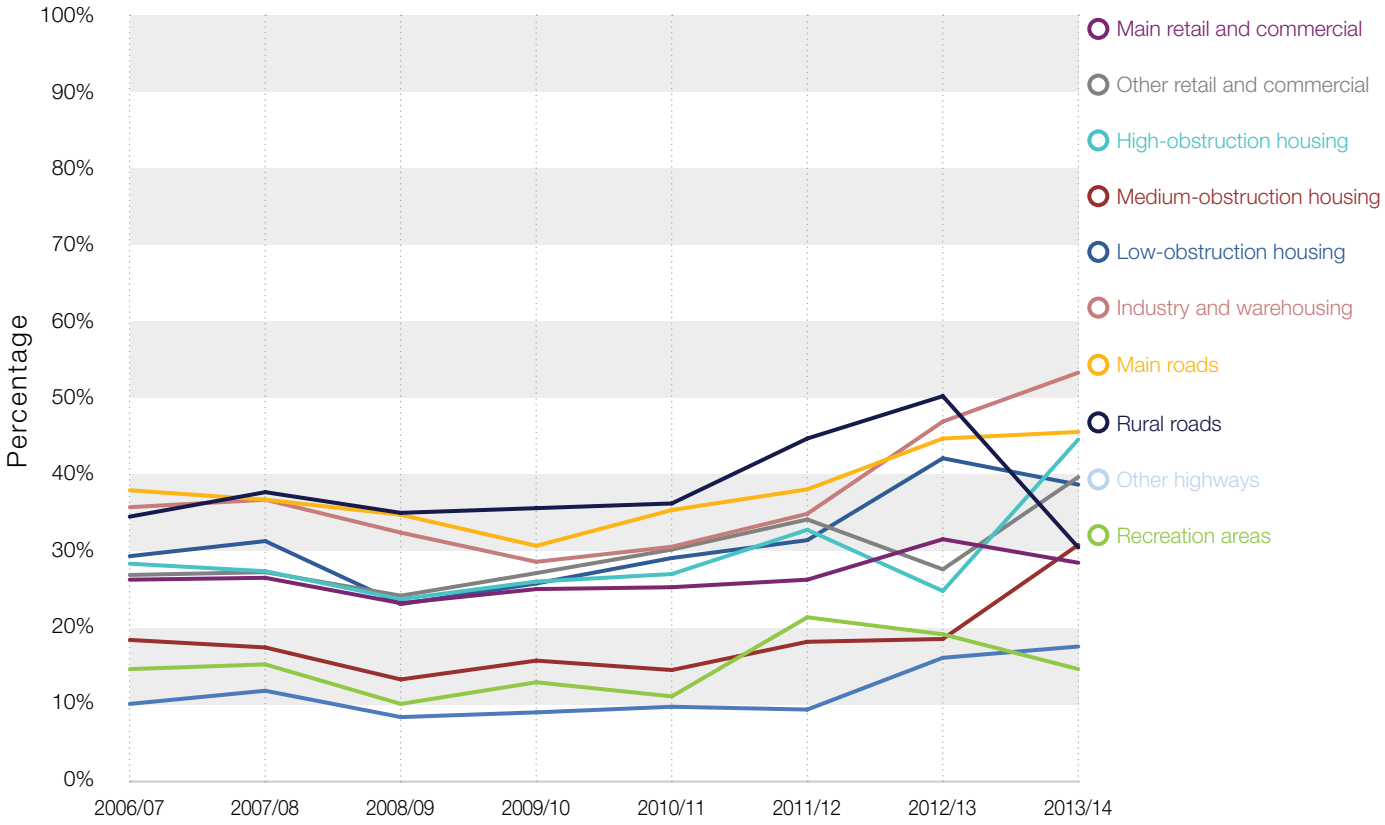


Figure 11 shows that in the past four years, fast food-related litter has doubled on low and medium-obstruction housing sites. The prevalence of fast food-related litter also continues to rise in high-obstruction housing areas[14], industry and warehousing land, and on main roads. This is a significant[15] rise across all three housing groups. The continued rise in fast food litter in industry and warehousing areas over the past five years correlates with the increase in food and beverage outlets in out-of-town retail parks[16], as these retail parks fall within this land use.

Despite the scale of these increases, there have been some improvements in fast food-related litter in 2013/14. Main retail and commercial areas and other highways both saw an improvement in standards, although they both still recorded their second highest levels in the past eight years. Fast food-related litter on rural roads has decreased substantially since last year, dropping from 51% of sites being affected to 31%. There was a notable peak in fast food litter in recreation areas in 2011/12 but this trend has now reversed, with 2013/14 seeing a second year of improvement for fast food scores in this land use.

13. Definitions of land use type used in the survey can be found at www.keepbritaintidy.org/howcleanisengland
14. High-obstruction housing areas are streets where the proportion of dwellings with purpose-built off-street parking facilities is less than or equal to 50%. Medium-obstruction housing areas are where more than 50% of dwellings have purpose-made off-street parking/garaging facilities for up to 2 modern-day family cars. Where this figure is 3 or more cars for more than 50% of properties, the land use is classed as Low-obstruction housing.
15. At 95% confidence level
16. Out-of-town Retail & Leisure: Occupational and Investment Markets. Knight Frank (2013)

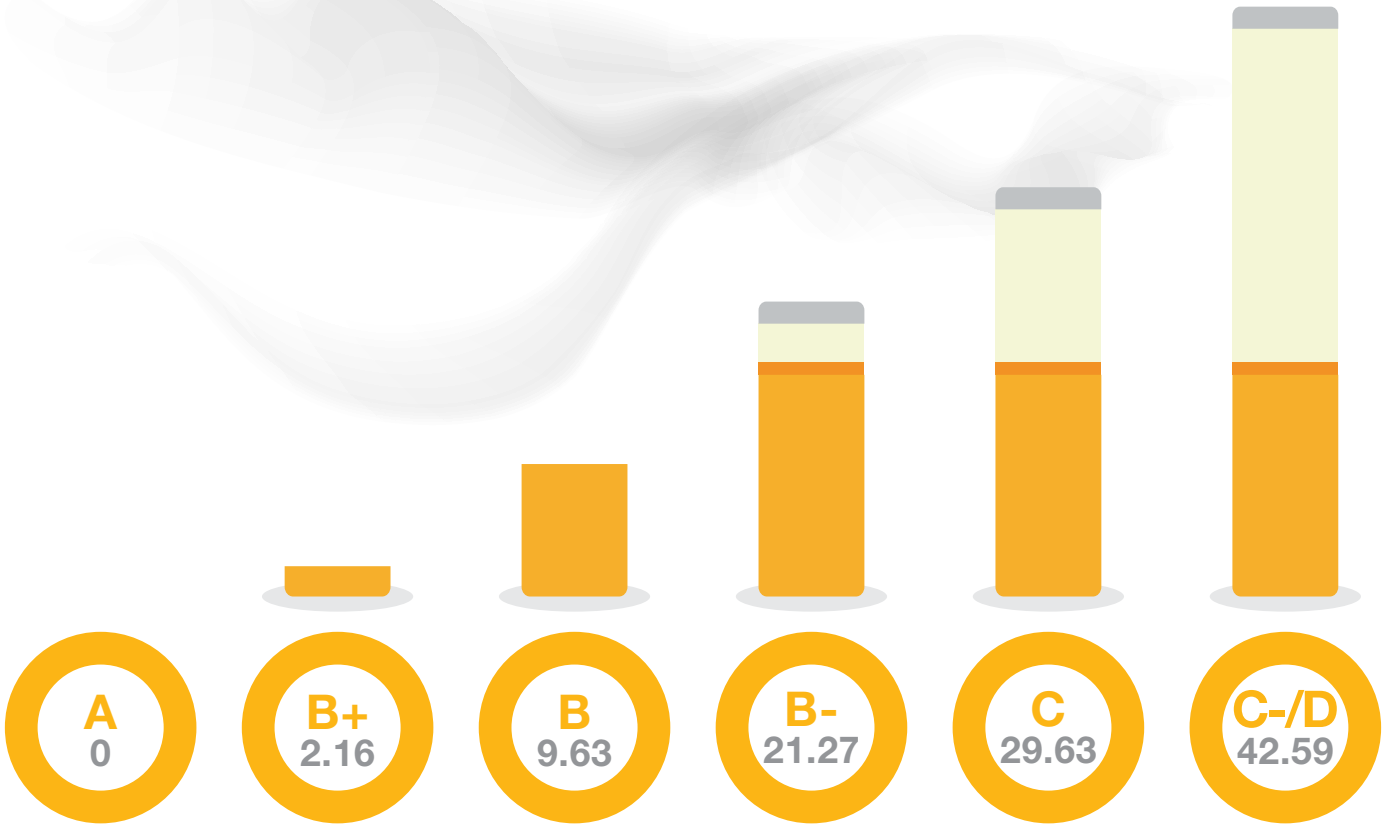
3.1.2. Smokers' materials

The most prevalent type of litter is smokers' material, which was recorded on 73% of sites in 2013/14. In 2012, 19.5% of England's adult population smoked, and although this dropped to 18.4% in 2013[17], this still equates to around 9.75 million adults smoking in England. Furthermore, 57%[18] of those who smoke said they would find it difficult to go just one day without smoking, so helping smokers dispose of their cigarettes responsibly is essential to preventing this unsightly form of litter.

As part of the survey, the number of cigarette butts found on each site were counted. The overall average number of cigarette butts per site in 2013/14 was 7.5[19] and two-thirds of sites had five cigarette butts or fewer.

As expected, the average number of cigarette butts counted on sites increases with a decline in overall litter grade. Figure 12 shows that there are ten times as many cigarette butts on a site which is graded as a 'C-/D' grade (below an acceptable standard), than on a site which achieves a 'B+/B' grade. As smoking materials play such a large part in the overall litter grade, it is interesting to examine this a little further.

Figure 12: Number of cigarette butts present by litter grade site in 2013/14



17. Integrated Household Survey, January to December 2013: Experimental Statistics. ONS (2014)
18. HSCIC, Statistics on Smoking: England 2013
19. Range of 0 to 200, standard deviation 14.3

There are significant differences in the amount of littered cigarette butts found across different land uses. Both main and other retail and commercial areas featured substantially more cigarette butts than other land types, recording around three times as many on each site than in housing areas. These areas are generally highly populated urban centres used by residents, workers and visitors. Where there is a high density of offices, pubs and restaurants, it is not uncommon to see people smoking outside doorways.

Industry and warehousing sites also have a relatively high number of cigarette butts, which is likely to be largely due to people congregating outside work or retail premises, and food outlets in retail parks. Keep Britain Tidy is currently carrying out some behavioural research into how people congregating outside buildings can be nudged to dispose of their cigarettes responsibly.

Figure 13: Number of cigarette butts by land use, in 2013/14

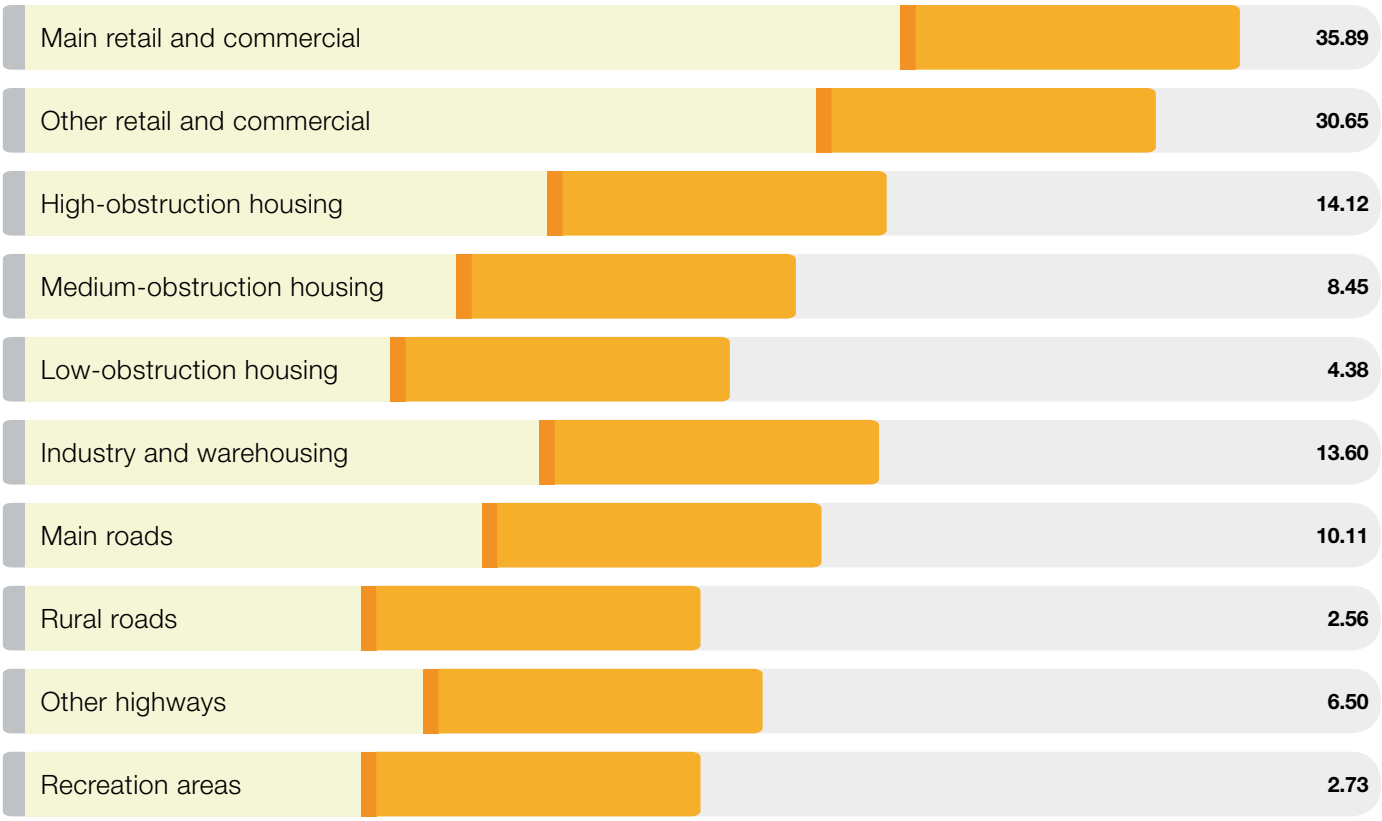
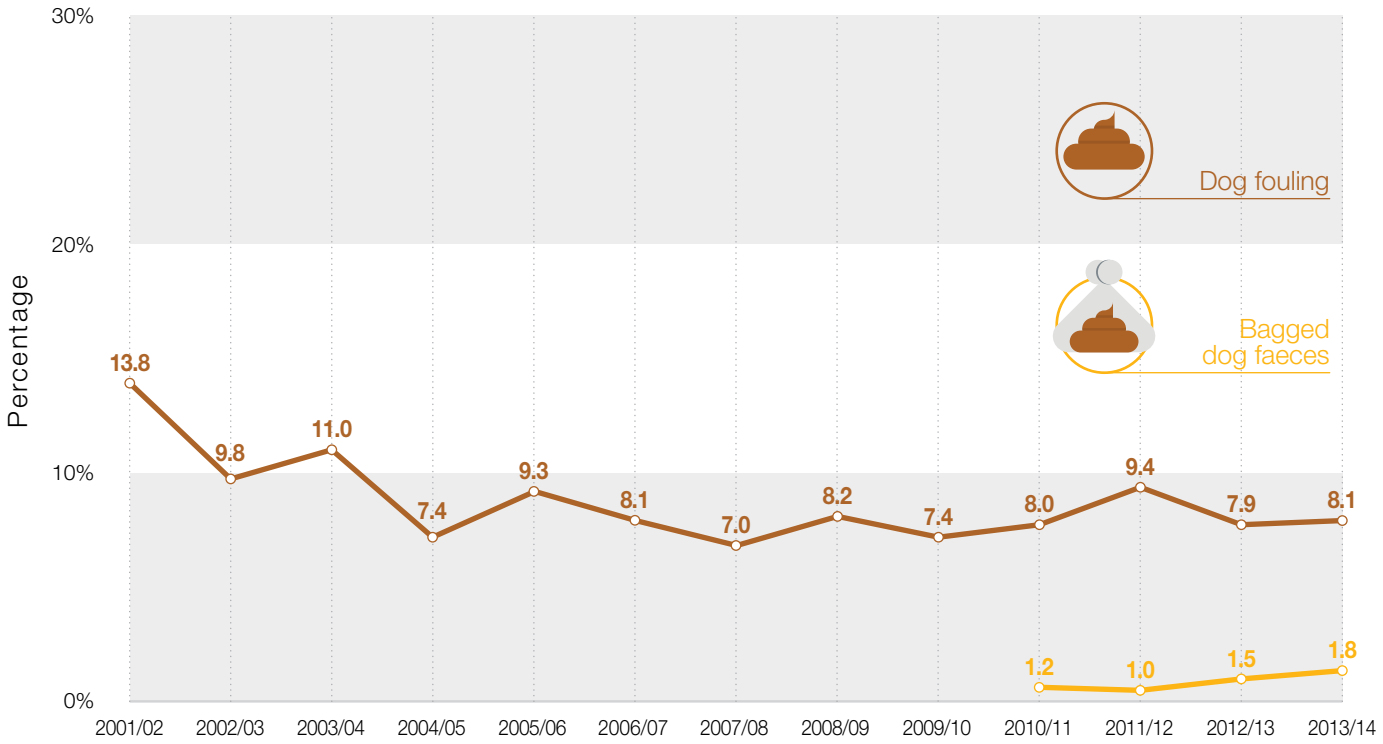
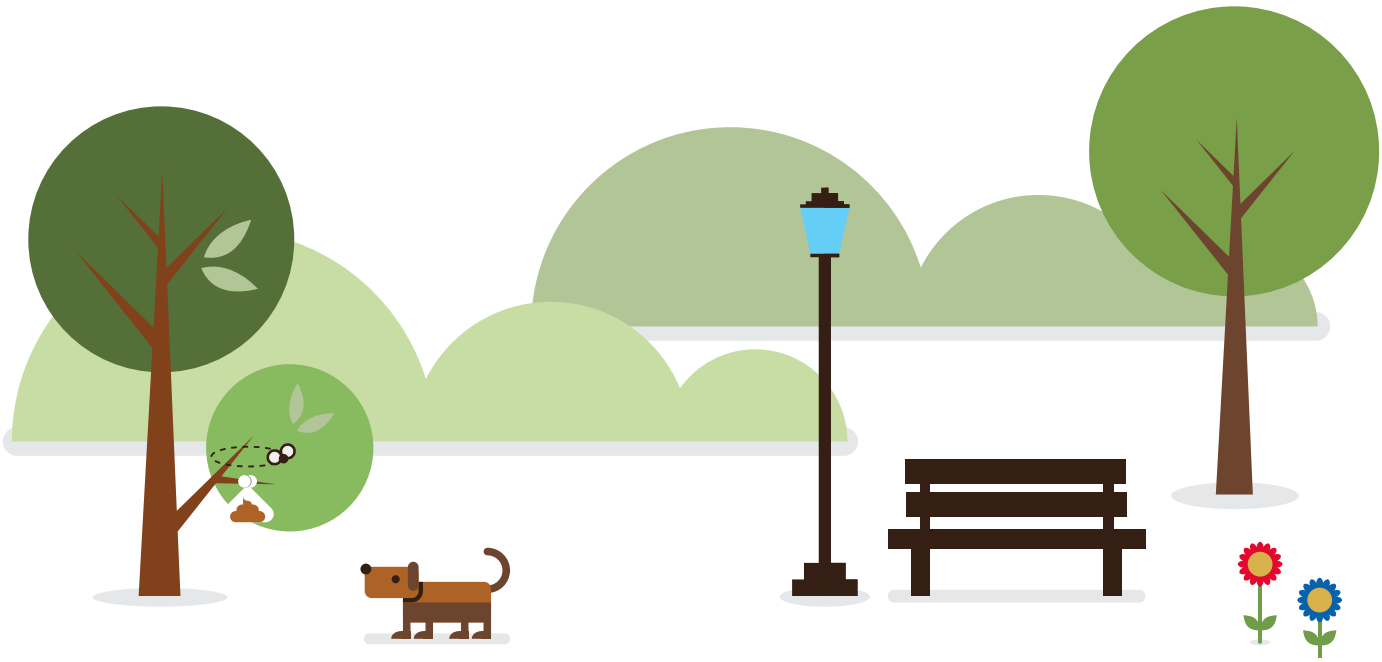


Figure 14: Percentage of sites affected by dog fouling and bagged dog faeces over time



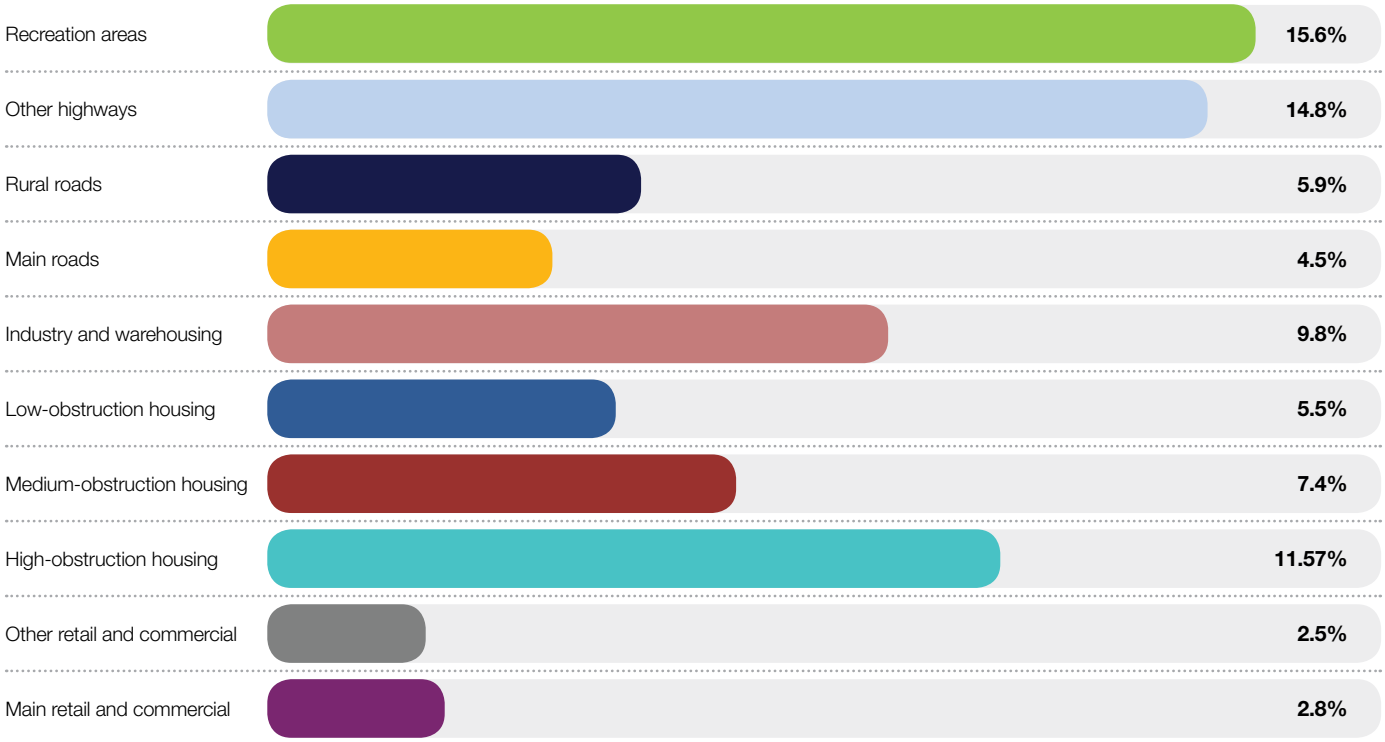
3.1.3. Dog fouling

Dog fouling is one of the environmental quality issues that is of most concern to the public[20], with more than five million dogs in England producing nearly 600,000 tonnes of waste each year[21]. However, although it is of high concern to people, it is found on a relatively low number of sites.



20. View from the Street, Keep Britain Tidy (2012)
21. www.streetkleen.co.uk

Figure 15: Percentage of sites affected by dog fouling, by land use, in 2013/14



Over the past three years, the number of individual instances of dog fouling on survey sites has been recorded. Results show that the average number is decreasing, along with the proportion of sites featuring multiple instances of dog faeces.

Since the inception of LEQSE, dog fouling has decreased. This is evidenced in figure 14, which shows that the average proportion of sites with dog faeces present has been under 10% since 2004/05. Bagged dog faeces is also of particular concern to the public and has been recorded in this survey since 2010/11. The levels, however, are comparatively low, with fewer than 2% of sites recording any instances of bagged dog faeces. Despite this low figure, there has been a slight increase in its presence over the past three surveys.

Although the number of sites with dog fouling is relatively low overall, there are some land uses that suffer more than others from dog fouling. In particular, these are recreation areas and other highways. These land uses have been identified in previous surveys and Keep Britain Tidy has carried out research to understand the behaviours in these areas. The research indicated that, particularly in other highways which tend to be unlit paths, people feel they are not being watched and so are more likely to not pick up after their dogs. In partnership with 17 local authorities across 120 dog-fouling hot-spot sites, we trialled innovative glow-in-the-dark ‘eyes’ posters, simulating someone watching the dog owners. Overall, the experiment showed a 46% reduction in dog fouling incidents in the trial areas.

Litter types linked to land use

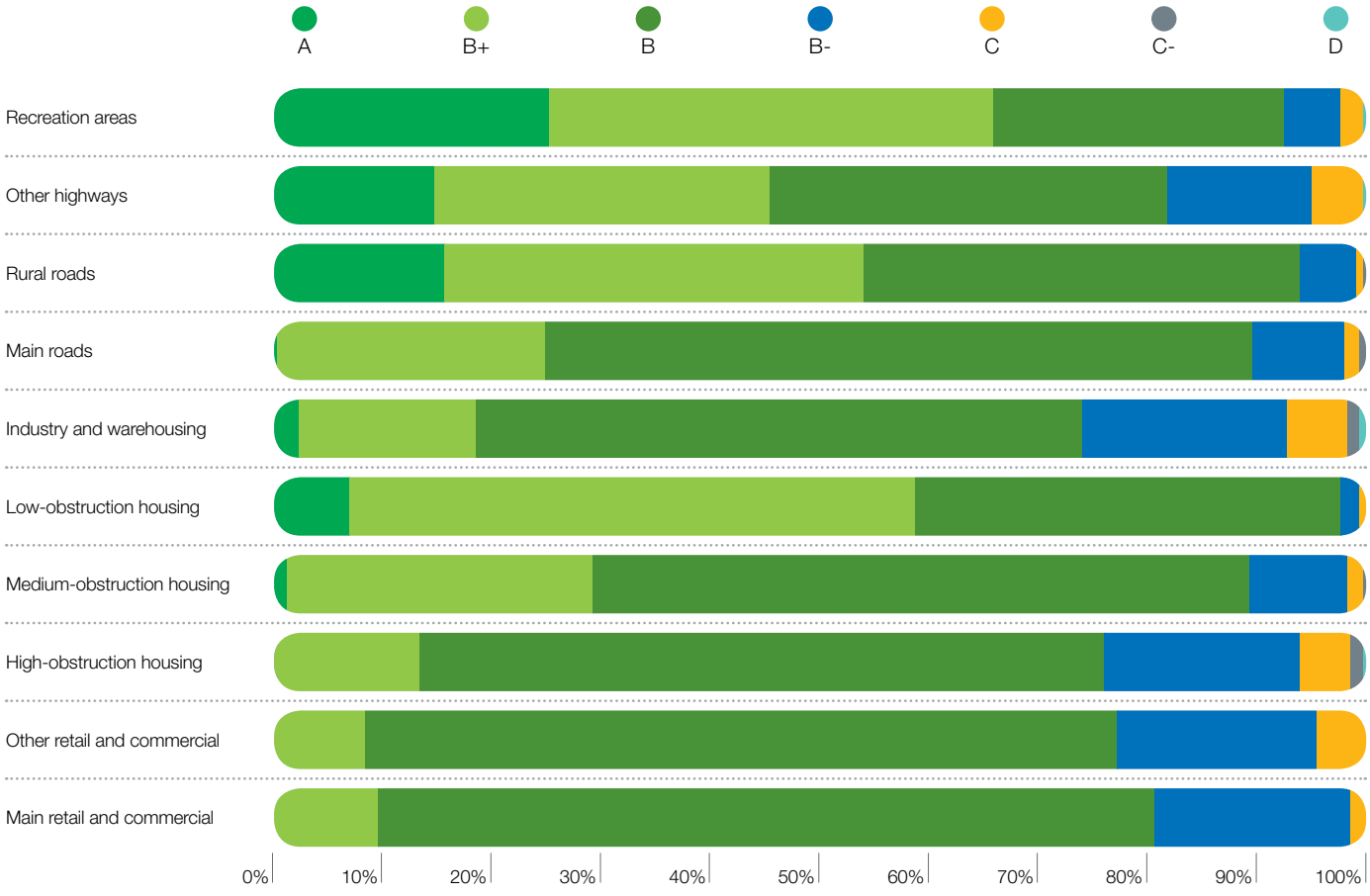
The grade distribution varies quite heavily for litter across different land uses. In general, densely populated busy areas performed less well and did not achieve 'A' grades for litter, whereas the more open, rural spaces performed much better.

While the average grade in retail areas is comfortably a 'B' grade, the average grade improves to a 'B+' grade in low-obstruction housing and recreation areas. Around a quarter of recreation areas received an 'A' grade for litter, indicating that they are very well managed and that people using the space are using the bins provided or are taking rubbish home with them.

The proportion of failing sites is very low in low-obstruction housing areas, rural roads and recreation areas. Medium-obstruction housing and main roads also fared well, with sub-standard sites only accounting for around 10% of the total number of locations surveyed.

In contrast, industry and warehousing recorded the highest proportion of sub-standard grades, with a quarter of sites scoring below an acceptable standard for litter. High-obstruction housing and other retail and commercial areas also recorded failure rates above 20%.

Figure 16: Litter grade, by land use, in 2013/14



4

Service-related results

Detritus, weeds, leaf fall and staining are very useful indicators of the presence (or absence) and quality of cleansing activity.

Detritus consists of mud, soil, grit, dust, gravel, small stones and old leaf or blossom fall that has broken down and fragmented, so it is no longer recognisable as such. Plastic and glass can also form detritus when they break down to very fine pieces. If not swept away regularly, accumulated detritus can encourage weeds to grow, damaging road and paving surfaces, trapping litter and leading to a rapid deterioration of the environmental standards of an area.

4.1. Trends for detritus, staining, weed growth and recent leaf and blossom fall over time

Figure 17: Average and predicted grade for detritus, weed growth, recent leaf and blossom fall and staining over time

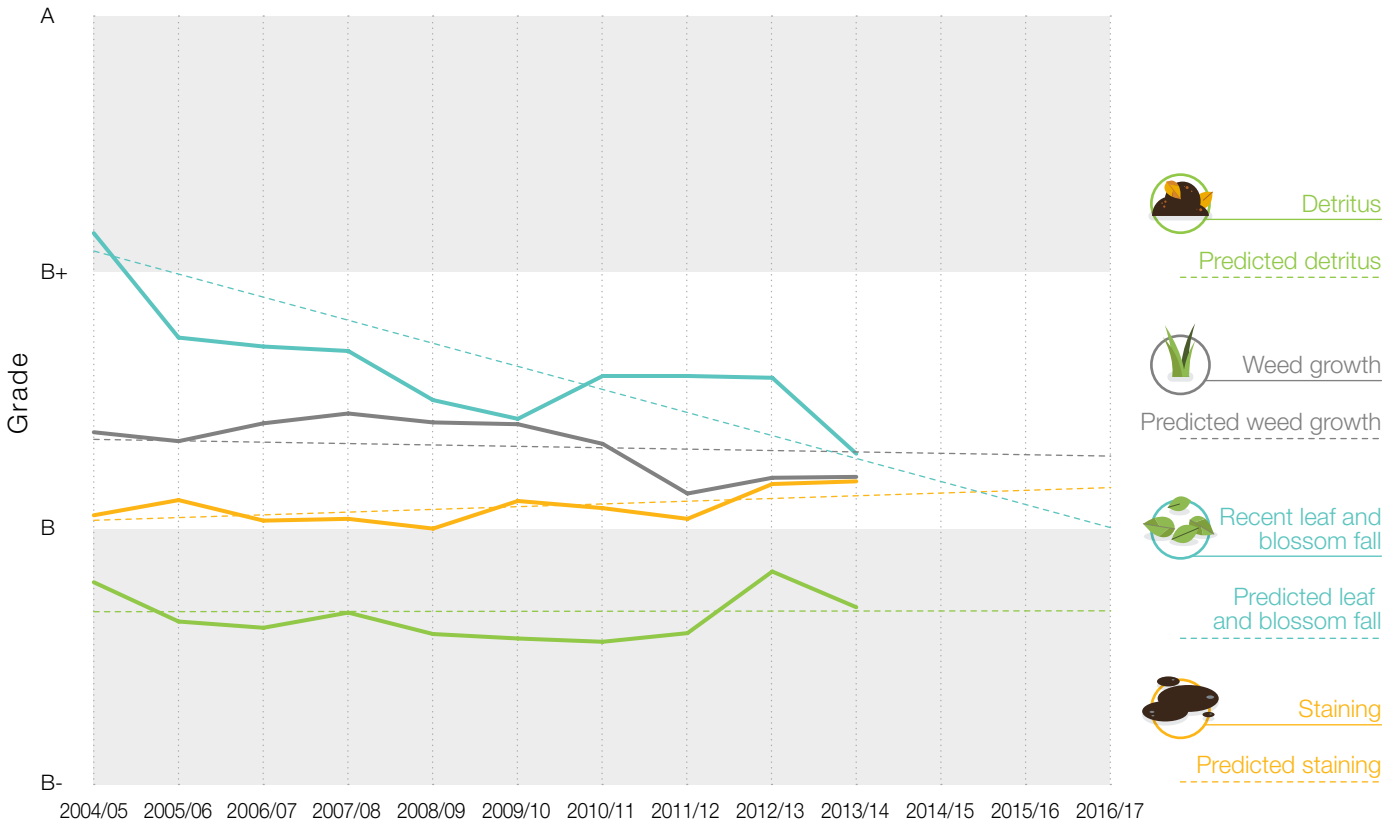
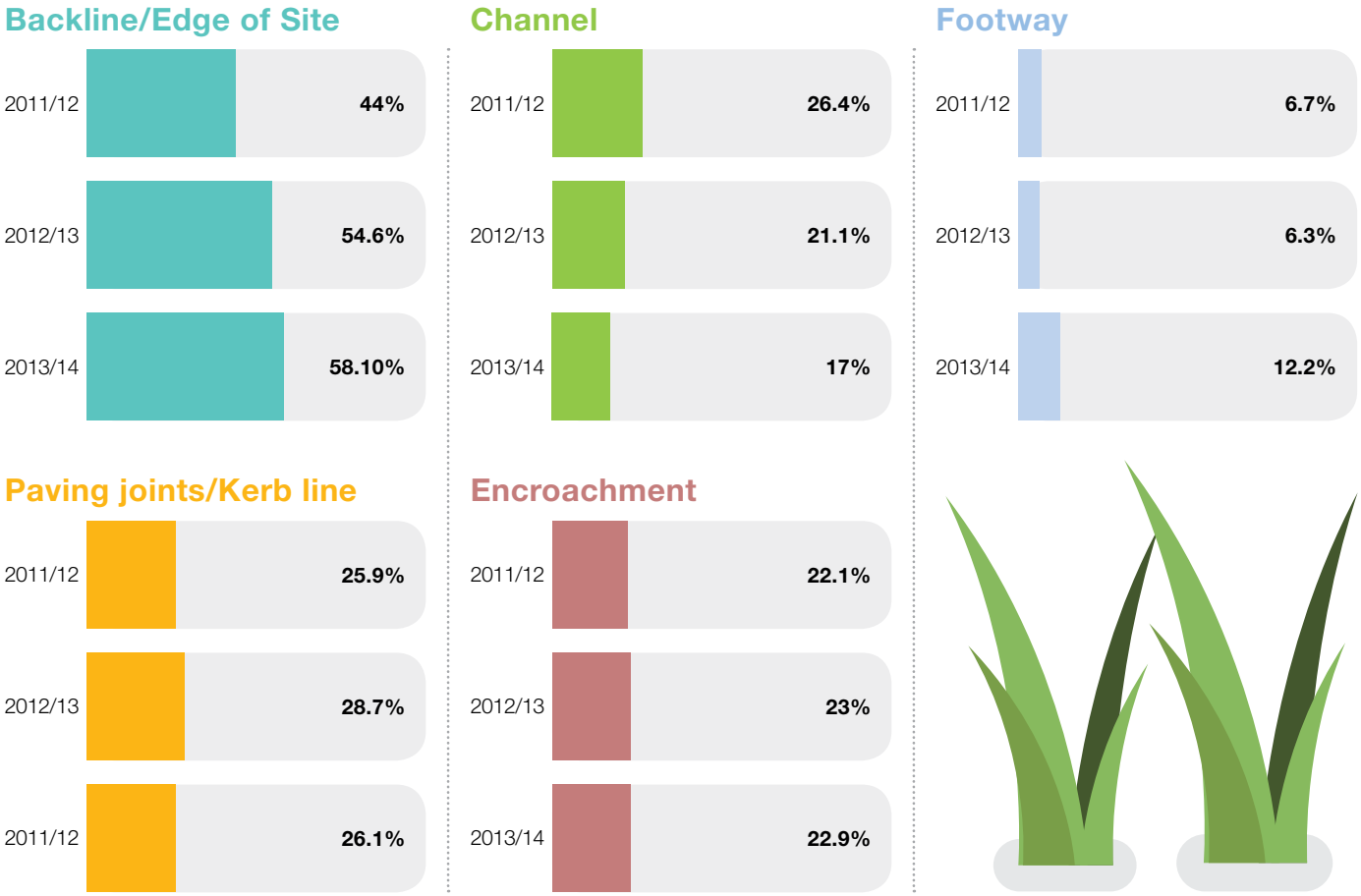


Figure 17 shows that the recent leaf and blossom fall grade is worsening over time.

Detritus is consistently the issue with the poorest standard and this has been the case since monitoring began.

Figure 18: Percentage of sites with location of weed growth over time



4.2. Seasonal Patterns

Leaf and blossom fall is, by nature, seasonal. Due to the trend of declining standards for this element, it is important that land managers adjust their cleansing regimes to account for the variations.

Weed growth

The 2013/14 survey has shown that weeds are predominantly found along the backline or edge of sites, e.g. against walls, fences or the edges of buildings.

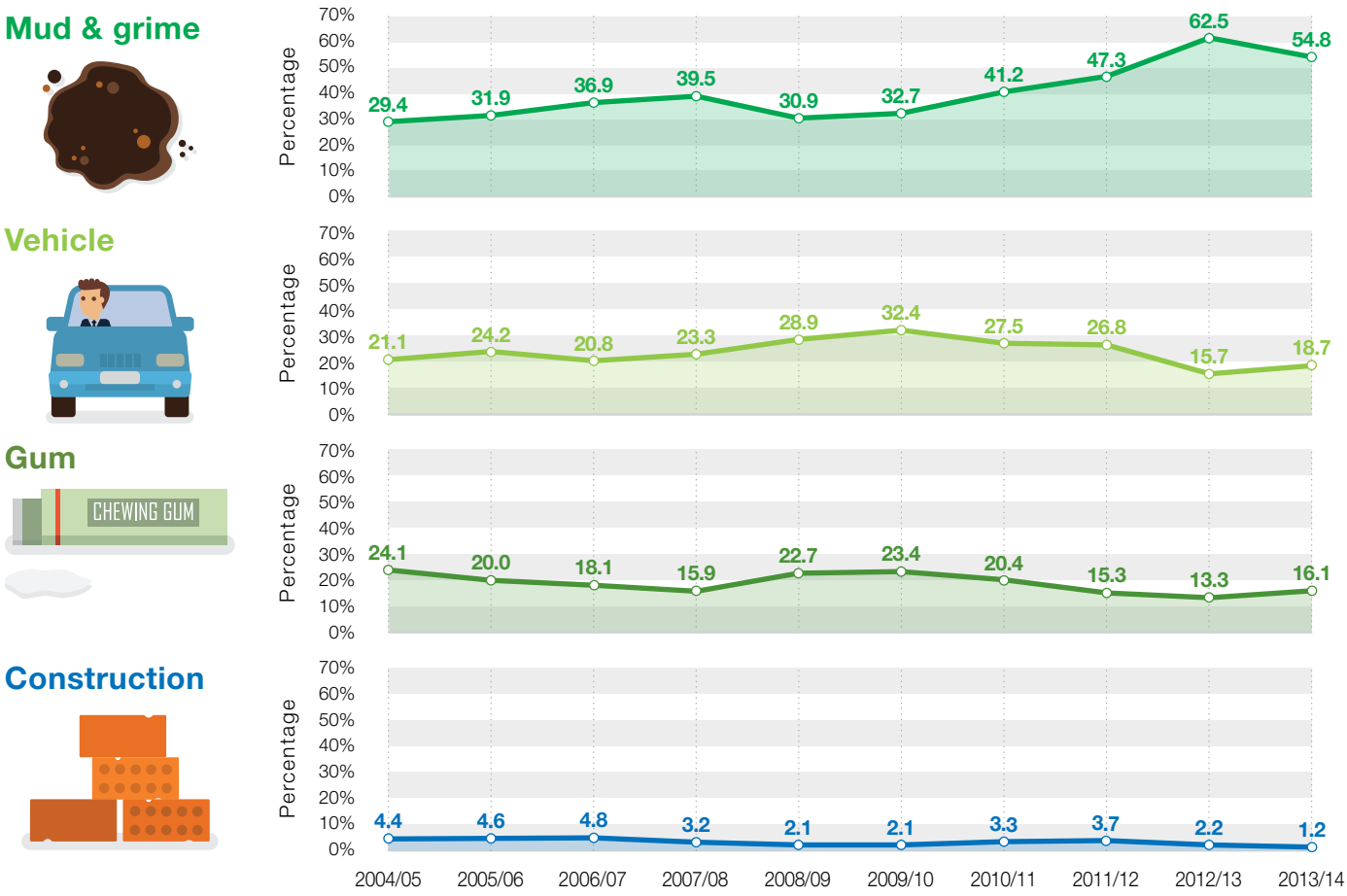
The second most common location is in paving joints/ kerb line, with just over a quarter of sites noticeably affected. This type of weed growth suggests a lack of sweeping as the detritus has been allowed to accumulate to the extent that it is supporting weed growth.

Cracks in the footway and gaps in paving joints may also be a result of reduced highway maintenance budgets. However, effective pavement maintenance can reduce the need to apply herbicides (pesticides) to prevent weed growth, which can save costs in the long run.

The UK has a policy of encouraging integrated weed management in all amenity situations. Government research[22] has shown that the design of footpaths has a strong bearing on the likelihood of weeds appearing. Effective weed management combined with other mechanical control, such as brushing, can help minimise the use of herbicides on pavements and road gullies. It is important that weeds are managed effectively, as they can cause damage to the pavement and become a litter trap if they are allowed to grow out of control.

22. Defra's 5yr research project (PS2802) is looking at integrated approaches in amenity weed control on hard surfaces (roads, footpaths, etc.). This will provide practical information on the applicability and costs of weed control methods (chemical and non-chemical) which will be of use to contractors and amenity managers, such as local authorities, in ensuring both the sustainable use of pesticides and acceptable vegetation management. Further information can be found at: www.emr.ac.uk/projects/development-zero-minimal-herbicide-regimes-controlling-weeds-hard-surfaces-determining-emissions/

Figure 19: Percentage of sites affected by each staining type, over time



4.3. Detritus

Detritus remained the indicator with the lowest standards in the survey, slipping to an average grade of 'B-'.This is a very clear "warning" sign that it's close to becoming a national problem and must be addressed as detritus impacts on the appearance of a street. A street can be totally litter-free but, if detritus is present, it can still look dirty.

In 2013/14, the parts of sites most affected by detritus were the channel area, where the carriageway meets the kerb, and the edge of the sites. Both of these areas were considered as being in the top two most affected locations on around 50% of all sites surveyed. The footway was also one of the most affected locations in just under 30% of sites, and the carriageway in just over a quarter of all sites surveyed.

The slight decline in standard in 2013/14, coupled with the build-up of detritus in the channel and edge of site areas, indicates that street cleansing is not effective enough in these areas.

4.4. Staining

The most common forms of staining are mud and grime, vehicle (including oil spillages), food and drink, chewing gum and staining from construction works. The type of land use will have a considerable impact on the amount and type of staining present.

Figure 19 uses information that estimates the proportion of each survey location affected by each staining type. It indicates that mud and grime has become the greatest cause of staining over the past five years; this form of staining is commonly found across England, having been recorded on 91% of sites.

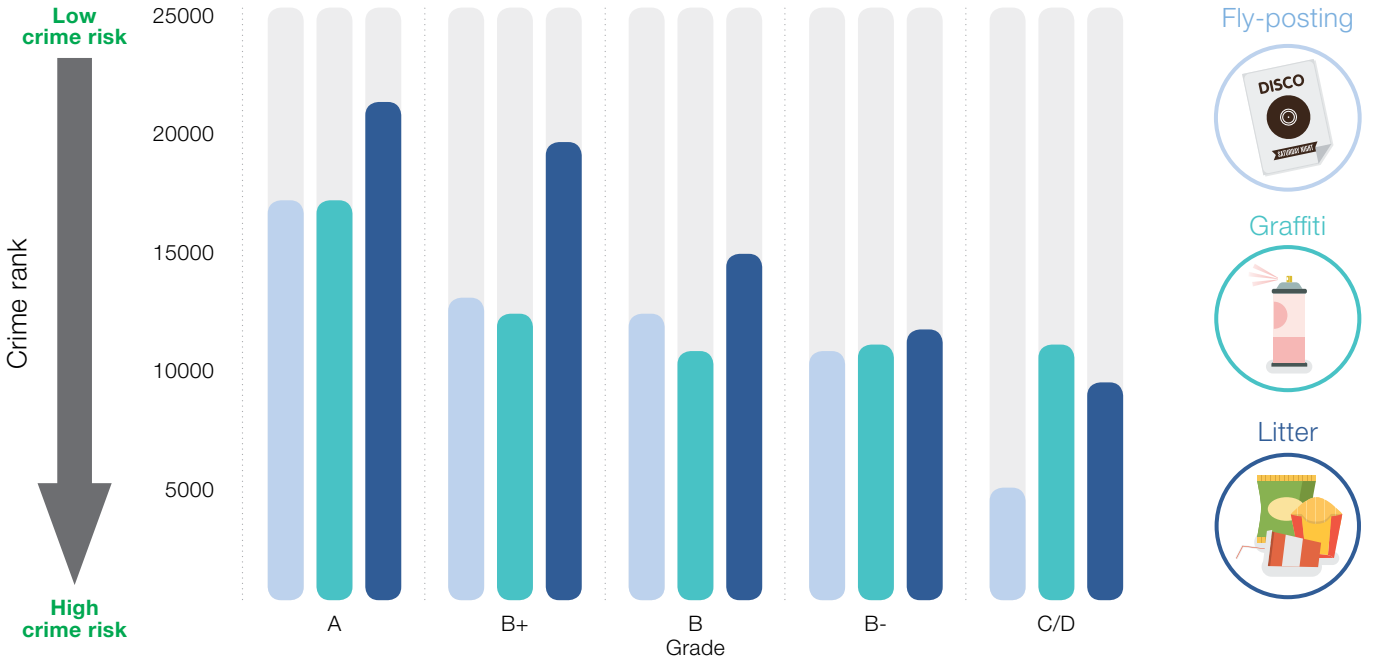
Although gum staining is a more high-profile issue, it is not seen as affecting as many sites as mud and grime, or indeed vehicle staining. This does not mean it is not as much of a problem for land managers though, because chewing gum is very costly to remove and was still seen on 62% of sites in 2013/14. Land use does play a part in gum staining, as it is most prevalent in areas of higher footfall, such as main retail and commercial areas, other retail and commercial areas and high-obstruction housing areas.

5

Local environmental quality linked to crime

5.1. Litter, graffiti and fly-posting

Figure 20: Crime linked to fly-posting and graffiti in 2013/14



Two of the main features of the ONS's Indices of Multiple Deprivation (IMD) are that it monitors how much unemployment there is in an area and how likely you are to be the victim of crime. Although littering, graffiti and fly-posting are criminal acts, this data is testing whether any link can be suggested between the occurrence of these environmental crimes and more serious crimes, such as theft, burglary and violence.

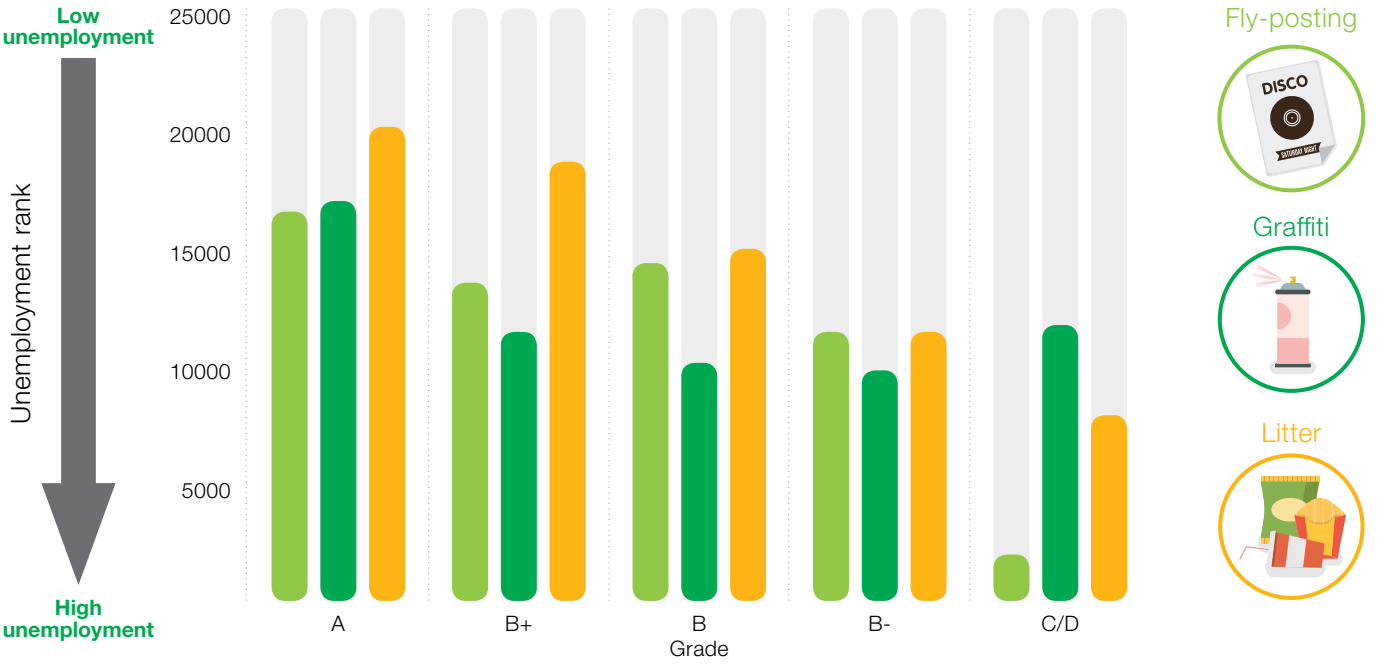
Comparing this data with LEQSE, sites graded 'A' for litter, graffiti and fly-posting are also those least at risk from crime; these are sites where no litter, graffiti or fly-posting is present.

Of the three elements, litter shows the most pronounced correlation with increasing crime risk as levels of litter also increase (and cleanliness standards decline).

Figure 20 shows that the overall presence of crime is far greater on streets where litter, graffiti and fly-posting are present compared to those without these issues.

The volumes of litter and fly-posting present do appear to be indicators of deprivation and crime risk. With every grade dropped for litter and fly-posting the risk of crime increases. This was especially true when a site received a 'C' or 'D' grade for fly-posting, as crime risk was much higher in these areas.

Figure 21: Unemployment linked to fly-posting and graffiti in 2013/14



Litter shows a link between a decline in standard and a decline in employment levels, as there is a clear trend from high rates of employment on 'A' grade sites to the lowest employment levels in 'C/D' grade sites.

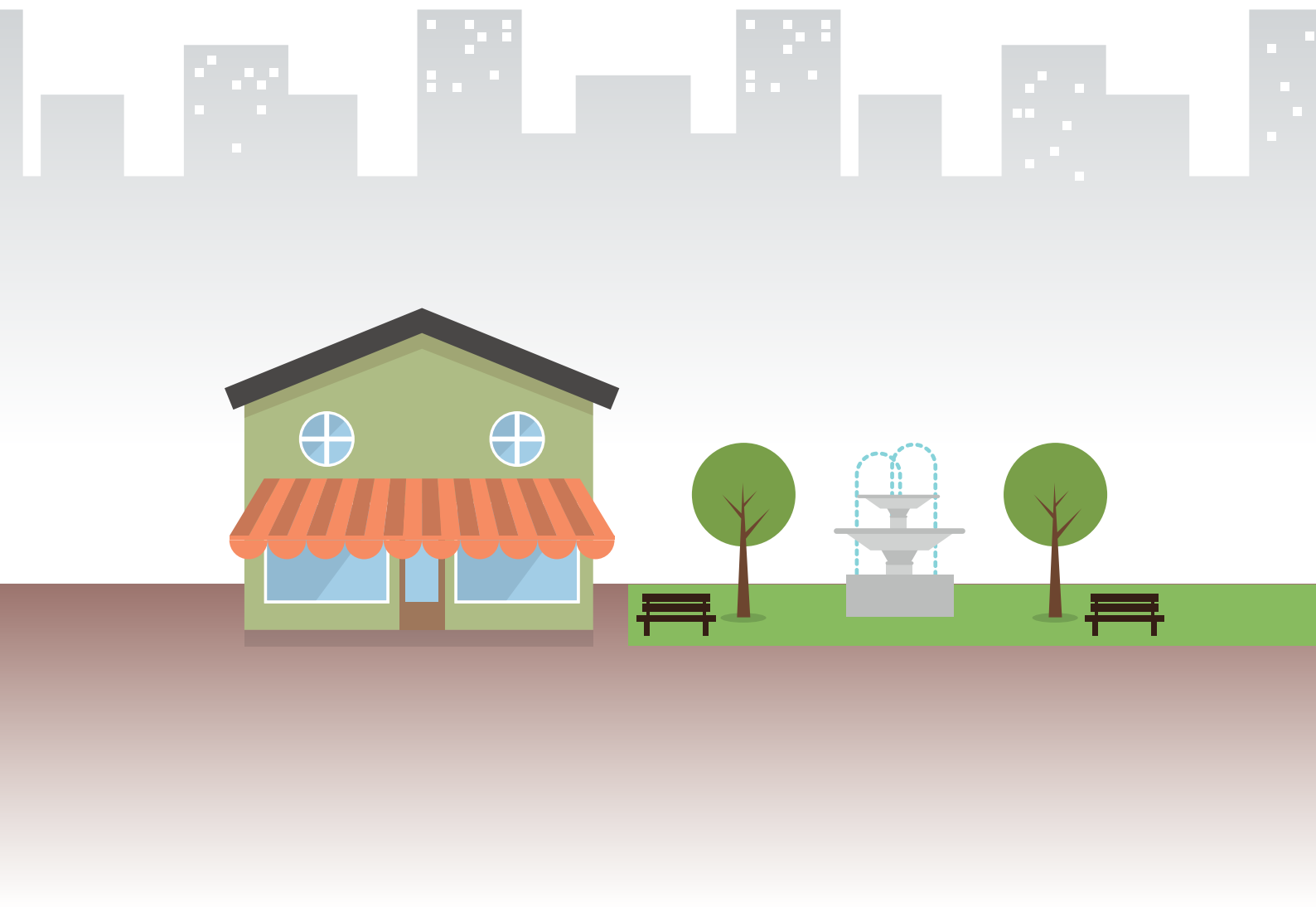
Fly-posting also saw a distinct pattern, albeit with a slight anomaly for sites graded 'B+'. Sites with no fly-posting ('A' grade) saw the highest levels of employment, whereas sites with a lot of fly-posting ('C/D') had the lowest levels of employment by some margin.

Although sites graded 'A' for graffiti have the highest rates of employment, sites with the most graffiti ('C/D' grade sites) correlate with the second highest rate of employment. In contrast, sites which achieved 'B' and 'B-' grades were the sites where employment levels were lowest. This suggests there is not a link between graffiti levels and employment rates.

Further research is required to understand the links suggested in this data and to test the correlation between high levels of litter and fly-posting and a greater risk of crime and unemployment.

6 Conclusion

Overall, there is a positive picture of improvement since LEQSE began. The vast majority of sites across England have acceptable standards of local environmental quality. This is an excellent achievement, particularly in light of the budget cuts that local authorities have been faced with in recent years. However, it is vital that we do not rest on this. As times continue to be challenging financially and resources continue to be stretched, we must work together to ensure that standards do not drop and that the key issues highlighted in this report are tackled, especially in areas of higher deprivation. By working together we can ensure that people across the country can live and work in clean and safe environments of which they can be proud.



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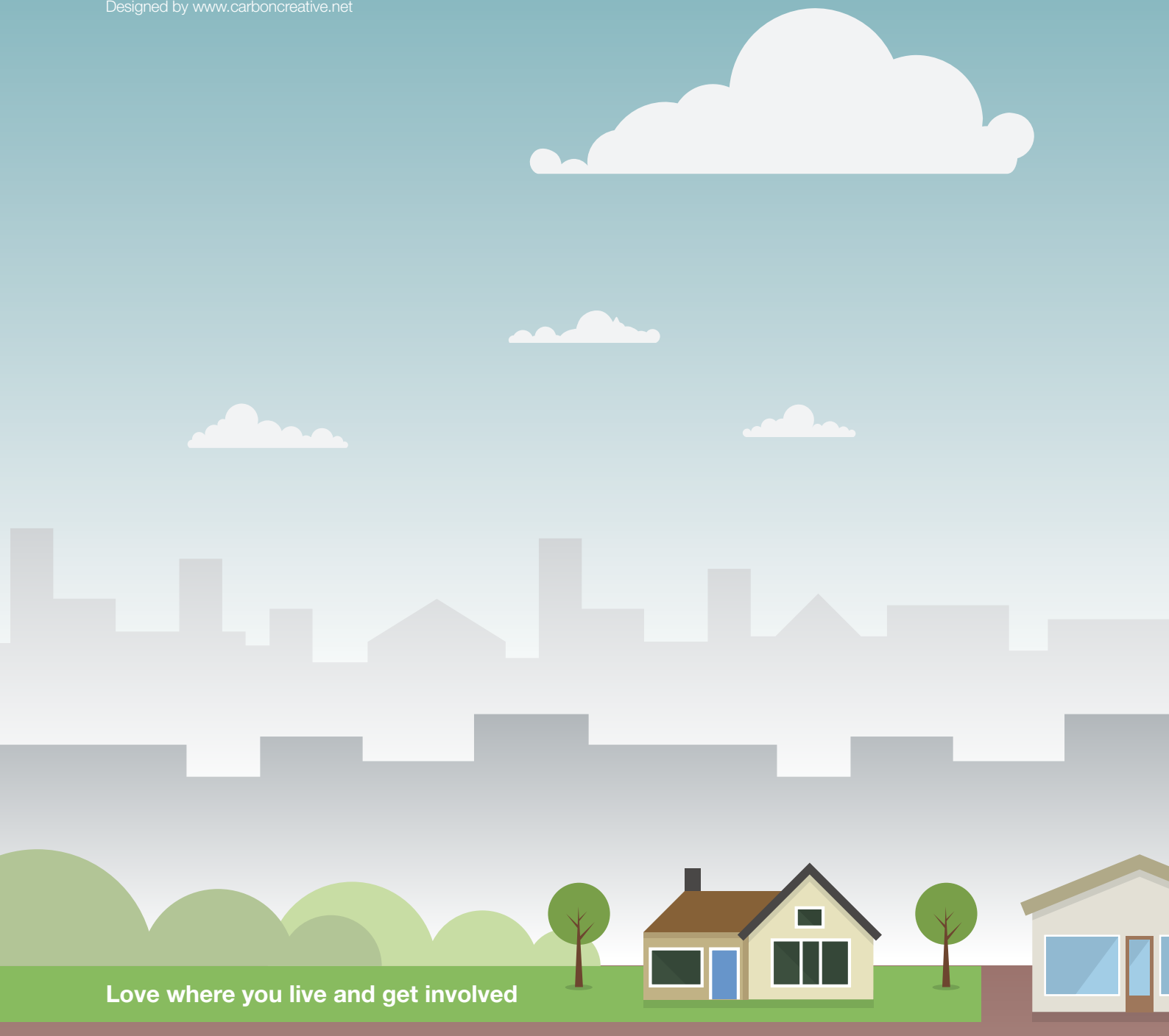

Love where you live and get involved

Keep Britain Tidy

Elizabeth House
The Pier
Wigan WN3 4EX

T 01942 612621

Development House
56-64 Leonard Street
London EC2A 4LT

T 020 7549 0300

enquiries@keepbritaintidy.org
www.keepbritaintidy.org

facebook.com/keepbritaintidy
@keepbritaintidy