



Stakeholder survey:

Actions and attitudes in relation to anti-litter activity

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Zero Waste Scotland commissioned this report for information purposes, and the content reflects the data and feedback collected, and the interpretation of the authors. It does not necessarily reflect the views of Zero Waste Scotland or Scottish Government.

1 Introduction

Aim

This study was commissioned by Zero Waste Scotland to understand stakeholder actions and views of anti-litter and anti-flytipping measures in Scotland, including in the context of the National Litter Strategy. The survey focuses on:

- Actions undertaken;
- Impact; and
- Contribution of (primarily) the Strategy and (secondarily) Zero Waste Scotland to these outcomes, to the extent this is possible at this early stage.

Background

Litter and flytipping have had a consistently prominent position on the Scottish political agenda in recent years. The Scottish Government consulted on a draft litter strategy in 2013 and published the final version in June 2014. A strategy document regarding marine litter followed in August 2014.

The National Litter Strategy supports broader work to create the conditions for a more resource efficient and circular economy as set out in the Zero Waste Plan (2010), Safeguarding Scotland's Resources (2013), and, subsequently, Making Things Last (2016). Zero Waste Scotland is a key organisation in delivery of some strategy components.

The three main themes under which interventions advocated by the National Litter Strategy are classified are:

- Information - improved sources, consistency and nature of messages;
- Infrastructure - facilities and services to reduce litter and promote recycling; and
- Enforcement - strengthening the deterrent effect of enforcement.

There are three broad elements of the strategy's approach:

- Prevention;
- People first; and
- Accountability.

With respect to many of the litter strategy's proposed actions, the support of stakeholders is an expectation, rather than a legal obligation, hence the relevance of survey work to understand the extent to which relevant stakeholders are acting, why this is, and help inform any further steps that could be taken to encourage action.

The strategy also states that the Scottish Government will work with other partners to establish effective approaches to measurement – and this applies both to litter itself and 'key indicators to measure progress.' Understanding actions taken in light of the strategy, and associated metrics, contributes to this effort.

This study is intended to facilitate an understanding of stakeholder action to date, and the influence of the strategy in this. It will also inform thinking about the future of the strategy, including reporting and measurement.

- The impact of actions to address existing challenges;
- Baselines to support measurement; and
- Key indicators to measure progress.

To this end, as well as measuring stakeholder actions, impacts, and motivations to date, the responses here may also provide a comparison point for any future, similar, studies.

2 Methodology

To assess the actions undertaken by litter stakeholders in Scotland, three groups of stakeholders were defined as follows, covering the broad range of delivery partners indicated in the National Litter Strategy:

Group 1 – litter managers. These organisations have statutory obligations to clear litter from public land they bear responsibility for. They are all duty bodies. The group was comprised of:

- The 32 local authorities in Scotland
- The 3 road operating companies: BEAR Scotland, Amey, Scotland TranServ
- 3 public land managers: Scottish Canals, Network Rail, Forestry Commission

Group 2 – service/product providers. This is a mixed group of organisations that have a range of roles regarding litter – some have statutory obligations to clear litter from land within their remit (these are duty bodies and statutory bodies); some provide services and sell products which end up being littered (these are commercial organisations including transport operators, or their trade organisations). These commercial organisations undertake clearance of the land within their remit and are known to undertake litter prevention activities, even though they are not obliged to do so. Rather than a comprehensive or representative survey, selection was purposive, with a focus on organisations thought to have shown an interest in the subject during the time period targeted by the survey.

The group was comprised of:

- National parks and public landowners
- Educational institutions
- Port and airport operators
- Transport operators
- Supermarkets
- Major fast food and coffee shop chains
- A drink manufacturer
- A water company

Group 3 – In this group, a variety of individual organisations were included that are stakeholders – whether they are litter campaigners, or have to deal with litter in some specific contexts, or are affected by litter in other ways. Membership and representative bodies do not typically generate products that are commonly littered, nor do they have cleansing responsibilities for litter in themselves, though they may in some cases represent organisations that do. Again, selection was purposive. The group was comprised of:

- Action on Smoking and Health (ASH)
- Association for the Protection of Rural Scotland
- National Farmers Union Scotland
- Scottish Land & Estates Ltd.
- Keep Scotland Beautiful
- Marine Conservation Society
- Chewing gum action group
- Scottish Retail Consortium
- Scottish Fire and Rescue Service
- Scottish Waterways Trust
- Crown Office & Procurator Fiscal Service (COPFS)
- Police Scotland
- SEPA

A survey was designed that covered actions under the three National Litter Strategy themes of information, infrastructure, and enforcement, and their perceived impacts. This was sent out to stakeholders in Group 1 and Group 2 as an online survey. There were a few questions, for example regarding enforcement powers, where questions were relevant to only some stakeholders. In this case question routing was used in the survey, meaning those questions were displayed only to the relevant subset of stakeholders.

For Group 3, because of the diverse and more unique nature of the stakeholders, questions from the main survey template were chosen as applicable to each stakeholder surveyed. The stakeholders were then surveyed by telephone interview, allowing for a more flexible question and response format.

3 Group 1 Sub-Group: Local Authorities

3.1 Introduction

Local authorities in Scotland serve as principal litter authorities with a duty to keep the land under their control free of litter. As such, they represent an important group of stakeholders in relation to the National Litter Strategy. From a survey perspective, notwithstanding their contextual and operational differences, they also represent an obvious sub-set of respondents sharing key commonalities. Of the 32 local authorities in Scotland, 22 responded to the survey with some degree of information. Of those which responded, 15 provided complete responses while five provided partially complete responses, and two provided very limited responses, ultimately categorised as incomplete. It should be noted that, even of those local authorities who provided complete answers, not all responded to every question, as not every question was applicable to every authority. Also, in some cases respondents may not have had all the necessary information easily to hand or the time to find it.

Half of the responses came from local authorities with whom Zero Waste Scotland has relatively close links. The sample therefore represents both authorities of this type and those with whom Zero Waste Scotland has had less contact. There was a fairly even split between the types of local authority family group represented by the responses, with 27% coming from rural authorities, 41% from mixed urban and rural authorities, and 32% from urban authorities.

3.2 Information

Local authorities were first asked broadly about the types of actions they had taken with regards to the 'information' theme of the National Litter Strategy. For this question, authorities were able to select multiple responses. Clean-ups were the 'information' theme measure most popular with local authorities, with 19 of the 21 who responded reporting undertaking this type of action. This was followed by anti-littering/flytipping campaigns, reported by 15 authorities), and facilitating and promoting reporting of litter/flytipping by the public, reported by 13 authorities. Promoting recycling-on-the-go to combat littering was undertaken by nine authorities, while the development and distribution of materials for educational projects and other targeted interventions at local hotspots were both undertaken by eight authorities.

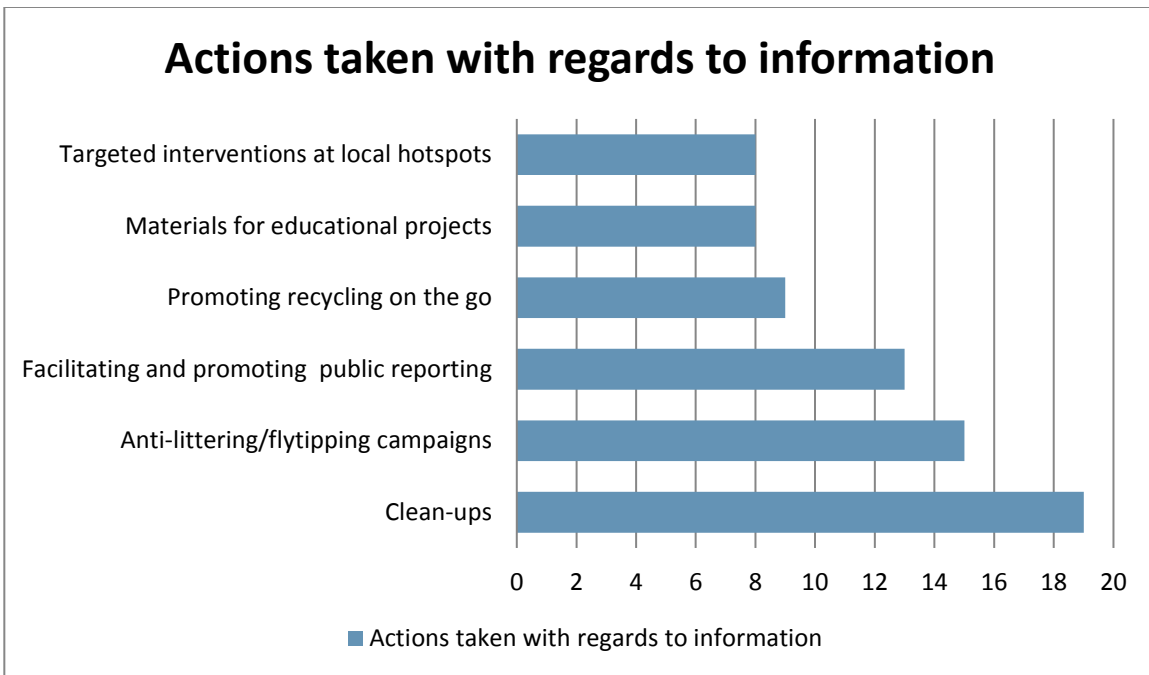


Figure 1: Actions taken with regards to information. Total number of respondents = 21.

Local authorities were asked to describe the information initiatives they have undertaken by way of a free text box. These included:

- ❖ Targeted campaigns (i.e. targeted at either specific types of litter or social groups)
- ❖ Facilitating public reporting of littering/flytipping
- ❖ Anti-littering presentations and campaigns for schools
- ❖ Crew reporting via mobile technology
- ❖ Appointment of education/engagement officers

12 local authorities responded to the question of how the scale of their litter/flytipping initiatives had changed since the introduction of the National Litter Strategy, with regards to information. Of these, nine stated that the level of action had stayed the same, while two said that it had increased a little and one said that it had increased a lot. No local authorities reported a scaling back of information initiatives since the launch of the National Litter Strategy.

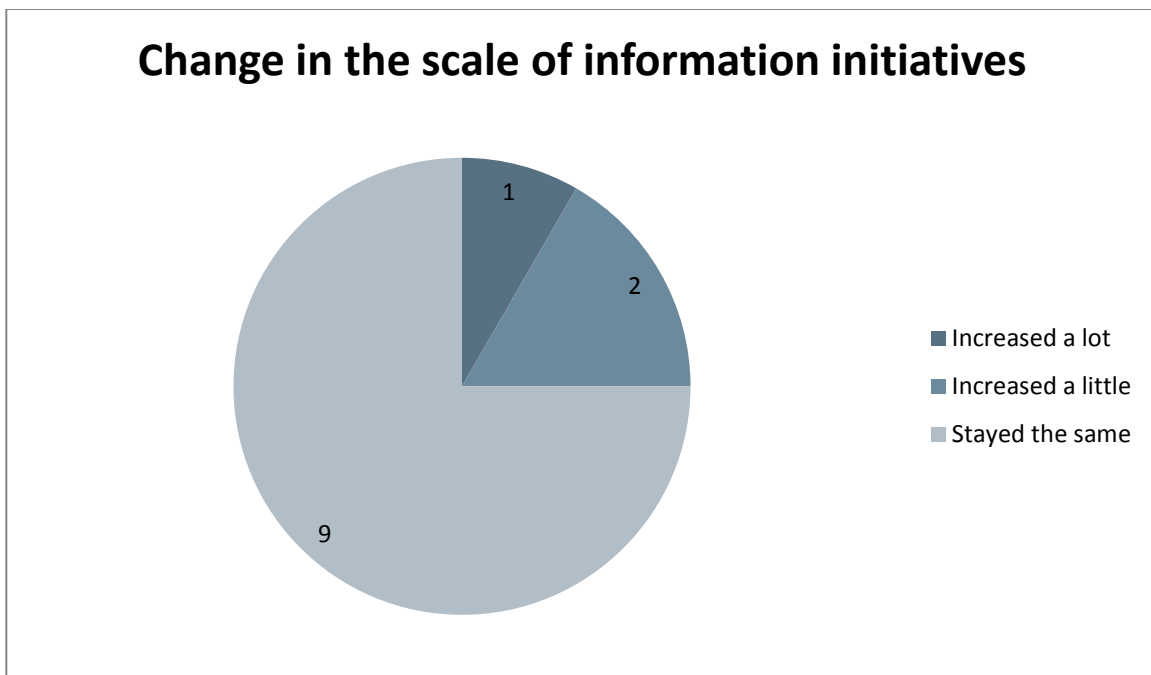


Figure 2: Change in the scale of information initiatives. Total number of respondents = 12.

3.2.1 *Community Action*

21 local authorities responded to the question of whether any of their information initiatives involved an element of community action, 15 in the affirmative and six in the negative. Of the 15 reporting community action, 12 explicitly mentioned clean-ups. Other types of involvement included public reporting on litter/flytipping and community-led action plans.

The level of support offered to clean-ups varied, with three local authorities stating that they provide groups with litter picking equipment, and arranging to collect the picked litter from specified points, and others simply promoting participation.

Eight local authorities provided information on the number of clean-ups organised. Responses ranged widely, from 20 at the lower extreme of the data set, and 170 at the highest. This variation may reflect different local authority sizes and contexts as well as the relative degree of effort they put in to clean-ups. Between them, the eight authorities reported 555 clean-ups in total.

Five local authorities provided information on the number of volunteers recruited for clean-ups. Again, numbers ranged widely, with 100 at the lowest end of the data set and 5775 at the highest. These five local authorities reported a total of 11,660 volunteers recruited.

3.2.2 *Perceived Impact on Litter Levels*

Local authorities were asked about their perceptions of how successful their information actions had been in terms of impacting on litter levels. Nine authorities responded to this question, with three reporting that they thought their actions had been very successful and another three reporting that they thought their actions had been somewhat successful. Two authorities reported that they didn't know, and one authority reported that they thought their information initiatives had had no effect. No authorities reported that they thought their actions had been counterproductive.

Perceptions of the success of information actions in terms of impacting litter levels

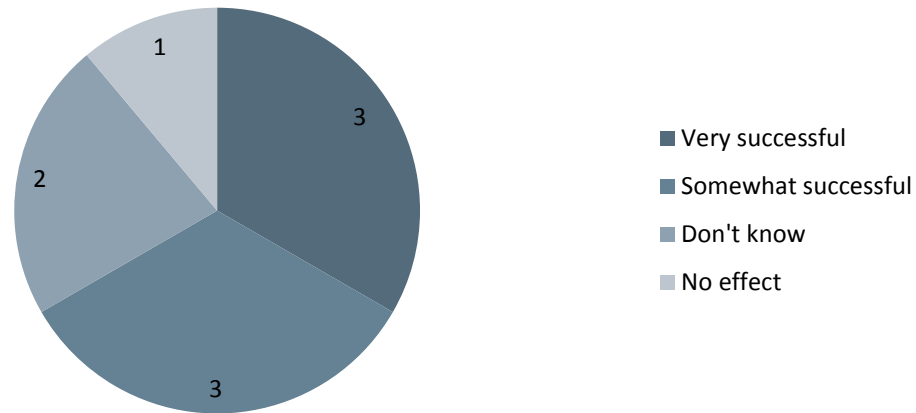


Figure 3: Perceptions of the success of information initiatives in terms of impacting litter levels. Total number of respondents = 9.

Local authorities were also asked how successful they thought their information actions had been in terms of other aims, for example, improved awareness, changed public behaviour, bin usage rates, improved management of litter, and improved coordination of actions. Nine authorities responded to this question, with three reporting that they thought their actions had been very successful and two authorities saying that they thought their actions had been somewhat successful. One authority said they did not know, and two authorities said that the question was not applicable. This is broadly in line with the previous question in proportional terms, and it is the same three authorities who reported a very successful impact on litter levels also reported a very successful impact in terms of other aims. Ten local authorities specified the ways in which they believed their actions had made an impact. Improved awareness was the most reported outcome, with nine authorities mentioning this.

3.3 Infrastructure

Local authorities were first asked broadly about the types of actions they had taken with regards to infrastructure. For this question, authorities were able to select multiple responses. Increasing the number or changing the type of bins in place was the infrastructure measure most popular with local authorities, with 14 of the 17 who responded reporting undertaking this action. This was followed by changes to services, reported by seven authorities; putting in place schemes or incentives to encourage re-use of the kinds of items that are littered or flytipped, reported by six authorities; and lastly, changing existing operating plans/strategies, which was reported by three authorities.

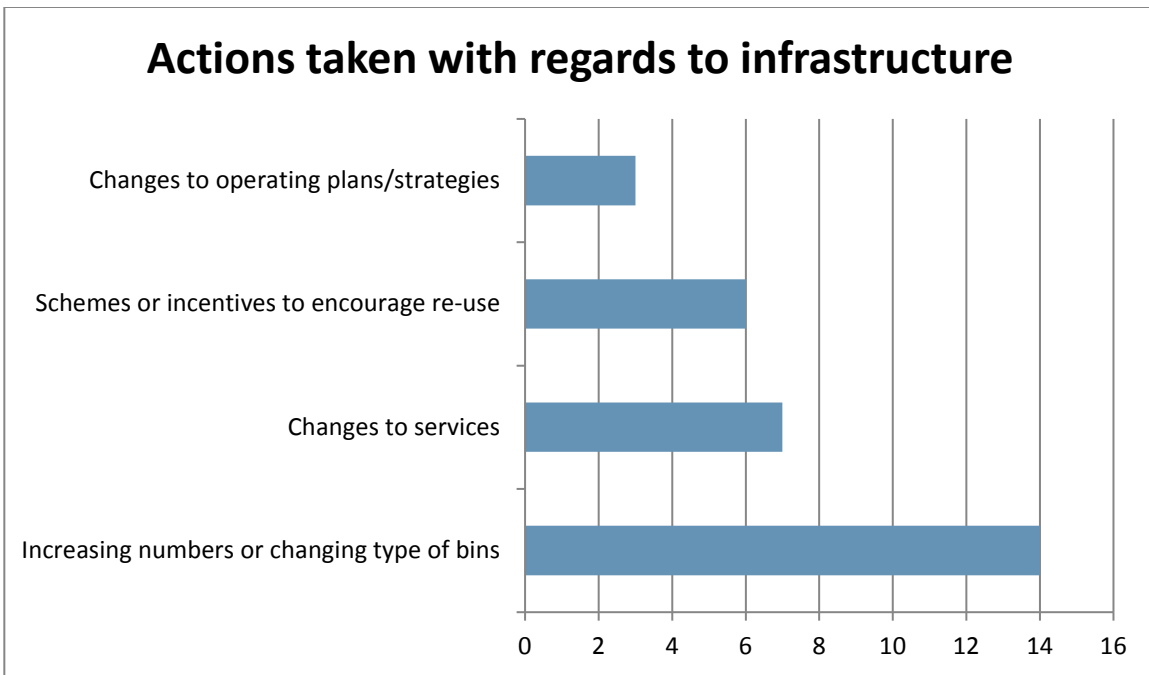


Figure 4: Actions taken with regards to infrastructure. Total number of respondents = 17

Local authorities were asked to describe the infrastructure initiatives they have undertaken by way of a free text box. These included:

- ❖ Reviewing locations and numbers of bins
- ❖ Trials and introduction of bin monitoring technology
- ❖ Adding re-use points to recycling centres
- ❖ Changes to collection services (frequency and materials collected)
- ❖ Redesign of street cleansing services

14 local authorities responded to the question of how the scale of their litter/flytipping initiatives had changed since the introduction of the National Litter Strategy, with regards to infrastructure. Seven reported that the level of action had increased a little, while four reported that it had stayed the same, two that it had decreased a little, and one that it had decreased a lot.

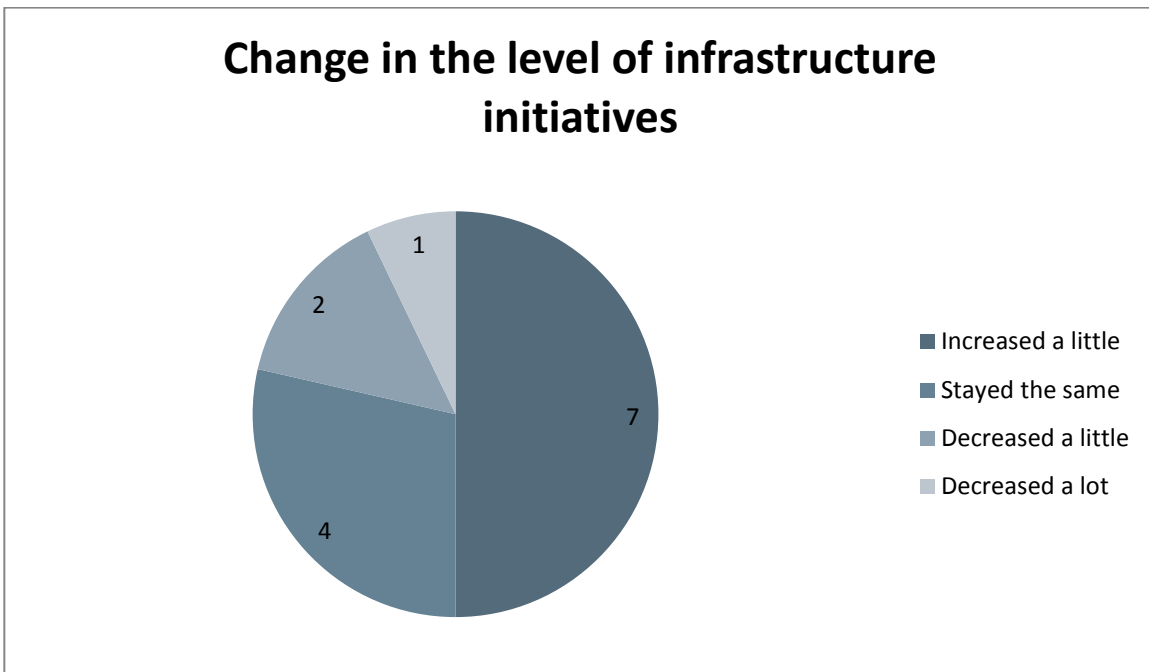


Figure 5: Change in the level of infrastructure initiatives. Total number of respondents = 14.

3.3.1 Provision of Bins

Local authorities were asked to state the number of bins they provide, using a free text box. 14 authorities provided a response, with the numbers given ranging widely from 100 in the lowest case to 3,500 in the highest. The responses are grouped and presented in the chart below in units of bins per 1000 people, for better comparison. The average number of bins provided per 1000 people did not differ greatly between mixed, urban and rural authorities at 10, 10 and 12 respectively (averages of 5, 6 and 3 authorities respectively).

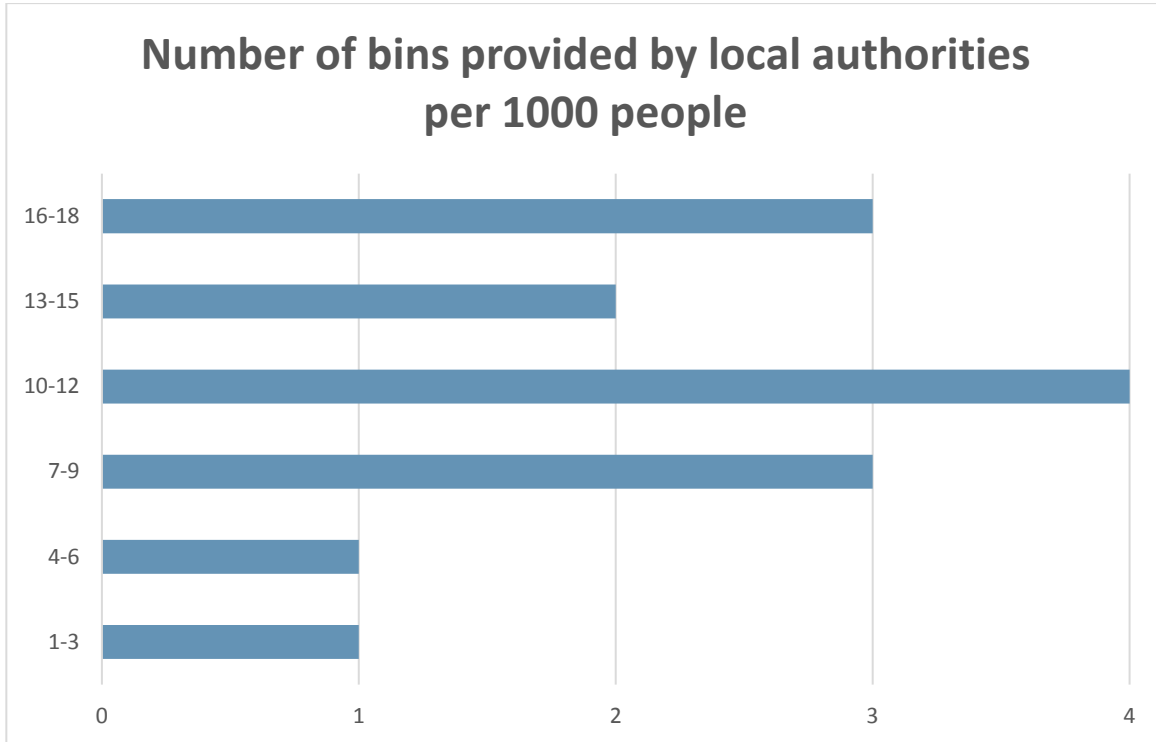


Figure 6: Numbers of bins provided by local authorities. Total number of respondents = 14.

20 local authorities responded to the question of whether the number of bins they provide had changed since the introduction of the National Litter Strategy. Of these, 12 reported that the numbers of bins had increased a little, while four reported that the number has decreased a little. Three reported that the number of bins had stayed the same, while one local authority reported that the number of bins had increased a lot. There was no statistically significant relationship between the numbers of bins provided and changes in the number of bins provided.

Changes in the number of bins provided

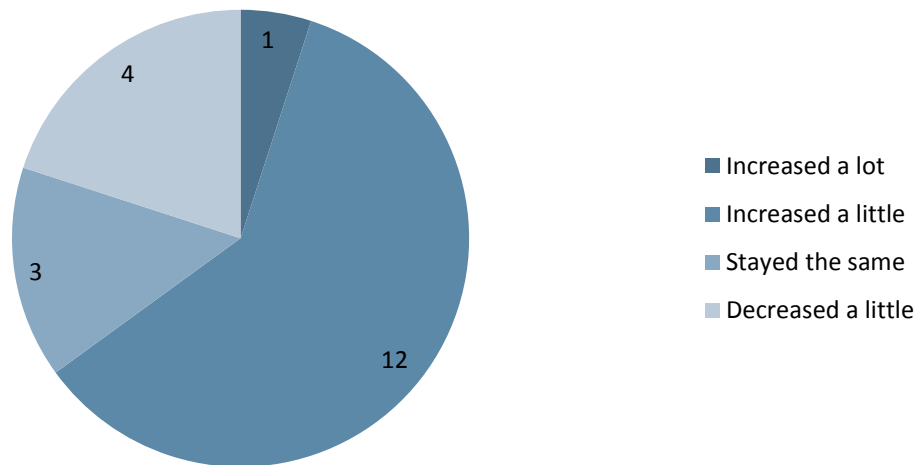


Figure 7: Changes in the number of bins provided. Total number of respondents = 20.

11 local authorities reported providing recycle on the go bins, with the number of these bins provided ranging widely, from one or two at one extreme of the data set and 100 at the other. Of these 10 authorities, five responded that the number of recycle-on-the-go-bins had increased a little since the introduction of the National Litter Strategy, while four reported that it had stayed the same, and two said that it had increased a lot.

3.3.2 Perceived Impact on Litter Levels

Local authorities were asked about their perceptions of how successful their infrastructure actions had been in terms of impacting on litter levels. Seven authorities responded to this question, with five reporting that they thought their actions had been somewhat successful. The remaining two authorities reported that they didn't know. No authorities reported that they thought their actions had been very successful, had had no effect, or were counterproductive.

Perceptions of the success of infrastructure actions in terms of impacting litter levels

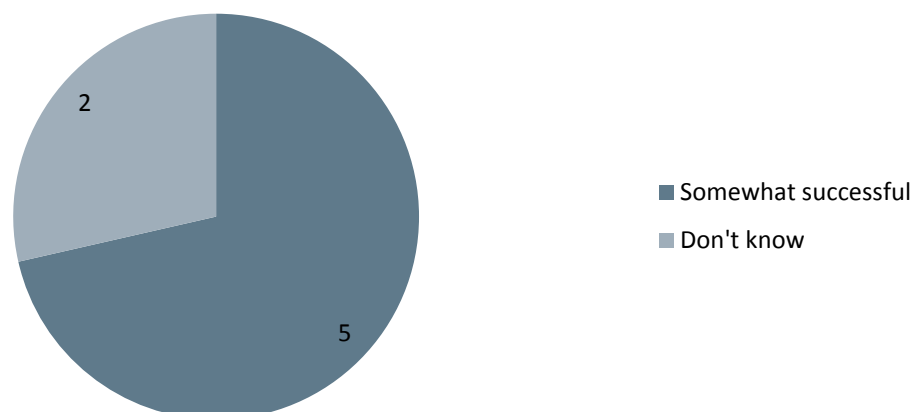


Figure 8: Perceptions of the success of infrastructure actions in terms of impacting litter levels. Total number of respondents = 7.

Local authorities were also asked how successful they thought their infrastructure actions had been in terms of other aims, for example, improved awareness, changed public behaviour, bin usage rates, improved management of litter, and improved co-ordination of actions. Nine authorities responded to this question, with six reporting that they thought their efforts had been somewhat successful. One authority thought that their actions had had no effect, one said they didn't know, and another said the question was not applicable. All of the four authorities who reported a somewhat successful impact on litter levels also reported a somewhat successful impact in terms of other aims. Ten local authorities specified the ways in which they believed their actions had made an impact. Of these, four mentioned the improved management of litter.

3.4 Enforcement

14 local authorities responded to the question of whether or not they had enforcement powers, with 11 answering in the affirmative and three in the negative. The negative responses suggest the question was interpreted as meaning 'are enforcement powers *exercised*', as all local authorities have these powers in legislature.

Local authorities were asked broadly about the types of actions they had taken with regards to enforcement. For this question, authorities were able to select multiple responses. Sending staff on enforcement training was the enforcement measure most popular with local authorities, with nine of the 12 who responded reporting having taken this action. This was followed by seven authorities increasing the amount of time spent on patrol, and then by increasing the number of staff able to carry out enforcement and publicising enforcement incidents and consequences, both of which were reported by five authorities.

Three of those responding reported making more use of other powers (e.g. Street Litter Control Notices, Litter Abatement Orders, licencing conditions involving litter control), and another three reported other enforcement related activities (including removing abandoned cars, flyposting and sandwich boards). One local authority reported setting targets for Fixed Penalty Notice (FPN) payment rates, and another one authority reporting obtaining improved FPN payment rates. None of the local authorities responding reported setting targets for enforcement effort (e.g. the amount of time spent on patrol or number of FPNs issued).

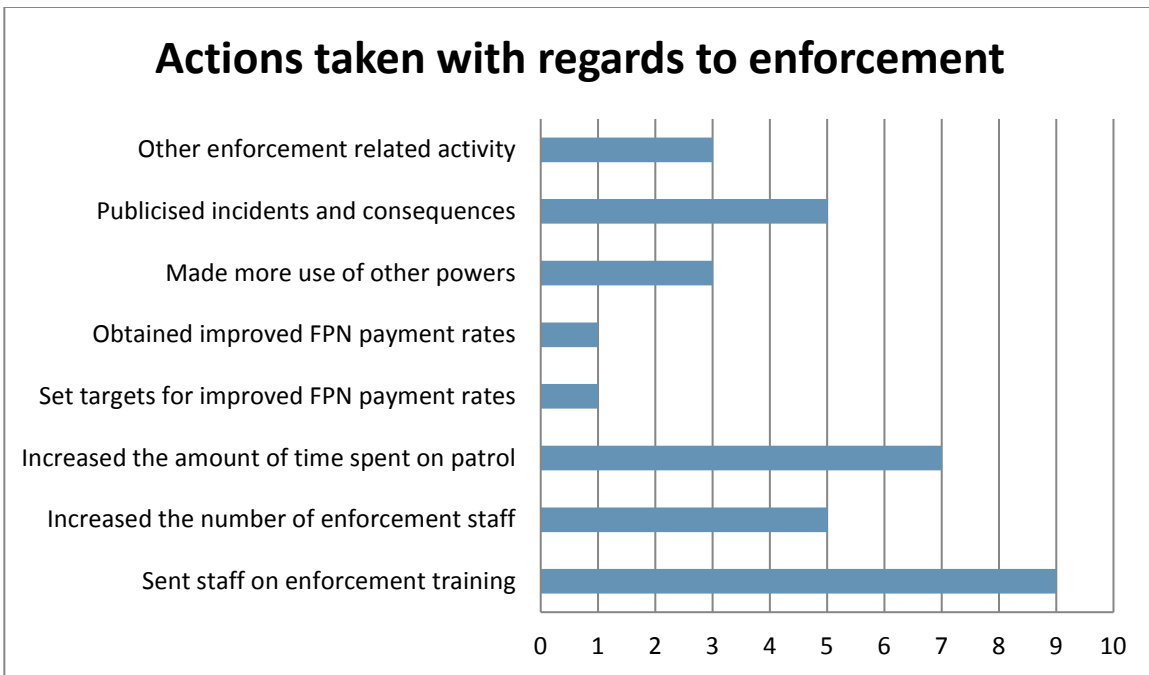


Figure 9: Actions taken with regards to enforcement. Total number of respondents = 12.

3.4.1 Perceived Coordination of Enforcement

16 local authorities responded to the question of how well they thought enforcement was coordinated between the different organisations involved (e.g. enforcement officers, police, courts). Of these, five responded that they perceived coordination to be good, and another five that it was neither good nor bad. Two local authorities thought that enforcement was poorly coordinated, while another two said they did not know. Finally, one local authority found coordination to be very good, while one found it to be very poor.

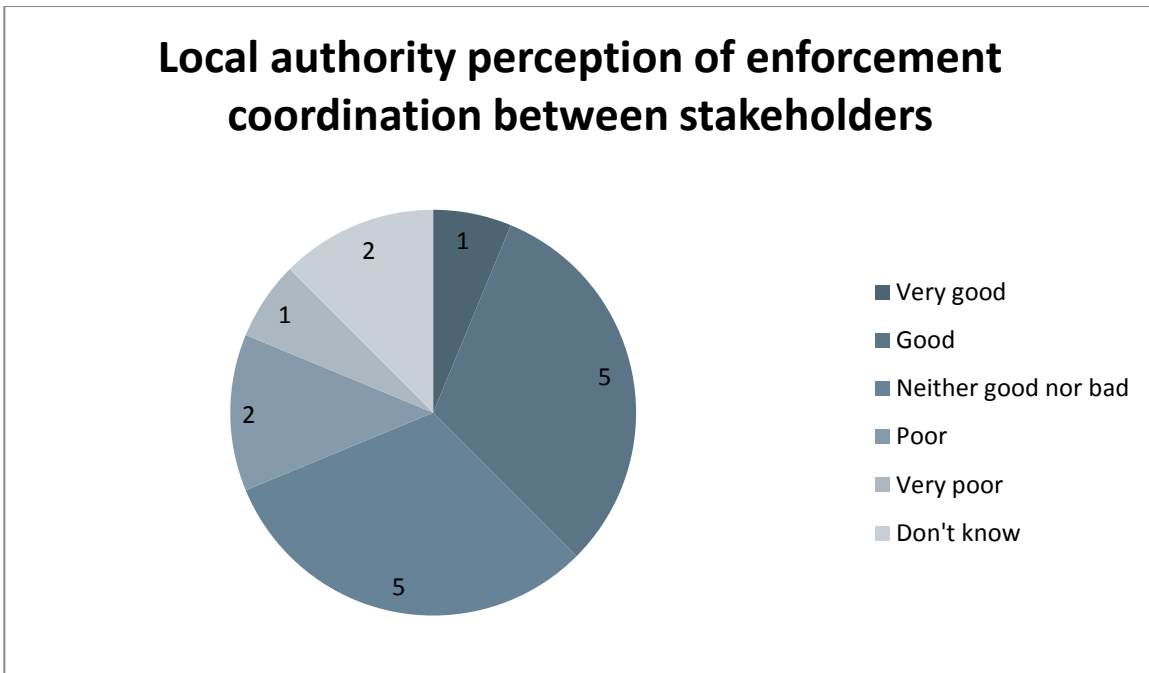


Figure 10: Local authority perception of enforcement coordination between stakeholders. Total number of respondents = 16.

3.4.2 Spending on Enforcement

12 local authorities responded to the question of how their spend on enforcement had changed since the introduction of the National Litter Strategy. Of these, five reported that their spend had been maintained at the same level, while four reported that it had decreased a little. Two authorities reported that their spend had increased a lot and one authority said that it did not exercise its enforcement powers. No authorities reported that their spend on enforcement had decreased a lot since the introduction of the National Litter Strategy, and neither did any report it increasing a little.

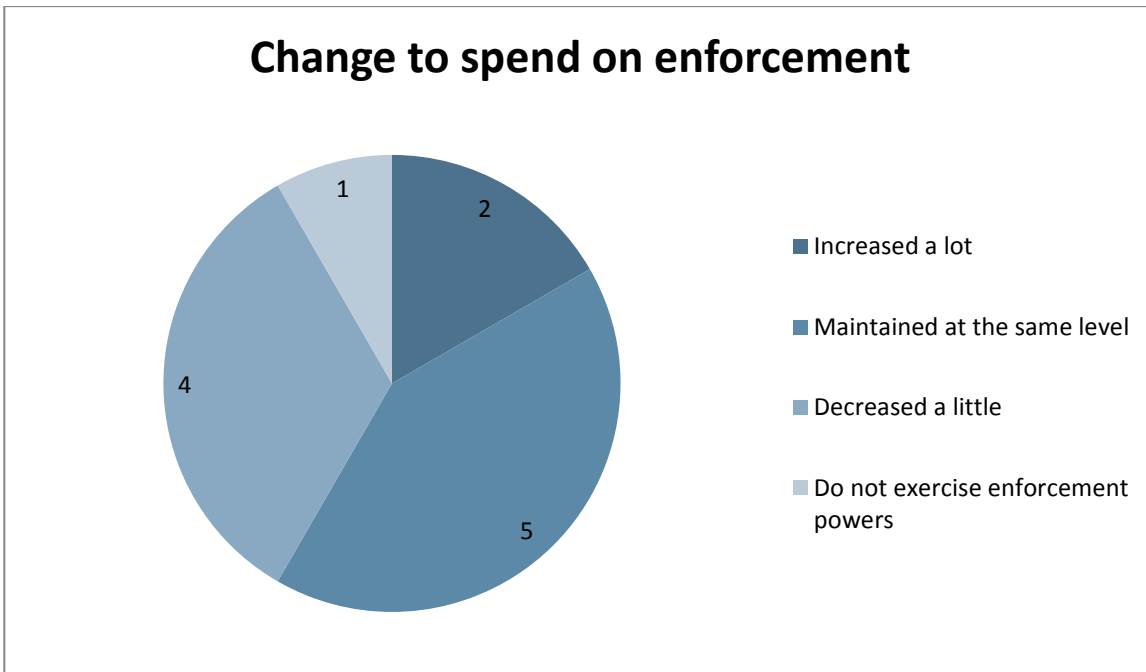


Figure 11: Change to spend on enforcement. Total number of respondents =12.

Local authorities were also asked to give the reasons for the change in spend. For this question, authorities were able to select multiple responses. The same 12 authorities also responded to this question. Of the two authorities reporting that their enforcement spend had increased a lot, one attributed this to enforcement being perceived as effective and recruitment of extra staff, while the other said it was due to restructuring. Of the four authorities reporting that their spend had decreased a little, two attributed this to the availability of funds, while one said it was due to a reduction in enforcement officers and the other to the fact that less spend was required as awareness had increased in local businesses (although this was due to campaigning started prior to the introduction of the National Litter Strategy). Of the five authorities reporting that their spend had been maintained at the same level, all attributed this the availability of funds, while one also said that enforcement was perceived to be effective.

3.4.3 Fixed Penalty Notices, Street Litter Control Notices, and Litter Abatement Orders

Seven local authorities responded to questions on how many FPNs they had issued for littering and flytipping. Of these only two reported having issued FPNs for littering, with the numbers quite different at 46 and 229 FPNs. In the first case, 72% of the FPNs were paid, and none of the remainder were taken to court. In the latter case, 59% were paid, and 96% of the remainder were taken to court.

The same two local authorities reported issuing FPNs for flytipping, Again the numbers were quite different, at nine and 27 FPNs, although the authority which issued the most FPNs for littering was the one that issued the fewest FPNs for flytipping. Four of the nine were paid, with the remainder taken to court, while 17 of the 27 were paid and none of the remainder taken to court. It was the same authority that pursued court action for both litter and flytipping FPNs.

Five authorities reported not issuing any FPNs for both littering and flytipping

Eight local authorities responded to the question of how many Street Control Notices they had issued, all reporting that they had issued none. The same eight responded to the question of how many Litter Abatement Orders they had issued, again all reporting that they had issued none.

3.4.4 Perceived Impact on Litter Levels

Local authorities were asked about their perceptions of how successful their enforcement actions had been in terms of impacting on litter levels. Six authorities responded to this question, with three reporting that they thought their actions had been somewhat successful. Two authorities reported that they thought their actions had had no effect, and one authority said that they didn't know. No authorities reported that they thought their enforcement actions had been very successful, or that they had been counterproductive.

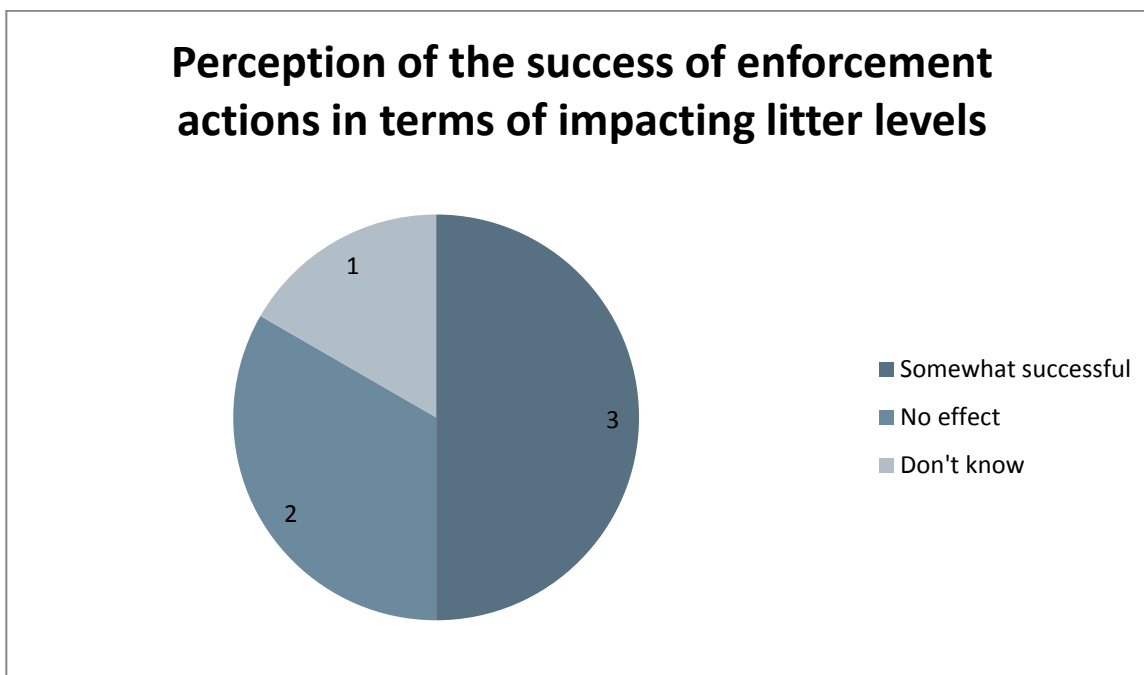


Figure 12: Perception of the success of enforcement actions in terms of impacting litter levels. Total number of respondents = 6.

Local authorities were also asked how successful they thought their enforcement actions had been in terms of other aims, for example, improved awareness, changed public behaviour, bin usage rates, improved management of litter, and improved co-ordination of actions. Six authorities responded to this question, with two reporting that they thought their efforts had been somewhat successful, two reporting that thought that their actions had had no effect, and two saying they didn't know. The same two authorities who reported that enforcement had had no effect on litter levels also reported it as having no effect in terms of other aims, while one of the three authorities reporting a somewhat successful level of impact on litter levels also reported a somewhat successful impact on other aims.

3.5 Perspectives on Actions Taken

3.5.1 Attitudes to National Litter Strategy

Local authorities were asked – looking at all the initiatives they had taken – to what extent their actions had been influenced by the National Litter Strategy. Sixteen authorities responded to this question, with two reporting that their actions would not have been taken in the absence of support. Nine authorities reported that the National Litter Strategy had improved their actions a little, while five authorities reported that it had made no difference to their actions. No local authorities reported that the influence of the National Litter Strategy had improved their actions a lot.

Influence of the National Litter Strategy on actions taken

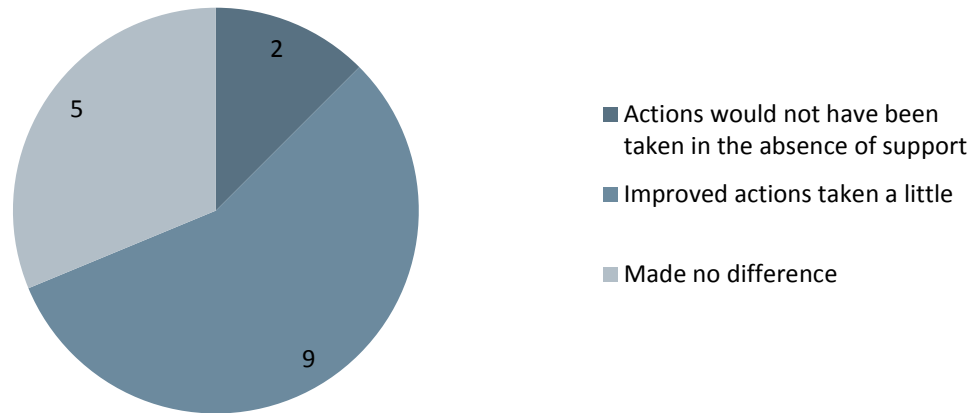


Figure 13: Influence of the National Litter Strategy on actions taken. Total number of respondents = 16.

Twelve authorities went on to specify ways in which the National Litter Strategy had influenced their actions. For this question, authorities were able to select multiple responses. Six said that the Strategy had provided new ideas for action, while six also said that the Strategy had helped to develop existing ideas.

Ways in the which the National Litter Strategy has influenced actions taken

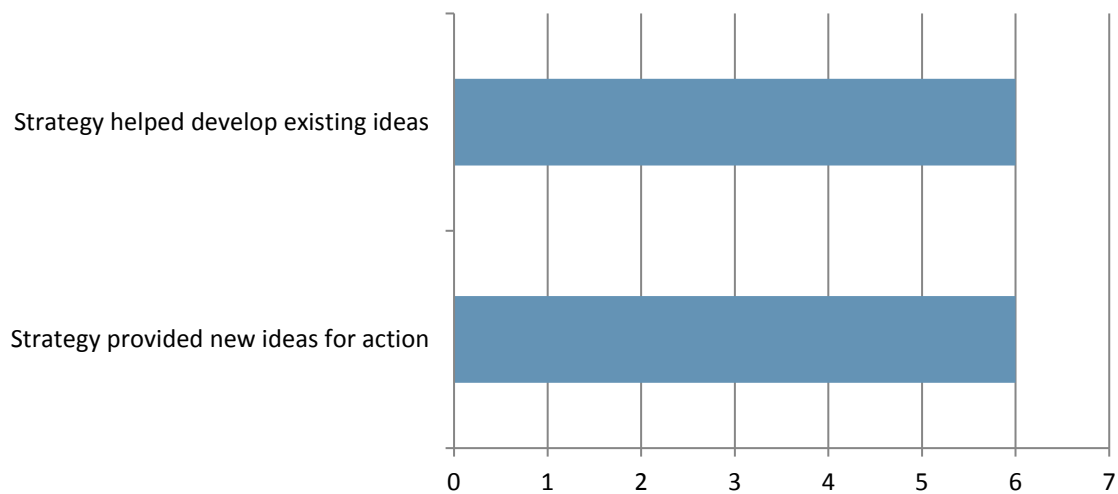


Figure 14: Ways in which the National Litter Strategy has influenced actions taken. Total number of respondents = 12.

3.5.2 Attitudes to Zero Waste Scotland

Local authorities were also asked to what extent the actions they had taken had been influenced by Zero Waste Scotland. Fifteen authorities responded to this question, with two reporting that their actions would not have been taken in the absence of support. Nine authorities reported that Zero Waste Scotland had improved their actions a little, while four authorities reported that it had made

no difference to their actions. No local authorities reported that the influence of Zero Waste Scotland had improved their actions a lot.

There was a very close correlation between authorities' attitudes to the National Litter Strategy and their attitudes to Zero Waste Scotland. Both of the authorities reporting that they would not have taken actions without the influence of the Strategy also reported that they would not have taken actions without the influence of Zero Waste Scotland. Seven of the nine authorities reporting that the Strategy's influence improved their actions a little also reported that Zero Waste Scotland's influence improved their actions a little. This suggests that local authorities may perceive Zero Waste Scotland to be the main instrument by which the National Litter Strategy is having an influence.



Figure 15: Influence of Zero Waste Scotland on actions taken. Total number of respondents = 15.

15 authorities went on to specify ways in which Zero Waste Scotland had influenced their actions. For this question, authorities were able to select multiple responses. Five reported having used Zero Waste Scotland templates for communications, while four said that they had used Zero Waste Scotland templates for operational strategy or action plans. Four authorities also reported receiving funding from Zero Waste Scotland, while four also reported that Zero Waste Scotland materials had helped them to develop existing ideas. Three authorities had made use of Zero Waste Scotland research, while two had received policy support. One authority specifically reported having made use of Zero Waste Scotland's FlyMapper app under an 'another reason' option – although this is not a reflection of the actual usage rate of FlyMapper, which is known to be widely used.

Overall, there is a fairly even split in the ways which Zero Waste Scotland has influenced actions, with different local authorities making use of the full range of support available between them; however few councils seem to be using all the kinds of support available, with only two councils taking advantage of four or more types of support.



Figure 16: Ways in which Zero Waste Scotland has influenced actions. Total number of respondents = 15

3.5.3 *Enabling and Limiting Factors for Actions Taken*

Local authorities were asked to list the main factors which had enabled them to take actions on litter and flytipping using a free text box, with 10 authorities responding. A disparate group of responses was provided, with different local authorities listing the main enabling factors as:

- ❖ The introduction of the National Litter Strategy (named by two respondents)
- ❖ The commitment of local authority staff (named by two respondents)
- ❖ The support of the council/senior management (named by two respondents)
- ❖ Zero Waste Scotland's Litter and Flytipping Programme
- ❖ Digital and mobile technology
- ❖ Local groups
- ❖ The availability of funding from Zero Waste Scotland

Authorities were also given the opportunity to list any other additional enabling factors, again using a free text box. Two authorities responded to this question, with one naming advances in technology (this authority has been trialling bin monitoring technology) and the other naming campaigning materials made available by bodies such as Zero Waste Scotland.

Local authorities were also asked to list the main factors which had limited the scale of the actions they had been able to take on litter/flytipping, using a free text box. 12 authorities reported on main limiting factors, with some mentioning more than one factor in their answers. Eight named the availability of staffing resources as a main limiting factor, while five named budgetary constraints, and one authority named limits to the scope of its powers.

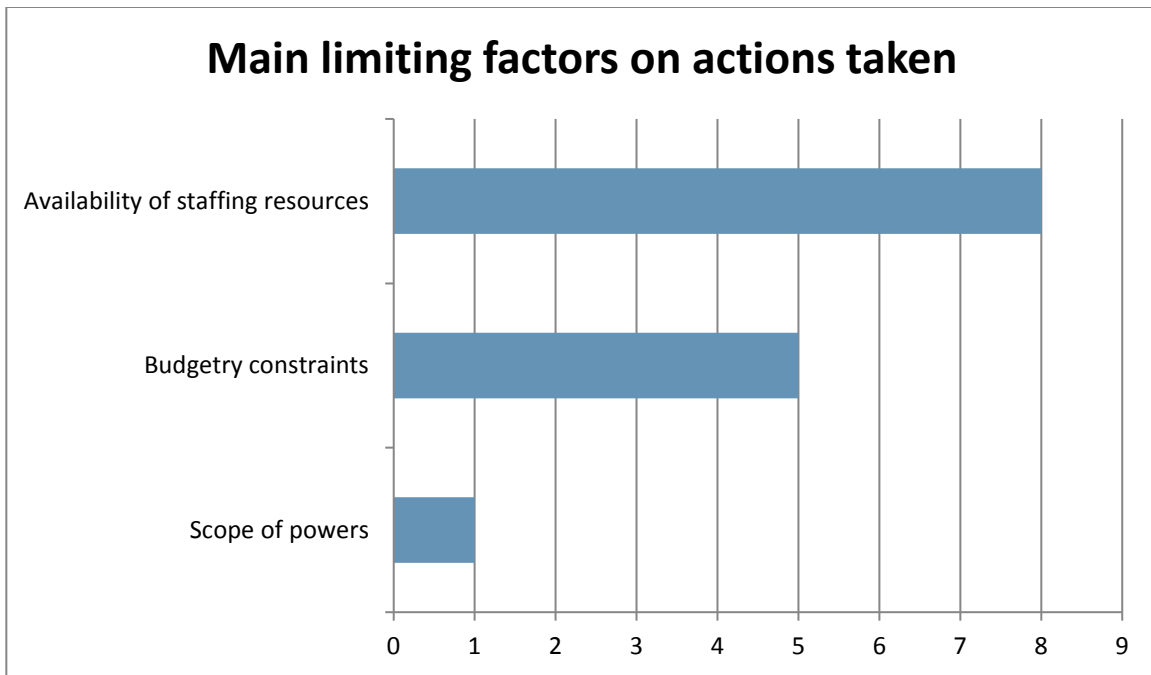


Figure 17: Main limiting factors on actions taken. Total number of respondents = 12.

Authorities were also given the opportunity to list any other additional limiting factors, again using a free text box. Three authorities responded to this question: two authorities named budgetary constraints as a secondary factor – both of whom had listed the availability of staff as the main limiting factor – and one authority named availability of staffing resources, linking this to budgetary constraints.

3.5.4 *Evaluating Actions Taken*

Twelve local authorities responded to the question of whether they were performing any evaluation of the actions they had taken, with six responding in the affirmative. The evaluation measures reported comprised:

- ❖ An evaluation framework for a new litter strategy and action plans being developed
- ❖ Recording the number of flyposting incidents reported by the public and the number of sandwich boards lifted
- ❖ Attempting to understand the sources of litter
- ❖ Using bin sensors to look at fill rates in areas where campaigns have been run
- ❖ Site surveys undertaken before, during and after campaigns
- ❖ An evaluation to be performed when the local litter strategy reaches the end of its term

3.5.5 *Impacts of the National Litter Strategy on Resourcing*

Local authorities were asked if the amount of resource they had spent on clearing litter and flytipping had changed since the introduction of the National Litter Strategy, and were given the option of choosing from a scale of 1–5, with 1 representing a decrease, 3 representing no change, and 5 representing an increase.

14 authorities answered this question, with seven reporting that there had been no change, three reporting a large decrease (option 1), another three reporting a small decrease (option 2) and one authority reporting a small increase (option 4). No authorities reported a large increase (option 5).

Change in litter and flytipping resource spend

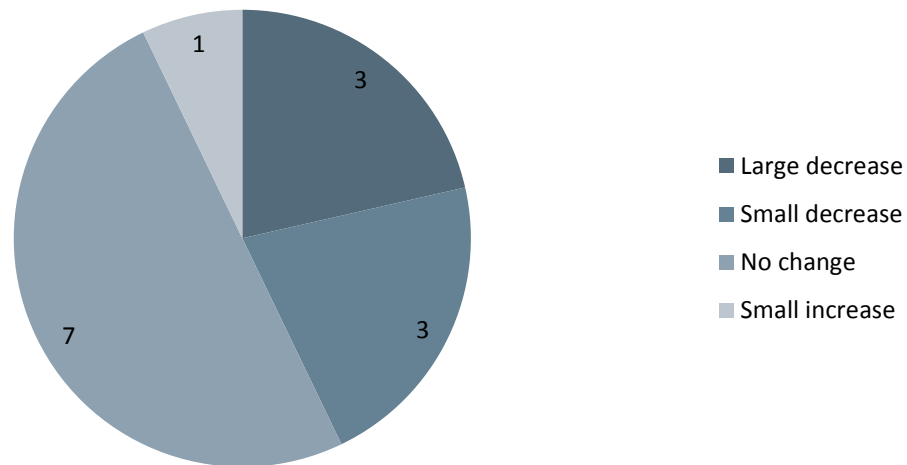


Figure 18: Change in litter and flytipping resource spend. Total number of respondents = 14.

Local authorities were also asked to give the reason for this trend. Respondents were allowed to choose multiple responses and provide any other response by using a free text box. 12 authorities responded to this question, with six reporting that the amount of budget available changed. Of these six authorities, three had already stated that their resource spend had seen a large decrease in response to the previous question, while two stated that it had seen a small decrease. The remaining one authority stated that its resource spend had seen a small increase, and had cited the reason for this was the budget decrease for landfill tax.

One authority attributed the change to the fact that the amount of litter had changed and one authority stated staff reductions as a reason, under 'other'. Five reported that there had been no change.

3.5.6 *Perceived Changes in Litter and Flytipping Since the Introduction of the National Litter Strategy*

Local authorities were asked if the amount of litter they had been collecting from the ground had changed since the introduction of the National Litter Strategy, and were given the option of choosing from a scale of 1–5, with 1 representing a decrease, 3 representing no change, and 5 representing an increase.

Nine authorities answered this question, with all of them reporting that there had been no change in the amount of litter collected (option 3). Of these, five reported elsewhere that the amount of resource they had spent on collecting litter and flytipping had stayed the same, which might account for there being no change in the amount of litter collected. However, three of the remaining authorities actually reported that their resource spend on collection had decreased; and each because of a change in the amount of budget available. We assume they are able to deal with the same amount of litter because of increased efficiency or small marginal costs, none of the authorities cited a decrease in litter as the reason for a decrease in the budget requirement for street cleansing. The final authority said their spend on clearing litter had increased slightly; they had previously related that they thought their infrastructure actions had been somewhat successful but that they thought information actions had had no effect; and they did not exercise their enforcement powers. They also stated that they had changed their budget because the amount of litter had changed. This suggest an authority that has improved their clean-up of litter but has not seen an improvement in public behaviour.

When we cross-reference these results with the perceived effect of information, infrastructure or enforcement actions, the most common rating for which tended to be that they had been 'somewhat successful' in terms of their impact on litter, we can see that if these perceptions are accurate, impacts on litter have not been great enough to impact the resources necessary to maintain clean streets.

Local authorities were also asked if the amounts of flytipping they had been collecting had changed since the introduction of the National Litter Strategy, and were given the option of choosing from a scale of 1–5, with 1 representing a decrease, 3 representing no change, and 5 representing an increase.

Six authorities responded to this question, with two reporting a small decrease (option 2) in the amount of flytipping collected and another two reporting that there had been no change (option 3). One authority reported that there had been a small increase (option 4) and one authority reported a large increase (option 5).

Of the two authorities reporting a small decrease in flytipping collected, one had not changed its spend on litter and flytipping, while one had slightly reduced it (citing the availability of budget as the reason). Elsewhere both stated that they believed their information and infrastructure actions to have been successful in terms of impacting on litter levels, while one of them also stated that they believed their enforcement to have been successful (with the other not providing an opinion either way). Also, both indicated that they believed the main other achievements of their actions to be improved awareness and changed public behaviour. Therefore we surmise that the predominant reason for the decrease in flytipping collection is a reduction in incidents, although a reduced spend on service might also have played a part in one instance.

The authority reporting a small increase in flytipping collected also reported elsewhere that it had increased the amount of resource spent on collecting litter and flytipping, which would account for an increase in the amount collected. However, the authority reporting a larger increase in flytipping collected reported that the amount of resource it spent on collected had decreased. The same authority also stated that it believed information actions had had no impact on litter levels, although it thought that enforcement was somewhat successful. The explanation is either, therefore, an increased level of service; increased efficiency of service and/or an increase in the number of flytipping incidents, but we do not have enough data to distinguish between these factors or discern a trend.

With respect to flytipping data, there is quantitative data available from the FlyMapper reporting tool, for local authorities who use it actively and consistently. This is likely to give a clearer picture of changes in flytipping levels than perceptions.

3.5.7 Limitations on the Use of Quantitative Data

There were number of quantitative questions asked in the survey which have not been reported on here owing to a poor response rate and subsequent lack of usable data. These included questions on:

- ❖ Numbers of people reached by information campaigns
- ❖ Numbers of places involved in information campaigns
- ❖ Number of places involved in clean-ups
- ❖ Amount of resource spent on information and infrastructure initiatives, in terms of both finances and staff time
- ❖ Amount of resource spent on clearing litter and flytipping

In all cases, very little quantitative data was returned, making it impossible to put together a data set that could be used to compare between local authorities, or be indicative of totals for Scotland as a whole. Local authorities may not always hold this data, or have it readily available for survey purposes.

For the questions asked regarding:

- ❖ Number of bins
- ❖ Number of clean-ups

- ❖ Number of volunteers recruited

We received some data, which was reported, as there was enough to be of interest, but it was not considered a large enough sample size for this kind of data, which is liable to vary widely, to allow extrapolation to Scotland as a whole.

There are a number of reasons why quantitative data may have been infrequently returned. Firstly, the time required to retrieve the information was perceived as too great, either because of where the data is in terms of information systems (this may not have been accessible to the person responding to the survey) or where it is in terms of team structure (the information may be located in a different team). Secondly, the information may not be recorded in any retrievable form, if it is recorded at all. We are unable to distinguish which is the case for each authority, from our survey results.

4 Group 1 Sub-Group: Other Statutory Bodies

4.1 Introduction

The two non-local authority statutory bodies that responded to the survey are both responsible for managing roads in Scotland. The organisations have very similar roles as they are both responsible for clearing litter from their land, but for this applies to motorways and special roads only. A-roads and trunk roads are the responsibility of the local authority to keep clear of litter and are not within the remit of either of these two organisations. Neither organisation maintains bins on the land for which they are responsible. Neither respondent has run any kind of information campaign since the National Litter Strategy was launched. Despite the similarities between the two organisations there is a marked difference in their responses.

4.2 Overview of Actions Taken

One respondent stated that they are responsible for picking up litter on motorways and special roads but did not give any examples of when or how this occurred. It is assumed that this forms a normal part of business operations as the respondent stated that the National Litter Strategy had made no difference to their actions, including no change in the amount of resource spent or changes to the amount of litter collected.

The second respondent gave details of a clean-up of an A-road in a specific scenic that involved 25 volunteers from a conservation organisation. The respondent provided traffic management to allow volunteers to clear roadside litter. Although this is officially the responsibility of the council, it is encouraging to note how this organisation were happy to support the litter pick initiative and plan to repeat the exercise in the future. This positive story demonstrates the important role partnerships can play in litter picking activities. The only other initiative noted by this organisation is the facilitation and promotion of reporting for litter and flytipping by the public, but no further detail was provided. The respondent considers their activities to have been somewhat successful with regard to the impact on litter and with regard to broader aims.

4.3 Enforcement

One area where there is similarity in responses is the issue of enforcement. Neither organisation has enforcement powers, but both stated their perception that coordination of enforcement powers is poor or very poor. One respondent stated that despite information campaigns from other organisations, levels of littering have not decreased and stronger enforcement is necessary for persistent offenders, both individuals and businesses. The respondent stated that heavy fines should be levied on businesses if their employees are caught littering as well as fines for individuals and drivers if litter comes from their vehicle, regardless of which passenger littered.

4.4 Scale, Motivations and Perceived Impact

Of the two respondents, only one provided any detail on the scale, motivations and impact of their initiative. The respondent stated their outcomes to be improved awareness, improved management of litter and improved co-ordination of actions. There has been a small increase in the amount of resource spent on clearing litter and this is attributed to maintaining different standards of cleanliness. Presumably this is why the amount of litter collected has increased a little. It is not explicit in the data, but it is presumed that more resource and better standards are the reasons for the increase rather than there being more litter.

Overall the respondent thought that their actions have been improved a little by the influence of both the National Litter Strategy and Zero Waste Scotland. This is due to the National Litter Strategy helping to maintain awareness and the policy support provided by Zero Waste Scotland. However the respondent did also make clear that they would have undertaken the actions regardless of the litter strategy and its partners.

The key enabling factor provided by the respondent is the willingness of the public and other parties to work together. This may include conservation organisations (as in the specific example above), but could also refer to Zero Waste Scotland too.

A key barrier identified is that litter picking involves a high degree of risk as operational staff involved in picking litter and removing flytipping are exposed to high speed traffic on road verges and/or exposed to harmful discarded material. These organisations do what they can to co-ordinate clean-ups but in their view this is not a long-term solution and prevention would be much better. This perception aligns with the priorities of the National Litter Strategy.

5 Group 2: Other Organisations that Provide Services and Products and/or Manage Land

5.1 Introduction

This group is comprised of range of organisations which provide goods or services that may incur littering; some of the organisations also have statutory obligations to clear litter and some clear litter as part of their day to day operations although they are not obliged to do so in law. There were five respondents in this Group. The response rate was low given the 18 organisations approached. Four provided complete responses while one only made a comment in response to one question, the overview of actions. The respondents were comprised of a national park, a national supermarket, a soft drink producer, a university, and a packaging trade association.

5.2 Information

All the respondents reported undertaking at least one kind of action under this theme, with three organisations undertaking more than two or three kinds of action. The most common information theme actions provided by respondents were clean-ups and promoting recycling on the go to combat littering. Both of these actions were listed by three of the respondents to be part of their activities. The other common response was developing and distributing materials for educational projects which was listed by two respondents.

5.2.1 *Clean-ups*

Two respondents, a supermarket and a university, described the clean-ups they organised; a third, a national park, stated a clean-up took place involving the community but provided no details. The clean-ups were community events which recruited volunteers from within each organisation's extended network. In one case this involved partnering with a local community group. One respondent provided more detail, stating that six clean-ups took place involving approximately 50 volunteers in total. Both organisations incorporated the clean-ups into a day or week long event as part of longer term initiatives specific their organisation, which supports their broader aims. This includes advertising 'Recycle and Reward machines' where instead of coins, cans and plastic bottles are inserted into vending machines as payment.

5.2.2 *Other Information Initiatives*

Four respondents mentioned other information initiatives they have worked on. Two respondents, a drinks manufacturer and an industry body, mentioned working with a national charity to support its public facing awareness raising activities, and data collection on litter. A different respondent, a supermarket, mentioned they had contributed to a publication by CIWM on the topic of fighting waste crime.

Two respondents, a drinks manufacturer and a university establishment, stated that since the launch of the National Litter Strategy they have been involved in developing and distributing materials for educational projects. The first said that this referred to work with the Packaging Recycling Group Scotland (PRGS) and working with a trade body relevant to their specific industry; the second said this involved poster campaigns.

5.3 Infrastructure

5.3.1 *Bins*

Three respondents, the supermarket, the national park and the university, confirmed that they provide bins on land for which they are responsible. Two respondents quoted exact numbers in their response. The university provides 500 bins, of which 13 are recycle on the go and the national

park provides 36 bins of which one is recycle on the go. Both respondents confirmed that the number of recycle on the go bins has increased a little since the launch of the strategy, and both stated that the total number of bins overall has decreased slightly. The university also noted that some of their bins are 'smart bins' that are seagull proof, which presumably helps reduce litter from wildlife. This respondent stated they have also created more recycling banks and have reduced the number of collections leading to an increase in the amount of re-use and recycling. The supermarket stated that the number of bins has remained the same since the launch of the strategy in 2014; this respondent did not state the number of bins they provide but confirmed that none of them are recycle on the go bins.

5.3.2 *Other 'Infrastructure' Initiatives*

Two respondents provided additional information with regard to other changes to their infrastructure to reduce littering and flytipping. One respondent, the supermarket, has worked towards increasing the recyclability of the packaging used in 600 different products it sells to reduce littering. This has involved a redesign to reduce the structural complexity of packaging such as removing laminated layers. The respondent stated they have also been involved in developing the new On-Pack Recycling Label (OPRL) guidance to increase the number of items that carry the 'widely recycled' logo. This process has also involved consultation with local authorities. This respondent stated that they have also been involved in the Rationalisation of Packaging work that is part of the Waste and Resources Action Programme (WRAP) Consistency of Collection agenda, as well as being involved in Plastics Industry Recycling Action Plan (PIRAP).

The other respondent, the university, discussed a scheme designed to encourage re-use of the kinds of items that are at risk of being flytipped. This included working with a re-use portal called WARPit that operates nationwide. In addition, the respondent stated they have set up an in-house furniture re-use store and a 'free-shop' for organisation members to both donate and take clothes and bric-a-brac as required. These keeps items in use and helps avoid them being littered/flytipped.

5.4 Enforcement

Two respondents confirmed that they lack enforcement powers and offered no opinion on how well enforcement is coordinated. One respondent, the university, that also lacks enforcement powers, believes co-ordination between the different organisations involved (e.g. enforcement officers, police, courts etc.) to be poor.

Only one respondent, the national park, had enforcement powers for litter and flytipping, which it gained in 2014 and began to use in 2016. This respondent believes co-ordination to be neither good nor bad. They stated that since the launch of the National Litter Strategy they have accessed enforcement training to increase the number of staff who can complete enforcement tasks. They have not yet issued any fixed penalty notices for litter and have only issued one for flytipping. This has been paid without the need for court.

5.5 Scale and Motivations

Four respondents provided information regarding the scale of their activities overall and the motivations behind them. Two respondents, the drinks manufacturer and the university, stated that their actions had been improved a little by the National Litter Strategy, with the reason for both being that it helped them develop existing ideas. Of these two, the drinks manufacturer stated that they would have still carried out the activities in the absence of the strategy but the university stated that while their actions would probably have still occurred, it would have been to a lesser extent. This respondent also noted that their actions would not have occurred at all without support from Zero Waste Scotland, which provided funding, templates for communication and policy support. Two other respondents, the supermarket and the national park, stated that they had not been influenced by the strategy or by Zero Waste Scotland, confirming that they would have undertaken the anti-littering/flytipping activities regardless.

Three of the respondents provided very little detail on the scale of their activities. One of the two that stated they were not influenced by the strategy, the supermarket, confirmed that since the

launch of the National Litter Strategy the scale of their activities had not changed. The national park stated that the scale of their initiatives has remained constant for information activities and marginally increased for infrastructure activities since the launch of the National Litter Strategy. The drinks manufacturer, who confirmed a small amount of influence from the National Litter Strategy, stated that the scale of their information activity for litter and flytipping initiatives had marginally increased but the level of action on infrastructure has remained the same.

The university, who had stated they were influenced by the strategy, provided more detail on the scale of their activities. They confirmed that with regard to infrastructure, their activities had increased somewhat. This respondent also confirmed that their 'information' theme campaign had reached 15,000 people and that the cost of their initiatives as a whole, for both information and infrastructure initiatives, is £150,000 a year and includes one full time member of staff.

5.6 Clearing Land

Four respondents stated that they are responsible for clearing land. The supermarket and the national park stated that the amount of resource spent has not changed, with the national park confirming that there had been no change in the quantity of litter collected. The other respondent stated that the budget for tackling flytipping in 2015/16 was £24,000.

The other two respondents had very different answers; the drinks manufacturer stated that spend had significantly increased (though it is not clear what activity was being referred to) and the university stated that it had significantly decreased. The budget decrease has been accompanied by some decrease in the amount of litter collected from the ground and a significant decrease in the amount of flytipped waste being collected. The respondent stated that annual spend stands at £100,000, but this includes a range of additional waste management activities such as disposing of broken office furniture. There are two full time employees who are charged with these tasks.

5.7 Impacts

The university conducted an evaluation of their initiative, this was done through surveys. On the basis of the evaluation the organisation believes their infrastructure actions have been very successful and their information actions have been somewhat successful in terms of impact on litter levels. With regard to broader aims, including improved awareness, improved management of litter and improved co-ordination of actions, the respondent states that their infrastructure activities have been very successful and their information activities have been somewhat successful. The supermarket was monitoring the number of lines that had packaging that was easy to recycle.

5.7.1 Barriers

Three respondents stated what they consider to be the main limiting factor to the scale of their actions. The national park (as a main barrier) and the university (as a secondary barrier) stated that a limited amount of staff time is a barrier to increasing the scale of their activities. The university stated that the main barrier to doing more is funding. The supermarket provided a different response, stating the main barrier to be UK recycling infrastructure, with an additional barrier stated to be the inconsistency in advice given to residents by different local authorities.

5.7.2 Enabling Factors

The same three respondents also stated what they consider to be the main enabling factors. The university stated that a limited amount of funding is a key barrier but also stated this as the main enabling factor for their activities. Two organisations stated that changes in legislation were an enabling factor, the national park stating that it was the most significant and the university stating it was the second most significant factor. The national park state that the granting of powers to the National Park Authorities was the key legislative change. The supermarket stated that the main enabling factor is the progress that has occurred regarding the collection of plastic pots, tubs and trays across the UK and an additional enabling factor is the review of OPRL label.

6 Group 3: Varied Stakeholders

6.1 Introduction

The third interview group comprised of exceptions, in that the individual stakeholders in this group are not asked to carry out “standard actions” under the strategy, but their strategic focus and operational decisions may have a significant influence on strategy achievement. These organisations are typically enablers, representative bodies for larger groups of stakeholders, or organisations with unique responsibilities for litter prevention, management, or enforcement.

The group 3 interviews targeted 14 organisations, including justice organisations, charities and trade bodies for whom a specific set of questions were selected from the main survey template and delivered in the format of 30-minute semi-structured telephone interviews. The interviewer was therefore allowed flexibility to address key themes as they emerged over the course of the interview, rather than adhering to a scripted questionnaire. Where initial attempts at contact via telephone were unsuccessful, an email was sent out, requesting an interview and providing a brief overview of questions that would be asked. In cases where no response was received, a further reminder email was sent two weeks later.

Of the 14 interviewees who were contacted (both by phone and email), 12 responded with some degree of information; with one declining to take part in the interview, one providing a partial response, and the remaining 10 completing the interview.

In terms of the roles of the Group 3 stakeholders, three distinct sub-groups were identified. For example, environmental NGOs and educational charities are mostly engaged with communications and information. Their impact data was expected to mainly be involving number and type of people engaged. Community groups also have a particular role in taking forward community based actions under this theme. These organisations formed the bulk of respondents under Group 3 (10 out of the 14 identified for interviews by Zero Waste Scotland) and were categorised under sub-group 3.1. Questions to this sub-group focussed on the “Information” actions and impacts theme.

Trade bodies potentially have contributions to make in in the ‘infrastructure’ theme with regards to product and service design, while simultaneously engaging members to spread awareness of issues related to litter and flytipping. Organisations such as these formed sub-group 3.2, to whom questions on both the “Information” and/or “Infrastructure” themes were posed. Following the interviews, only one respondent fit into this category.

Finally, with respect to enforcement, only the justice agencies, SEPA (whose main role as a stakeholder is in investigating flytipping offences), Police Scotland and the Crown Office & Procurator Fiscal Service (COPFS) are involved in “Enforcement”, and so questions regarding this theme were only posed to these three respondents.

Within the sub-groups, eight out of 10 stakeholders in sub-group 3.1 were successfully contacted, with one declining to be interviewed, and seven completing interviews. The sole respondent in sub-group 3.2 was successfully contacted and interviewed, and all three respondents in sub-group 3.3 were contacted, with one providing a partial response and the others completing interviews. It should be noted that, even of those stakeholders who provided complete interviews, not all responded to every question, as not every question was applicable to every stakeholder and in some cases, information was considered confidential or not easily accessible during the interview.

6.2 Information

6.2.1 *Overview of Actions Taken*

Of the seven respondents in sub-group 3.1, four charities highlighted running campaigns for litter action (whether dealing with one or all types of litter) as a key action undertaken, while two others highlighted actions relating to supporting these campaigns (through participation or knowledge sharing). Two of the campaigns organised nationwide clean-ups to intercept terrestrial and beach litter and simultaneously gather data on the extent of the problem. A further four dealt with spreading awareness and proposing solutions to specific streams of litter, including wet wipes, dog fouling, smoking-related litter and disposable drinks containers.

Including those involved in organising the campaigns mentioned above, five of the seven respondents highlighted their involvement in litter picks (whether public or internal), and six of the seven made a note of significant coordination and partnering efforts in these activities, whether among its members, or with other groups locally, nationally, or at the European level.

Finally, all respondents highlighted a range of awareness actions being undertaken with a range of stakeholders, including government, businesses, schools, households, and wider communities. This ranged from the publication of information on websites and social media, to the development of flyers and more formal briefing papers and data, as well as individual case-by-case guidance and support via newsletters provided to organisation members.

Two respondents (both membership bodies) also highlighted their roles in supporting enforcers via monitoring activity as a key activity they undertake. This included reporting incidents to authorities, and identifying and keeping a lookout for offender vehicles where possible.

6.2.2 *Scale*

Three respondents (all charities) claimed that the scale of their activities has risen since the launch of the National Litter Strategy, though none attributed this increase directly to the National Litter Strategy. Instead, two stated that this was due to increased awareness of the situation and support from partner organisations coupled with more resource, while the third stated that it was simply due to increased efficiency in managing what resources they had. It is noted that these factors are potentially indirect outcomes of the National Litter Strategy, however, respondents did not identify this connection. A further response from a membership body stated that the scale of activity had roughly remained constant over the years, though no data was available as support was delivered on a case by case basis. In this instance, however, it was stated that the National Litter Strategy had been useful in reinforcing messages related to flytipping.

The final three respondents also reported no change to the scale of activity they undertake, though they all expressed that this was not due to a lack of desire or stakeholder demand for such actions, but rather, inadequate resources to do so. Two respondents identified personnel and funding as the key resource needed to achieve this, while one regarded further coordination, knowledge sharing and opportunities for collaboration as somewhat lacking.

In terms of outreach of the various activities, those engaging the public in voluntary community litter picks, campaigns and beach cleans described a marked increase in the popularity and outreach of these programmes since 2014. One pointed out an increase in the number of clean-ups as an indicator of this (from 45 to 75 to 121 within the last five years), while another highlighted the number of partner organisations for their campaign (six to 30 within two years). A third outlined that they had reached as many as 600,000 people to get involved with clean-ups since 2014. Additional anecdotal evidence was also provided about the longer-term impacts of clean-ups on community behaviour. Despite this increase in public engagement, all respondents stated that the issue of litter and flytipping in Scotland as a whole appears to be worsening, though there is limited evidence to support this claim.

Other actions for which estimates of outreach were provided included webpage clicks (one organisation reported modest success, having received 16 'clicks' on a litter fact sheet in a three-

month period) and members on a mailing list (9000 individuals receiving the newsletter in question). Neither of these organisations are involved in litter issues as part of their core work.

Finally, costs for these actions were not reported quantitatively, and are hence difficult to interpret and compare. However, one organisation which organised an internal litter pick (for six to ten members of staff) and has a live webpage providing litter information stated that these interventions had cost them “not much at all”. Another organisation involved in supporting a large campaign through liaison with international groups, media coverage and government engagement, though not research, has three dedicated staff working on the issue. Two others who dealt with litter and flytipping more sporadically, providing support and guidance on a case by case basis had no budgetary figures per se, but did highlight that the work was undertaken by a single member of staff per region as part of a wider remit in environmental work. Others kept their budgets confidential, revealing only that a combination of public and private funding were being used to support additional key officers to run the campaigns and clean-ups, with other members of staff supporting where possible and efficiency measures (such as clean-up kits) being used to keep costs down while increasing outreach. The final respondent stated that a number of officers were engaged in activities at a regional level, though this number varied from region to region depending on the scale of engagement to be undertaken. The costs for staff were justified in terms of avoided costs of having to deal with incidents later on.

6.2.3 *Motivations*

In addition to the role of the National Litter Strategy and financial resources as key drivers (see section 6.2.2 above), respondents from membership organisations outlined that further engagement in monitoring and prevention activity could potentially be undertaken if stakeholders could see a clear benefit to their members from this activity – at present, the focus is on providing members with guidance on dealing with litter and flytipping after the fact.

Several mentions were made of the Scottish Flytipping Forum, in various capacities. Some respondents felt that these sessions had been vital in sharing knowledge and providing a platform for coordination. This was especially true among respondents whose core activities are not litter-related, and who therefore expressed a need for continuous support and knowledge-sharing with others who are. On the other hand, a few organisations in this group felt that the forum was not useful due to its lack of focus on actions.

The national Flytipping Forum was discontinued in 2016, with a small project group, facilitated by Zero Waste Scotland, created in its place to progress the discussion and development of specific flytipping projects and interventions.

One respondent, a charity, also stated that the impact of litter and flytipping on social factors, for example smoking and smoking related litter around schools, was a powerful motivator for them to carry out a public campaign and study of impacts, but had been frustrated by a lack of resources to pursue this. Industry and government reticence were also highlighted as barriers to positive outcomes.

6.2.4 *Perceived Impacts*

Nine out of 11 respondents answered this question. Although they felt they could identify some success in the various actions discussed above, six respondents felt that the problems of flytipping and litter in Scotland are on the rise. The others did not volunteer an opinion on the general levels of litter and flytipping across Scotland. This was variously attributed to structural failures in the waste management and enforcement systems, and the lack of a clear, strong message from enforcers, government, and the National Litter Strategy on actions and penalties for such behaviour. In some areas, the problem was cited to be the lack of free uplift of goods, or accessible Household Waste Recycling Centres (HWRCs), while in others it was the fact that perpetrators were aware of the low chance of being caught or prosecuted.

Nevertheless, a little less than half the respondents in this sub-group stated that some of the campaigns in particular were slowly picking up traction, and were starting to see a change in industry and government attitude to the problem, which was highlighted as a positive first step in the right direction.

6.3 Infrastructure

6.3.1 *Overview of Actions Taken*

The single respondent in this category described having had a prior remit in installing and maintaining litter bins as part of a Zero Waste Scotland funded project in 2013-14. In addition, the stakeholder is responsible for various actions related to community engagement and awareness of litter issues, including organising litter picks and running skills and volunteering programmes with schools.

6.3.2 *Scale*

The scale of activities undertaken by the stakeholder has decreased since the launch of the National Litter Strategy, though the two events were stated as being uncorrelated. Rather, the lack of resources, as well as any further funding from Zero Waste Scotland for the clean-up programme in 2013, prompted the discontinuation of some of the actions described in Section 6.3.1. The respondent is therefore no longer involved in maintaining the litter bins installed, and responsibility for these has passed to another organisation.

Actions relating to clean-ups and community engagement have been continued, though these are only carried out as one part of a much wider role played by environmental officers, once again, due to a lack of dedicated resource for litter activities. The stakeholder estimated that outreach of this activities has remained steady for the last few years, with approximately 1,000 volunteers getting involved in clean-ups on an annual basis (including school children).

The stakeholder was also able to provide approximate costs for these actions, stating that at present, one additional officer to undertake planning, promotion and delivery of actions was being funded for three years by Historic Scotland. It was further estimated that such an officer could potentially attract a maximum of an additional 300-500 volunteers to take part in clean-ups, assuming they were given no other duties (which acknowledge to be unlikely).

In terms of infrastructure activity costs, it was estimated that the Zero Waste Scotland project in 2013 was funded at £50,000 for six months, the majority of which budget was earmarked for the installation of bins and development of materials rather than outreach actions. It is important to note that the stated figure for Zero Waste Scotland funding was caveated as being highly uncertain and the respondent had trouble recalling the exact terms of the funding.

6.3.3 *Motivations*

The respondent stated that aside from the Zero Waste Scotland-funded work, they are currently doing what they have always done, and have not been impacted in any way by the National Litter Strategy. It was stated that the National Litter Strategy “is fine for what it is”, but in its current form was of no relevance to their work. The proposed alternative was described as a clear, concise document, which is action-focussed with two or three powerful messages that people can get behind. It was also stated that Parliamentary support for the National Litter Strategy was lacking, and promotion and marketing of its key messages was similarly wanting. Finally, there was a desire for clarity about penalties to be delivered in a revised National Litter Strategy such that it could also act as a deterrent to offenders.

In terms of involvement with Zero Waste Scotland, it was stated that the stakeholder found their role in the steering group for the clean-up very beneficial, in terms of sharing knowledge, and both resourcing and recruitment. However, the one-off nature of the project prevented any long-term benefits from this involvement.

Finally, it was stated that resources were the key driver that was directly correlated not only to the scale of actions being undertaken at present, but also to the impacts on the issue of flytipping and litter in general, which were perceived to be getting worse over time.

6.3.4 *Perceived Impacts*

As stated above, the respondent perceived that the litter situation is worsening over time. Although they do not undertake regular evaluation of the environmental impacts of their actions, they did have access to anecdotal evidence that the clean-ups sometimes prompted pro-social behaviour in the longer term (people would observe litter picks in their area and consciously avoid littering themselves in the future). A scaling up of information activities and re-commencement of infrastructure activities were desirable, but entirely dependent on the availability of funding.

6.4 Enforcement

6.4.1 *Overview of Actions Taken*

All three of the respondents in this sub-group (Police Scotland, SEPA and COPFS) stated that their role in enforcement activities for litter and flytipping issues was supportive, with the bulk of responsibility resting with the local authorities. Police Scotland outlined that rather than having a strategic role in addressing litter and flytipping enforcement, day-to-day enforcement rested with local police divisions. Their own involvement only extends to intervening to provide information or support when requested on an ad hoc basis.

The contact from SEPA outlined that though they continue to have oversight of litter and flytipping issues, SEPA's remit in this area has changed over the years to embrace a more proactive rather than reactive approach to the issues. This is in line with a Memorandum of Understanding with various enforcement stakeholders since 2010, subsequent to which SEPA is no longer involved in either litter enforcement, or investigations related to opportunistic flytipping, which are the remit of local authorities. SEPA does, however, intervene in cases of organised criminal activity related to large scale flytipping with significant environmental impacts (involving chemical, hazardous, or industrial waste, for example) as well as strategic work attempting to design flytipping out of the system (including involvement in the EU Life Smart Waste Project dealing with issues of large scale waste crime). In addition, the contact outlined that there was clear coordination among various enforcement stakeholders, with SEPA stepping in to provide support on enforcement or the implementation of regulations and notices, as well as sharing knowledge with local authorities when required.

Finally, the respondent from COPFS outlined their role as the sole prosecution body in Scotland, responsible primarily for assessing the sufficiency of evidence in litter and flytipping reports, and identifying suitable actions to be taken in the public interest (whether through warnings, fines, FPNs and so on). Although rare in the case of littering offences, they can play an enforcement role in identifying cases to be prosecuted in court. In addition, they are involved in policy dialogue related to litter and flytipping and coordinate with other stakeholder in conducting training events, providing feedback on the quality of information received and so on.

6.4.2 *Scale*

Two of the respondents in this category estimated that the scale of activities undertaken in this area had remained unchanged over the last few years. Due to the ad hoc basis of their involvement, they were unable to provide estimates of the scale of actions (cases investigated, cases that end up in court, arrests made etc.) they undertake related to litter and flytipping.

SEPA stated that the scale of direct actions undertaken by them had decreased over the years as some responsibilities had passed to local authorities, as described in section 6.4.1 above. Therefore previous actions related to large scale clean-ups, awareness campaigns and on-the-ground inspections (of waste carrier licenses) are no longer undertaken. Instead, FlyMapper is now used as a key monitoring and enforcement tool for local authorities, with SEPA taking on a supportive role where required.

6.4.3 *Motivations*

The actions of neither SEPA nor COPFS were thought to have been impacted by the National Litter Strategy to date. However, both organisations were able to provide suggestions as to how the National Litter Strategy might be made more relevant, particularly in terms of a more concerted marketing and engagement effort. One of the two respondents also suggested improvements by addressing some of the issues highlighted in a previous study for Scottish Government. These included the need for reform of key enforcement mechanisms, including consistency in local authority reporting, and increasing the payment rate for flytipping FPNs.

Relatedly, quality of information received from local authorities was highlighted as a key driver for COPFS to extend their activity in the area of litter and flytipping enforcement, while clarity and communications around roles and responsibilities, to improve coordination and efficiency of actions was identified as the motivator for SEPA's work.

6.4.4 *Perceived Impacts*

Very little information regarding the impacts of activities undertaken by the respondents was received. The respondent from COPFS stated that no regular evaluation is undertaken, but rather that this was promoted by one-off pieces of research, or Parliamentary questions which necessitated a review of available statistics. However, it was felt that COPFS' actions in the area acted as a clear deterrent to flytippers, though this could be improved if a more consistent message regarding enforcement could be sent. The respondent from SEPA was unable to comment on the impact of SEPA's current actions on flytipping, though it was found that previous actions had a direct correlation to the scale of flytipping in Scotland. However, the impact was not sustainable, and would diminish as soon as the activity was reduced or stopped.

7 Summary of findings

The survey gives an overview of a wide range of types of litter actions undertaken by stakeholders, their perceived effects, and the influence of the National Litter Strategy and delivery partners.

Actions

Amongst local authorities, most who responded reported undertaking some type of action under the 'information' theme with many reporting carrying out several types of action; slightly fewer reported undertaking 'infrastructure' theme actions; while the least frequently undertaken were 'enforcement' theme actions. The road companies who responded showed differing levels of engagement, one proactive and undertaking litter actions under the 'information' theme; the other less involved and undertaking only their statutory obligations. They do not have infrastructure or enforcement responsibilities. The varied organisations of group 2, a university, a supermarket, a drink manufacturer, an industry association, and a national park, had all undertaken at least one type of action under the 'information' theme and again, most had undertaken more. A smaller number had undertaken action under the 'infrastructure' theme. The organisation that had enforcement powers had undertaken some action under the enforcement theme. Most of the relevant organisations in the Group 3 category had been involved in information actions, while many fewer organisations had roles to play in infrastructure or enforcement; their various supportive roles were described.

Across Groups 1, 2 and 3, clean-ups were the most popular litter action under the 'information' theme, while anti-litter/flytipping campaigns followed. Amongst Groups 1 and 2, changing the number and type of bins was the most popular 'infrastructure' theme action, followed by service changes. For enforcement, sending staff on enforcement training was the most popular action, and spending more time on patrol was the second. A broader range of actions was in evidence amongst smaller numbers of stakeholders, demonstrating that there is scope for increased take-up of many more different types of anti-litter and flytipping action.

Perceived impacts

The responses of Group 1 organisations reveal that the perceived impacts of the actions undertaken mirror the popularity of actions; with more respondents believing 'information' theme actions to be very or somewhat effective than 'infrastructure' actions. A greater proportion of respondents (50%) stated that they didn't know if or didn't think that enforcement actions were effective than for any other category of action.

Group 1 and 2 organisations all stated that the amount of litter they collected had remained the same with the exception of one, a road company. Cross-referencing their responses with questions on resource spent clearing litter revealed a whole range of potential explanations, from increased efficiency, increased resource spend, as well as evidence of change in litter levels. However the small sample size and wide variation in responses made it difficult to discern any particular trend.

Group 3 organisations generally felt that litter and flytipping was on the rise, despite successes related to some actions.

There were not a large number of evaluation actions taking place and efforts were very varied. However some organisations did report the evaluation of their activities, with some positive outcomes.

Resources spent on clean-up

It was difficult to obtain quantitative data on the resources allocated to litter and flytipping clean-up. The qualitative estimates obtained produced the following overview. Half the Group 1 organisations had managed to maintain the amount of resource spent clearing up litter; around a third had decreased the amount of spend a lot or a little, mostly owing to the availability of budget rather than changes in litter levels. A couple of organisations had increased resourcing a little. This pattern was very similar to that found in Groups 2 and 3.

Influence of the National Litter Strategy and Zero Waste Scotland

Amongst Group 1 organisations, around two-thirds attributed some positive effect to the National Litter Strategy. A slightly larger proportion stated that the input of Zero Waste Scotland had been helpful. Amongst Group 2 stakeholders, around half stated that the National Litter Strategy and Zero Waste Scotland had had a positive influence. For Group 3 stakeholders, Zero Waste Scotland was much more commonly cited as an influencing factor, while the National Litter Strategy was rarely directly cited as affecting actions taken.

Part of the selection strategy for the survey was to sample organisations that were likely to have been involved in litter actions, so as to target fact-finding effort and resources effectively. It was not intended to produce a quantitative estimate of engagement versus non-engagement Scotland-wide, for which a random sampling approach would have been used. Therefore this sample is intentionally biased towards organisations that are actively involved in litter management in some way. We stress that these results are therefore not representative of all stakeholders in Scotland; but they are a good indication of the influence of the Strategy and Zero Waste Scotland amongst those stakeholders who are active on litter.

The most cited contribution was helping to develop existing ideas, but there was a proportion of cases where it was stated that action would not have been taken had it not been for the Strategy and/or Zero Waste Scotland.

Enabling and limiting factors

A broad range of enabling factors were cited by Group 1 local authorities, from staff and management commitment, the contribution of local groups, as well as the National Litter Strategy and contributions made by Zero Waste Scotland. This bears out the enabling factor of the willingness of parties to work together cited by the responding road company in Group 1. Group 2 also cited legislative changes as being an important enabling factor, while Groups 2 and 3 both cited funding received via Zero Waste Scotland as a key enabler. Group 3 organisations also cited the National Litter Strategy. In terms of limiting factors, staff availability was the most cited, with budgetary constraints being the second. This was true for respondents from all groups; in addition, some respondents in Group 3 cited industry and government reticence as acting as a limiting factor.

8 Appendix 1.0 - Questionnaire

Q1 Please indicate which option is acceptable to you.

Answer Choices
I am happy for my answers to be shared with Zero Waste Scotland/Scottish Government in a way that is attributable to my organisation.
I would like my data to be anonymised

Q2 Please fill in the name of your organisation here:

Q3 Since the launch of the National Litter Strategy in 2014 have you done any of the following (please tick all that apply):

Answer Choices
Anti-littering/flytipping campaign
Promoting recycling on the go to combat littering
Facilitating and promoting reporting for litter and flytipping by the public
Development and distribution of materials for educational projects
Clean-ups
Other targeted interventions at local hotspots

Q4 Please briefly list and describe, with a sentence or two for each, your 'Information' initiatives below.

Q5 Did any of these involve an element of community action and if so, what?

Y/N, Comment

Q6 Since the launch of the National Litter Strategy in 2014 have you done any of the following (please tick all that apply):

Answer Choices	Responses
Increased the number or changed the type of bins in place	

Put in place schemes or incentives to encourage re-use of the kinds of items that are littered or flytipped (e.g. leasing, collections, repair services)	
Made other changes to service or product design to reduce littering or flytipping (e.g. increasing recyclability, reducing refuse collection associated waste)	
Changed existing operating plans/strategies with respect to littering or flytipping (including signing up to the Resource Efficiency pledge)	

Q7 Please briefly list and describe, with a sentence or two for each, your 'Infrastructure' initiatives below.

Q8 Are you responsible for the provision of litter bins outside your business or on land you are responsible for?

Answer Choices	Responses
Yes	
No	

Q9 How many bins do you provide?

Q10 Has the number of bins changed since the introduction of the National Litter Strategy?

Answer Choices	Responses
Increased a lot	
Increased a little	
Stayed the same	
Decreased a little	
Decreased a lot	

Q11 Of these, how many are recycle on the go bins?

Q12 Has the number of recycle on the go bins changed since the introduction of the National Litter Strategy?

Answer Choices	Responses
Increased a lot	
Increased a little	
Stayed the same	
Decreased a little	
Decreased a lot	

Q13 Has the scale of your litter and flytipping initiatives changed since the launch of the National Litter Strategy? (1 = decreased, 3 = unchanged, 5 = increased)

	1	2	3	4	5
Information					
Infrastructure					

Q14 How many people did your information campaigns reach?

Q15 If you organised local information campaigns, how many places participated?

Q16 If you organised clean-ups, how many were organised?

Q17 How many clean-up volunteers did you recruit?

Q18 If you organised changes to services, how many businesses or localities were involved?

Q19 If you implemented changes to products, how many of your product lines did this apply to?

Q20 How much resource was spent on your 'Information' and 'Infrastructure' initiatives as a whole?

Answer Choices	Responses
In financial terms (£)	
Staff time (FTE)	
Space for explanatory comments if necessary	

Q21 What is your perception of how well enforcement is coordinated between the different organisations involved (e.g. enforcement officers, police, courts etc.)

Answer Choices	Responses
Very Good	
Good	
Neither good nor bad	
Poor	
Very Poor	
Don't know	

Q22 Do you have enforcement powers?

Q23 Since the launch of the National Litter Strategy in 2014 have you done any of the following:

Answer Choices	Response
Sent staff on enforcement training	
Increased the number of staff that are able to carry out enforcement.	
Increased the amount of time spent on patrol	
Set targets for enforcement effort	
Set targets for improved fixed penalty notice payment rates	
Obtained improved fixed penalty notice payment rates	
Made more use of other powers such as Street Litter Control Notices, Litter Abatement Orders, licensing conditions involving litter control.	
Publicised enforcement incidents and consequences	

Q24 How has your spend on enforcement changed since the launch of the National Litter Strategy?

Answer Choices	Responses
Do not exercise enforcement powers	
Increased a lot	
Increased a little	
Maintained	
Decreased a little	
Decreased a lot	

Q25 What are the reasons for this?

Answer Choices	Responses
Availability of funds	
Perceived to be effective	
Perceived to be ineffective	
Other reason (please specify)	

Q26 How many Fixed Penalty Notices have you issued for Littering?

Answer Choices	Average Number	Total Number	Responses
Total number of FPNs			
How many were paid?			
How many were taken to court?			

Q27 How many Fixed Penalty Notices have you issued for Flytipping?

Answer Choices	Average Number	Total Number	Responses
Total number of FPNs			
How many were paid?			
How many were taken to court?			

Q28 How many Street Litter Control Notices have you issued?

Q29 How many Litter Abatement Orders have you issued?

Q30 Looking at all your initiatives together, to what extent have the actions your organisation has undertaken been influenced by the National Litter Strategy?

Answer Choices	Responses
Made no difference	
Improved actions taken a little	
Improved actions taken a lot	
Actions would not have been taken in the absence of support	

Q31 How, specifically? (Please select all that apply.)

Answer Choices	Responses
Strategy provided new ideas for action	
Strategy helped develop existing ideas	
Other reason (please explain)	

Q32 To what extent have the actions your organisation has undertaken, been influenced by Zero Waste Scotland?

Answer Choices	Responses
Made no difference	
Improved actions taken a little	
Improved actions taken a lot	
Actions would not have been taken in the absence of support	

Q33 How, specifically? (Please select all that apply.)

Answer Choices	Responses
Funding received from Zero Waste Scotland;	
Use of Zero Waste Scotland templates for operational strategy or action plan;	
Use of Zero Waste Scotland templates for communications;	
Zero Waste Scotland materials helped us develop existing ideas	
Zero Waste Scotland research	
Policy support	
Other reason (please explain)	

Q34 What is the main limiting factor on the scale of the actions you have been able to undertake?

Answer Choices	Responses
Main limiting factor	
Please list any other limiting factors here.	

Q35 What has been the main enabling factor with respect to the actions you have been able to undertake?

Answer Choices	Responses
Main enabling factor	
Please list any other enabling factors here	

Q36 Would you have still undertaken these actions in the absence of the Litter Strategy and delivery partners?

Answer Choices	Responses
Yes	
To a lesser extent	
No	

Q37 Are you doing any evaluation of the outcomes of these actions, and if so, how?

Q38 What is your perception of the success of your actions in terms of the impact on litter levels?

	Information	Infrastructure	Enforcement
Very Successful			
Somewhat Successful			
No Effect			
Counterproductive			
Don't know			
N/A - Do not have enforcement powers			

Q39 In terms of achievement of other aims of the interventions e.g. improved awareness, changed public behaviour, bin usage rates, improved management of litter, improved co-ordination of actions

	Information	Infrastructure	Enforcement
Very successful			
Somewhat successful			
No effect			
Counterproductive			
Don't know			
N/A - Do not have enforcement powers			

Q40 What outcomes are you referring to specifically? (Please select all that apply).

Answer Choices	Responses
Improved awareness	
Changed public behaviour	
Improved management of litter	
Improved co-ordination of actions	
Other (please explain)	

Q41 Do you clear land under your responsibility of litter?

Y/N

Q42 Has the amount of resource you have spent clearing litter and flytipping changed since the introduction of the National Litter Strategy? 1 = decreased, 3 = unchanged, 5 = increased

	1	2	3	4	5
Resource spent					

Q43 What are the reasons for the change? (Please select all that apply).

Answer Choices	Responses
Amount of litter changed	
Maintaining different standard of cleanliness	
Amount of budget available changed	
Change in efficiency	
There has been no change	
Other reason (please explain)	

Q44 Has the amount of rubbish you have been collecting changed since the introduction of the National Litter Strategy?

1 = decreased, 3 = unchanged, 5 = increased

	1	2	3	4	5	Total
Litter from the floor						
Flytipping						

Q45 How much resource is spent collecting litter and flytipping? (For the latest available annual period). Please fill in as many types of information as you can.

Answer Choices	Responses
In financial terms (£)	
Staff time (FTE)	
Hours	
Period this refers to - e.g. 2015, 2016 or 2015/16	

Q46 What do the figures provided in the previous questions refer to exactly? (e.g. total street cleansing budget; picking litter up of floor only; picking up litter and emptying bins)

Q47 Length

Answer Choices	Responses
Too long	
Acceptable	
Too short	

Q48 Clarity

	1	2	3	4	5

Q49 Was there anything else you wanted to share for which there was not an opportunity?

Q50 Any other comments?

