

Litter Innovation Fund (LIF)

Final Report

Further to your award it is important for us to evaluate how effective your research project has been and if the wider aims of the fund have been achieved.

The purpose of the Litter Innovation Fund is to support councils and communities in the development and evaluation of innovative approaches to tackling litter, which have the potential to be implemented more widely. The Litter Strategy also encourages people to use and contribute to online best-practice 'hubs', to help test and refine new innovations, share learning and extend the implementation of best-practice. It is therefore a condition of your award that you provide a full report of your project, to share in the knowledge and insights gained from your experiences and, if successful, to enable others to replicate it.

To assist these two aims, we require you to complete the following document. Section A sets out a template final report which is designed to provide the information needed to identify interventions with the potential for wider application, and to enable your project to be implemented by others if appropriate.. Please consult the monitoring and evaluation guidance for further help on answering any questions. You can also contact us at LitterFund@wrap.org.uk.

As set out in the guidance to applicants once we have signed off this report, successful applicants are expected to make the information from Section A of this template available online, to share best practice, enable others to replicate your project and learn from your experience. Information that you share with us may also be subject to requests for disclosure by Defra or MHCLG under the Freedom of Information Act or Environmental Information Regulations. It is likely therefore that information from this report will be released into the public domain. If there is any information contained in your report that you wish to remain confidential or regard as subject to copyright or commercially sensitive please clearly identify it. In particular, please do not include personal data of any individuals.

The completed form should be e-mailed to litterfund@wrap.org.uk

LIF Reference Code	ENG102-014	Date	23 November 2018
Organisation Name	Keep Britain Tidy	Completed by	Jane Hargreaves & Rose Tehan

Project Abstract

Please provide an overview of this report, up to 400 words (Grant funding amount received, Aims, Results and Scalability of the project)

Through the Litter Innovation Fund, Keep Britain Tidy received a grant of £9,952 to pilot a social norming intervention to reduce the amount of dog fouling on playing fields. Working with Ashfield District Council as the trial partner, two 'real-time' sports-style scoreboards were installed at playing fields in The Lawns. The scoreboards displayed the number of 'responsible dog owners' who had cleaned up after their dog in the park that day versus the number of 'irresponsible dog owners' who had *not* cleaned up after their dog that day.

A monitoring and evaluation framework was used to establish the effectiveness of the intervention:

1. Dog fouling monitoring – to identify the impacts on dog fouling in the park
2. Perceptions surveys with park users to assess the impact of the scoreboards on park user perceptions and claimed behaviours
3. An end-of-project interview with the partner to gather feedback and recommendations for future iterations of the trial.

The results show that the scoreboard intervention reduced dog fouling by 38%.

Overall, 75% of park visitors surveyed (71% of dog walkers and 79% of other visitors) said that they had noticed the scoreboards, indicating that were highly effective in drawing attention to the intervention. 64% of respondents (65% of dog walkers and 63% of non-dog walkers) correctly identified that the purposes of the scoreboards was to discourage dog fouling. The social norming message appears to have been effective, with 72% agreeing that the scoreboards made them think that most dog walkers clean up after their dog. The majority of respondents felt that the scoreboards would be effective in encouraging dog walker to pick up (62%), resulting in less dog waste on the ground (58%).

The partner council was very positive about the intervention. The scoreboards were deemed to be a minimalist and effective solution in reducing dog

fouling.

Keep Britain Tidy now plans to seek funding to enable us to trial the concept in a number of other parks/playing fields suffering from dog fouling, particularly where there is a known problem affecting the use of the playing fields by local sports teams. Depending upon the results, we would then look at how the scoreboards intervention could be packaged and scaled, making it available to local authorities and other land managers across England. Due to the low cost and practical nature of this intervention, we believe that if future trials have similar success to this one, then this intervention has great potential for scale.

Final Report

What did you want to achieve?

Please set out the project context, purpose and aims. This will have been laid out in your original application. For sharing purposes please include this, and any clarification needed

- What specific problem(s)/area(s) did your intervention target, and why did you choose it? Please include a description of the local context.
- What did your intervention aim to achieve? Set out the intended outcomes and impacts.

Background

Dog waste remains a key litter issue across the country, with dog fouling being one of the most common causes of complaints from residents to local councils¹. A 2017 national survey by Dogs Trust and Keep Britain Tidy found that almost half (47%) of UK adults think dog fouling is one of the most annoying things they experience in public places. Dog fouling not only poses a risk to other dogs through the spreading of viruses, but can also pose health risks to humans.

Anecdotal evidence suggests that dog fouling on playing fields is an issue, with local football groups finding their games are disrupted by instances of dog fouling. We know that green spaces support physical health and wellbeing, and healthier lifestyles, and with nearly a third of children aged 2 to 15 being classified as overweight or obese², ensuring green spaces can be utilised is imperative.

This project piloted a social norming intervention to reduce the amount of dog fouling on playing fields in parks and green spaces. Two 'real-time' sports-style scoreboards were installed at playing fields in a large park, The Lawns, in Ashfield. The scoreboards displayed the number of 'responsible dog owners who had cleaned up after their dog in the park that day versus the number of 'irresponsible dog owners' who had *not* cleaned up after their dog that day.

This intervention used a social norming approach by highlighting that the majority of people in the park do the right thing by clearing up after their dog. The idea that people are heavily influenced by the behaviours of others has been demonstrated a number of times in research in the field of behavioural economics³. Keep Britain Tidy's own experiment, *We're Watching You*⁴, successfully used images of 'watching eyes' on posters at dog fouling hotspots based on the insight that dog walkers know they should pick up, but some tend not to when they aren't being watched. The findings from this experiment suggested that social influences can be a driver of dog fouling behaviours, and as such we wanted to test a new approach to tackle the issue, using social norming and positive reinforcement messaging.

¹ *Keeping an eye on it: a social experiment to combat dog fouling*, Keep Britain Tidy, 2014; *The Little Book of Litter: An Essential Guide*, Keep Britain Tidy, 2012.

² *Childhood Obesity: A Plan for Action*, UK Government, 2017, accessed 15 November 2018, <<https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action>>.

³ *The Little Book of Litter: An Essential Guide*, Keep Britain Tidy, 2012.

⁴ *Keeping an eye on it: a social experiment to combat dog fouling*, Keep Britain Tidy, 2014.

The aim of the scoreboards intervention was to reduce incidents of dog-fouling in parks with playing fields, using a dynamic social norming messaging approach.

The pilot of the intervention had three objectives, designed to understand the extent to which the intervention achieved its aim. These were to identify:

4. the impacts of the playing field scoreboards on dog fouling in the park
5. the influence of the playing field scoreboards on park user perceptions and claimed behaviours
6. learnings to improve the impact, effectiveness, appropriateness and efficiency of the approach.

What was your project plan?

- Describe the project plan – what you intended to do, including details of intervention site(s), timelines, use of resources (e.g. materials) and involvement of people and other organisations. Include details of a control or comparison site, if applicable.
- How did you expect your intervention to achieve its aims and intended impacts (see the ‘intervention pathway’ diagram in the Monitoring & Evaluation guidance)

Keep Britain Tidy partnered with Ashfield District Council to pilot the intervention at one park – The Lawns, Sutton-in-Ashfield. The park has a number of open fields and a football pitch, alongside a variety of other facilities, such as a café, children’s play area, an outdoor gym, a skate park and tennis courts. The park is situated in a residential area and is popular amongst families, sports teams and dog walkers. This park was selected for the experiment due to a considerable dog fouling issue at the site, despite 16 litter bins, as identified by Ashfield District Council.

Timelines

The pilot was designed to be delivered in four phases:

- Project set-up
- Design and production of intervention; baseline monitoring
- Implementation of the intervention; intervention monitoring
- Data analysis and reporting

Pilot monitoring and evaluation

The pilot monitoring was conducted in two phases: a baseline monitoring phase (one month before the installation of the playing field scoreboards) and an intervention monitoring phase (one month after installation).

The monitoring and evaluation of the pilot can be summarised as follows (further details are provided under ‘How did you monitor your intervention?’ below):

Pilot objective	Baseline monitoring phase	Intervention monitoring phase	Rationale
1. To identify the impacts of the playing field scoreboards on dog fouling in the park	Count of all incidents of dog fouling in the park, conducted three times per week for four weeks.	Count of all incidents of dog fouling in the park, conducted three times per week for four weeks.	By comparing counts from before to after the installation of the scoreboards, we were able to gather a measure of impact.
2. To identify the influence of the playing field scoreboards on park user perceptions and claimed behaviours	-	Face-to-face perceptions surveys with 163 park users at the site.	Respondents were asked about their awareness and perceptions of the intervention, and its influence on their own and other people's behaviour.
3. To identify learnings to improve the impact, effectiveness, appropriateness and efficiency of the approach.	-	Semi-structured telephone interview with the project manager at Ashfield District Council to understand from their perspective what worked well, what could be improved and their observations of its impacts and effectiveness.	The interview provided insight into how the intervention worked practically and informed our recommendations for improving the intervention for future iterations.

Triangulating the three sets of data we collected (rates of dog fouling, public perceptions and partner interview) provides detailed evidence of the effectiveness of the scoreboards. For example, if dog fouling went down significantly during the implementation of the intervention but awareness of the intervention was very low amongst park users surveyed, then the reduction in dog fouling may have been driven by something other than the scoreboards intervention.

Roles, responsibilities and resources

In this pilot, Keep Britain Tidy was responsible for:

- Overall project management
- Design of the overall pilot methodology and data collection guidelines and tools (dog fouling monitoring form, survey questionnaire, partner interview questionnaire)
- Development of the intervention concept and scoreboards design
- Briefing Ashfield District Council
- The partner interview
- Analysis, evaluation and reporting

Ashfield District Council was responsible for:

- selecting a park for the pilot
- informing anyone internally or externally who needed to know about the pilot (e.g. park managers, customer service teams, etc.)
- installing the scoreboards
- monitoring dog fouling for the duration of the pilot (counting all incidents of dog fouling in the park, three times per week, during each monitoring phase)
- updating the scoreboard signage to reflect the number of responsible versus irresponsible dog walkers on a daily basis, based on the number of dog fouling incidents found in the park.

Keep Britain Tidy engaged and managed two suppliers for the intervention:

- A design agency, which designed and produced the scoreboards
- A fieldwork agency which conducted the park users surveys using a methodology and questionnaire provided by Keep Britain Tidy

The above elements of the project were all resourced by staff time funded by the Litter Innovation Fund grant.

Communications

To avoid influencing the results of the pilot, Keep Britain Tidy and Ashfield District Council did not promote the scoreboards at any point during the pilot (for example, via social media, newsletter articles or other communications).

What was innovative about this project?

- Describe how your project differs from existing approaches, or extends/develops previous research.

The playing field scoreboard intervention uses social norm theory and positive reinforcement to encourage dog walkers to pick up after their dog. While this approach has previously been used successfully to tackle dog fouling (one version of Keep Britain Tidy's *We're Watching You* posters displays the message: "9 out of 10 dog owners clean up after their dog, are you the one who doesn't?"⁵), to our knowledge, the approach has not been applied using dynamic scoreboards that can be updated frequently, nor specifically to target the issue of dog fouling in sports playing fields.

The most innovative element of the dynamic scoreboards approach is that they are frequently updated with the latest 'results' to provide 'real time' feedback on people's behaviours in the park. Providing in-situ feedback to people on behaviours is one of the most effective ways to influence behaviour change. Often there is no feedback loop for dog walkers who don't pick up unless they are seen by someone and challenged on their behaviour or receive a fine from a local authority. The dynamic element of the scoreboards also adds weight to the social norming message by demonstrating that those who don't pick up are in the minority – i.e. the scores are based on actual behaviours within that specific park. Finally, the dynamic element of scoreboard implies that the issue of dog fouling in the park has been noticed and is being actively monitored. This may increase the perceived threat of a dog walker getting caught if they fail to pick up.

The scoreboard itself was designed in bright colours and placed in prominent locations within the park to increase the salience of the message. This has the added benefit of communicating to park users in a highly visual way that dog fouling is unacceptable to the community and that park managers are taking action to address it.

⁵ *Keeping an eye on it: a social experiment to combat dog fouling*, Keep Britain Tidy, 2014.

What did you do?

- How did you implement your project in reality? Please describe what happened during your project.
- Did anything change from your original plan, and if so, why? Did you encounter any problems or unexpected issues that might have affected your results?
- How did people react during the project?

To enable others to replicate your project, please include images of any key signage, posters, graphics etc. that you used, as well as photographs, maps or other essential information to show how interventions were deployed. Documents can be provided as appendices if appropriate. The information you provide should not be subject to copyright and should be able to be shared freely

Overall, the project was delivered as planned, however some additional work was required to identify the number of 'responsible' versus 'irresponsible' dog walkers to inform the scoreboards, as described below.

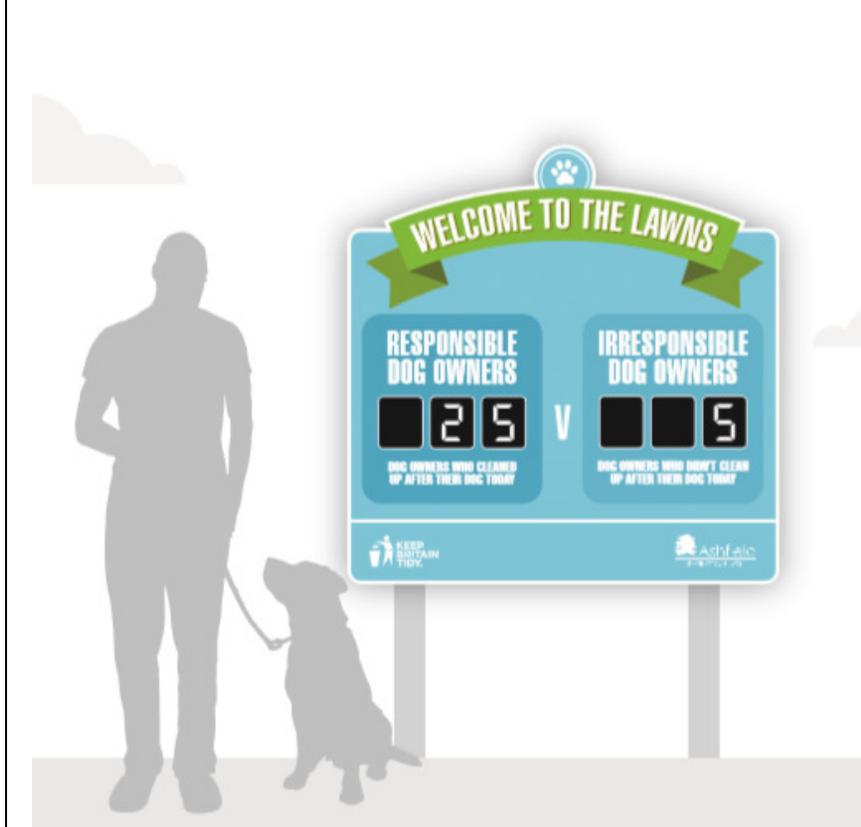
Scoreboard design

Keep Britain Tidy worked with a design agency to develop and produce the scoreboards. This was designed to look similar to a sports scoreboard that you would typically see at sporting events, and used bright, eye-catching colours to ensure that it would stand out in the context of the park. The scoreboards had interchangeable numbers, which could be easily changed by park staff to show the latest 'responsible' versus 'irresponsible' dog walker scores. The material used for the scoreboard was 3mm Dibond, with anti-graffiti laminate (1498mm (w) x 1522mm (h)), mounted on 2 grey plastic coated traffic posts, with magnetic numbers also in the Dibond material.

The scoreboards were installed by the partner council. For the purposes of the pilot, the scoreboard posts were installed directly into the grass, rather than set in concrete.

The two scoreboard locations were selected by Ashfield District Council because they were prominent areas with high footfall and near to dog fouling hotspots within the park.

A mock-up of the scoreboard by design agency Carbon Creative



In-situ at The Lawns



Site selection, preparation and dog waste monitoring

Ashfield District Council selected a park which it felt was appropriate for the pilot because it had a range of sporting and leisure facilities, high footfall and a considerable dog fouling problem.

Keep Britain Tidy held a briefing session with Ashfield District Council to agree the delivery plan, timelines and monitoring for the pilot. Keep Britain Tidy provided Ashfield Council with guidelines for conducting the dog waste monitoring, alongside a tally form to use for counting and recording incidents of dog waste while onsite and an Excel spreadsheet for recording this data once back in the office.

The baseline monitoring commenced while the scoreboards were being design and produced. Before the first day of the baseline monitoring, Ashfield District Council cleansed the park to a Grade A⁶ standard ensure that it was free from dog waste. The Council then counted and recorded all incidents of dog fouling throughout the park on three days per week for four weeks to produce the baseline dataset. Following the installation of the scoreboards, Ashfield District Council again cleansed the park to a Grade A standard to ensure that it was free from dog waste and conducted a further four weeks of dog foul counts to collect the intervention monitoring data. The Council conducted the dog fouling counts on the same days of the week (Mondays, Wednesdays and Saturdays) throughout the baseline and intervention monitoring periods to ensure that the interval between each count remained consistent. This was important for capturing the accumulation of dog fouls between counts in a systematic manner to ensure that the overall results were accurate and robust.

Calculating the number of ‘responsible’ and ‘irresponsible’ dog walkers in the park

In order to provide the ‘responsible’ versus ‘irresponsible’ scores for the scoreboard, we first needed to understand how many dog walkers use the park to establish a baseline for the scoring. Unfortunately we did not have this information easily to hand. Therefore, we enlisted our partner market research agency to conduct observations at the park to count the number of dog walkers visiting the park over two full days: one week day and one weekend day. From this, we were able to estimate that on a typical weekday, 273 dog walkers visit the park, while on a typical weekend day, 176 dog walkers visit the park. These estimates are based on a very small sample size due to budget limitations, but gave us enough information for the purposes of the pilot (which tested the concept of the dynamic social norming messaging, rather than the accuracy of the scores).

⁶ As defined by the NI195 system of grading – see http://www2.keepbritaintidy.org/ImgLibrary/NI195%20manual_3715.pdf.

The numbers displayed on the scoreboards each day for the duration of the intervention were determined by the estimated number of dog walkers per day (depending whether it was a weekday or weekend day), minus the number of instances of dog fouling counted that day. For example, if 36 incidents of dog fouling were found in the park on a weekday (when we estimated that a total 273 dog walkers visited the park), then the score for 'irresponsible dog walkers' would be 36, while the score for 'responsible dog walkers' would be 237. ($273 - 36 = 237$). Ashfield District Council was responsible for counting the instances of dog fouling each day to make these calculations and update the scoreboards.

Park user perceptions survey

During the intervention phase of the pilot, our partner market research agency conducted a face-to-face survey with 163 members of the public in the park across six different days. The approach and results are discussed below.

Telephone interview

At the end of the pilot, Keep Britain Tidy conducted a semi-structured telephone interview with Ashfield District Council to gather feedback on the intervention from a delivery perspective. The findings from this interview are discussed below.

Analysis and evaluation

Keep Britain Tidy analysed the data from the dog foul counts, park user survey and telephone interview for pilot evaluation using Excel and Q Research software.

How did you monitor your intervention?

Indicators:

- What indicators did you set out to monitor, in order to help understand if your project achieved its intended outcomes and aims?
- Were you able to establish a baseline, i.e. by collecting information on the original state of your indicators, before your intervention began?
- What were your intended indicators of success?

Our monitoring and evaluation framework was designed around the aim and objectives of the intervention pilot. The aim of the scoreboards intervention was to reduce incidents of dog fouling in parks with playing fields using a dynamic social norming messaging approach.

The pilot of the intervention had three objectives, designed to understand the extent to which the intervention achieved its aim. The monitoring conducted to achieve each objective is described below.

Pilot Objective 1: To identify the impacts of the playing field scoreboards on dog fouling in the park

Using guidelines and forms provided by Keep Britain Tidy, Ashfield District Council counted all incidents of dog fouling in the park over two phases: a four week baseline monitoring phase, prior to the installation of the scoreboards, and a four week intervention monitoring phase, conducted while the scoreboards were in place in the park. As noted under 'What did you do?' above, before each monitoring phase commenced, Ashfield District Council cleansed the park to a Grade A⁷ standard to ensure that the site was clear of dog waste. The purpose of this was to ensure that the monitoring did not record incidents of dog fouling that occurred outside each monitoring period so that the two phases (baseline and intervention) could be compared accurately.

The partner counted both bagged and un-bagged instances of dog fouling, and to ensure the monitoring was robust, the partner counted instances on the same three days each week, for the full eight weeks of the pilot. The partner also counted instances on the same walking route each time, to ensure the monitoring phase was consistent. The partner used a tally form provided by Keep Britain Tidy to track the number of instances found, and

⁷ As defined by the NI195 system of grading – see http://www2.keepbritaintidy.org/ImgLibrary/NI195%20manual_3715.pdf.

input the data into a spreadsheet.

Pilot Objective 2: To identify the influence of the playing field scoreboards on park user perceptions and claimed behaviours

During the intervention phase of the pilot, our partner market research agency conducted a face-to-face survey with 163 members of the public in the park across six different days. Those surveyed were asked whether they had seen the scoreboards in the park, what they thought the purpose of the scoreboards was, their perceptions on the level of dog fouling in the park and finally whether they believed the scoreboards would be effective in reducing dog fouling at the site.

Pilot Objective 3: To identify learnings to improve the impact, effectiveness, appropriateness and efficiency of the approach

At the end of the pilot, Keep Britain Tidy held a short, semi-structured telephone interview with the partner to establish what they feel worked well about the pilot, what could be improved and their interpretation of the results. During the interview, we also asked the partner about their perception of the scalability of the intervention, and whether they plan to keep the scoreboards in place.

Installing the scoreboards

Firstly, the partner cleansed the site to a Grade A standard to ensure all existing instances of dog fouling would not be recorded in the monitoring phases of the pilot. The partner then counted instances of dog fouling at the site for four weeks to establish the baseline level of dog fouling before the intervention was put in place. After the four weeks, the site was then cleansed again to a Grade A standard and the scoreboards were installed. A further four weeks of monitoring were conducted with the intervention in place.

The scoreboards were installed at hotspot locations; at the entrance of the park and near the tennis courts within the park situated opposite the park café, these areas have a high footfall, particularly with dog walkers. The scoreboards were installed by the partner and were checked to ensure they were safe and secure.

For the intervention to be deemed successful, it was intended that the intervention would a) show a reduction in dog fouling, and b) show positive attitudes towards the intervention, for example, a high level of awareness of the intervention.

Other influences and understanding causality

- How did you try to understand if any changes that occurred in your indicators were caused by your project, rather than other external factors?
- Were you able to identify and monitor a comparison or 'control' site?
- Describe the context and what happened during your intervention e.g. description of the weather, any events, any other campaigns (local or national), etc.
- What, if any, data/information did you record on external factors that may have influenced your data?
- How did you attempt to mitigate against them?

During the briefing session, the partner was informed of external factors to consider when undertaking the monitoring that may impact the results, such as events at the park, and weather conditions that may either increase or decrease the number of visitors the park receives. The partner confirmed that there were no planned events during the duration of the pilot.

The partner noted that there was heavier rainfall during the intervention phase of the pilot, which may have reduced the number of visitors to the site, and in turn potentially reduced the number of dog fouling instances recorded. Additionally, there is a possibility that rainfall may have washed some of the instances of dog fouling away.

Triangulating the three sets of data we collected (rates of dog fouling, public perceptions and partner interview) provides detailed evidence of the effectiveness of the scoreboard intervention. For example, if dog fouling went down significantly during the implementation of the intervention but awareness of the intervention was very low amongst park users surveyed, then the reduction in dog fouling may have been driven by something other than the scoreboards intervention.

Other potential influences on dog fouling at the site were able to be recorded at the point that the dog fouling counts were recorded, allowing us to pick up any other factors that the partner felt might have influenced that day's dog fouling counts. This issue was discussed at an end-of-project interview with the delivery partner. Here, the partner discussed their interpretation of the dog fouling monitoring result, and whether there were any factors which may have (positively or negatively) influenced the levels at the site during the trial. The partner felt that the dog fouling monitoring process accurately captured the amounts of dog fouling in the park.

As this project used a baseline phase, prior to the intervention being implemented, we suggest a control site was not necessary and therefore this method was not used. We suggest the baseline used for this trial gave a reliable comparison between dog fouling levels in the two phases.

METHODS: Data sources and collection

- How did you source or collect the data/information to measure the indicators above?
- For each data source, set out at what points during the project you collected data (and why), and at what locations. Include information on the data you collected before your project began.
- How did you make sure data collection was consistent?

- *Dog fouling at the target site*

Dog fouling counts to measure this indicator was collected by Ashfield Council. Keep Britain Tidy provided the council with dog fouling monitoring guidelines, data collection forms (tally chart) for use during the counts, and a spreadsheet for inputting data.

Data was collected for a total of eight weeks (four weeks baseline, four weeks intervention), on the same three days each week. After the first weeks' worth of data had been collected, the partner sent the data to Keep Britain Tidy for quality checking, to ensure data was being captured and recorded correctly. The partner took the same walking route each time whilst counting instances of dog fouling, to ensure the data was consistent.

- *Perceptions of members of the public at the target site*

Perceptions and attitudinal data was collected through 163 perceptions surveys with site users. This collected awareness of and feedback on the scoreboard intervention and the impact on claimed behaviour. Surveys took 5 minutes to complete, and were carried out by an experienced market research agency, adhering to the Market Research Society's Code of Conduct, ensuring data collection remained consistent throughout.

OUTCOME: Results and Data Analysis

Please record all the information derived from the project, using appendices if appropriate. As set out in the Monitoring and Evaluation Guidance, please include any assumptions made or qualifications needed.

Dog fouling results (Pilot Objective 1: To identify the impacts of the playing field scoreboards on dog fouling in the park)

Overall, incidents of dog fouling reduced by 38% in the month following the installation of the scoreboards, as shown below. This result suggests that the intervention has had considerable impact on dog fouling in the park.

	Total count over monitoring period	Average count per day during monitoring period	Average count per week during monitoring period
Baseline monitoring	471	39.3	157.0
Intervention monitoring	292	24.3	97.3
Percentage reduction in dog fouling (from baseline to intervention phase)	38%	38%	38%

Public perception surveys (Pilot Objective 2: To identify the influence of the playing field scoreboards on park user perceptions and claimed behaviours)

During the intervention phase of the pilot, 163 park users were interviewed during their visit. Of those surveyed, 51% were walking a dog, and 49% were general park users.

Overall, 75% of park visitors surveyed (71% of dog walkers and 79% of other visitors) said that they had noticed the scoreboards, indicating that were highly effective in drawing attention to the intervention.

Table 1: Proportion of respondents who said that they had noticed the scoreboards in the park

	Yes	No	Don't know
Dog walker	71%	28%	1%
Non-dog walker	79%	20%	1%
Overall	75%	24%	1%

Base: Dog walker = 83; Non-dog walker = 80; Overall = 163.

Respondents were asked, unprompted, what they thought the purposes of the scoreboards was. As shown below, 64% of respondents (65% of dog walkers and 63% of non-dog walkers) correctly identified that the purposes of the scoreboards was to discourage dog fouling in the park. This indicates that the

reductions in dog fouling observed through the dog waste monitoring were a result of the scoreboards intervention, rather than by chance.

Table 2: Perceptions of the purpose of the scoreboards (unprompted)

	Dog walker	Non-dog walker	Overall
Reduce dog fouling generally within this park by getting dog walkers to clean up after their dog	63%	65%	64%
Highlight that more dog owners do the right thing and clean up after their dog than those who do not clean up after their dog	7%	13%	10%
Highlight that not cleaning up after your dog is irresponsible	8%	8%	8%
To show those who don't clean up after their dog that levels of dog poo in the park is being monitored	6%	8%	7%
Don't know	2%	1%	2%
Other	19%	10%	15%

Base: Dog walker = 83; Non-dog walker = 80; Overall = 163.

Respondents were asked whether rates dog fouling in the park had increased or decreased over the previous month (i.e. the intervention phase, with the scoreboards in place). Overall, the majority (64%) of respondents felt that rates of dog fouling had stayed the same, indicating that the signage did not have an impact on perceptions of the extent of the issue on the ground.

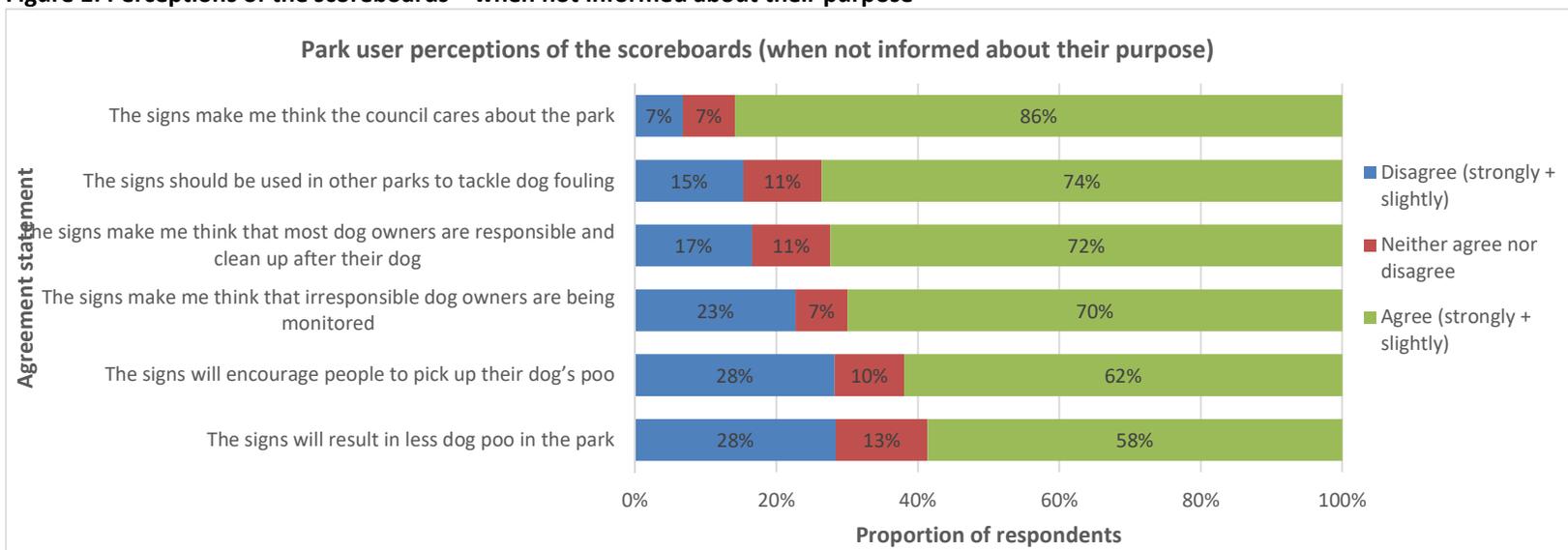
Table 3: Perceptions of the effectiveness of the scoreboards in reducing rates of dog fouling in the park

	Decreased	Stayed the same	Increased	Don't know – I do not visit the park frequently enough to say
Dog walker	8%	70%	8%	13%
Non dog-walker	15%	59%	4%	23%
Overall	12%	64%	6%	18%

Base: Dog walker = 83; Non-dog walker = 80; Overall = 163.

Without explaining the purpose of the intervention, respondents were asked about the extent to which they agreed with a series of statements about the impacts and effectiveness of the scoreboards. Overall, respondents were very positive about the initiative, with the majority agreeing that they indicated that the council cares about the park (86%) and that the signs should be used in other parks to tackle dog fouling (74%). The social norming message appears to have been effective, with 72% agreeing that the scoreboards made them think that most dog walkers are responsible and clean up after their dog. Additionally, 70% of respondents agreed that the scoreboards made them think that irresponsible dog owners were being monitored. The majority of respondents felt that the scoreboards would be effective in encouraging dog walker to pick up (62%), resulting in less dog waste on the ground (58%).

Figure 1: Perceptions of the scoreboards – when not informed about their purpose

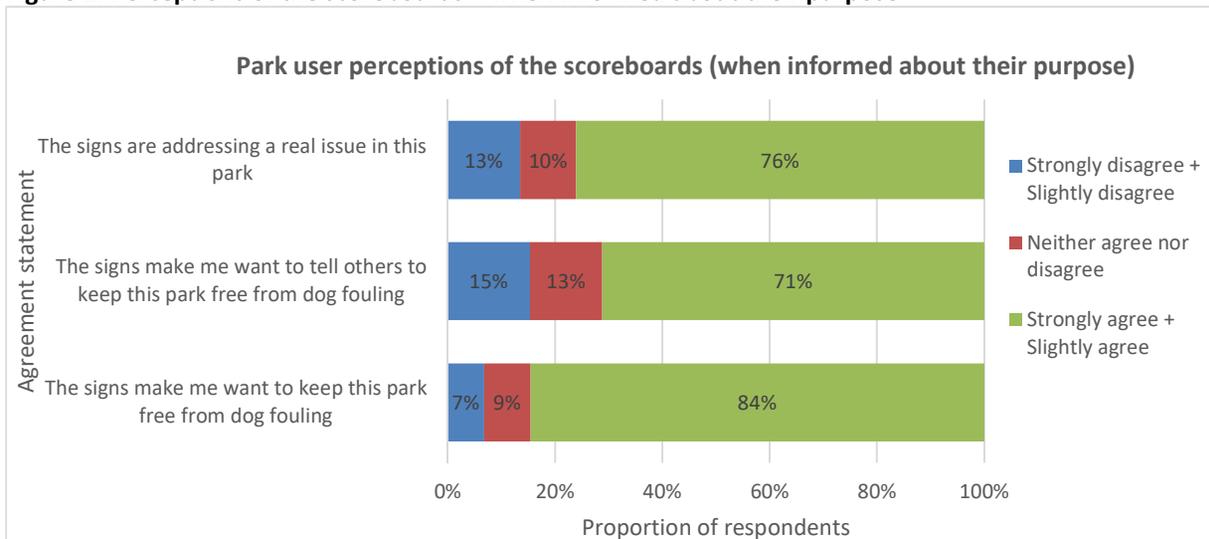


Base = 163 respondents.

The interviewers then explained the purpose of the scoreboards intervention to respondents⁸ and asked respondents to answer a number of questions about the scoreboards now that they were aware of their purposes. The results are shown below. Overall, respondents were overwhelmingly positive about the purpose and application of the scoreboards.

⁸ Specifically, interviewers told respondents: "This sign aims to reduce dog fouling in this park. One of the key reasons for this is that local sports groups need to pick up the dog poo from playing fields before they can play. Knowing the purpose of the signs, please can you tell me how strongly you agree or disagree with each of the following statements?"

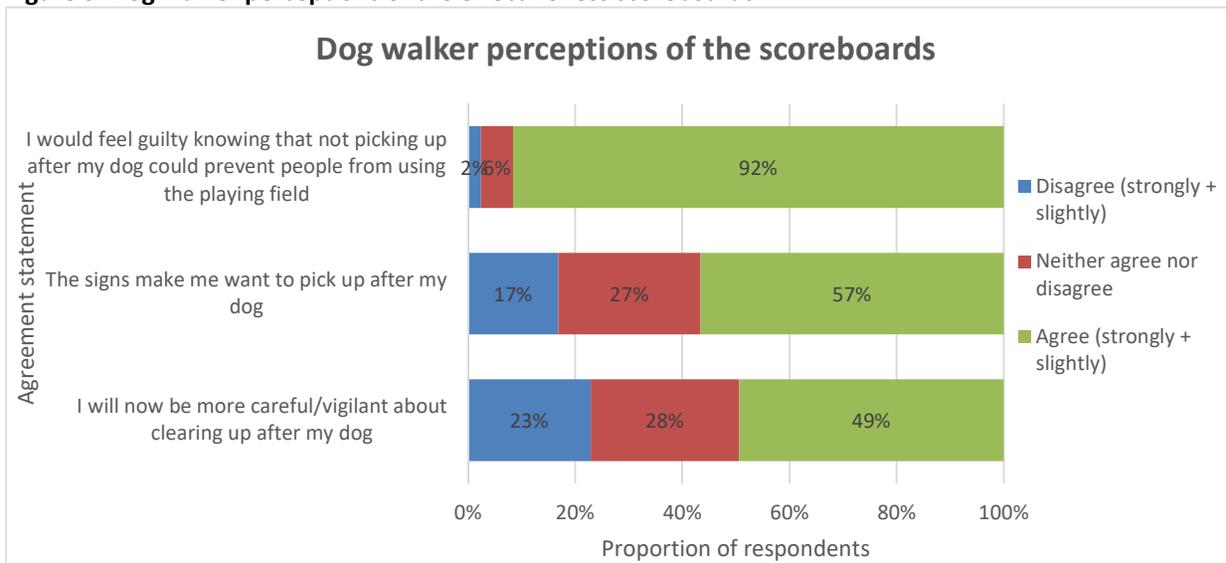
Figure 2: Perceptions of the scoreboards – when informed about their purpose



Base = 163 respondents.

The dog walker respondents were asked about the extent to which they agreed that the scoreboards would be effective in influencing their own behaviour. The overwhelming majority of respondents (92%) indicated that they would feel guilty if they did not pick up after their dog and this prevented others from using a playing field. However, smaller proportions of respondents felt that the scoreboards would influence their own behaviour, presumably because they already tended to clean up after their dog (as indicated by the relatively high proportions of respondents who neither agreed nor disagreed with the relevant statements).

Figure 3: Dog walker perceptions of the effectiveness scoreboards



Base = 83 respondents.

Overall, the above results triangulated with the reduction in rates of dog fouling observed through the dog waste monitoring indicate that the intervention has been effective in encouraging dog walker to clean up after their dog.

Pilot Objective 3: To identify learnings to improve the impact, effectiveness, appropriateness and efficiency of the approach

A short, semi-structured interview with the partner was conducted in order to understand what worked well about the project, what could be improved, and their interpretation of the impact of the intervention on levels of dog fouling.

Overall, the partner felt that the scoreboards were a minimalist and effective solution in reducing dog fouling at the site, and commented that they had seen a notable reduction across the site, and particularly at the known dog fouling hot spots.

“There was definitely a notable reduction in dog poo. One of the key hot spots near the tennis courts had a huge reduction.”

The partner felt that the scoreboards were vibrant, noticeable and that the purpose was clear, and that they created awareness of dog fouling in general.

“It was a clear message, with a clear purpose.”

The partner received positive feedback from colleagues who used the park; they thought the scoreboards were a good idea to tackle dog fouling and that the message was clear.

“We have had people at the council saying it was a good idea.”

The partner found the monitoring of dog fouling to be incredibly easy as part of their existing cleansing routine.

“Counting dog poo was straightforward. I used a click counter to make it easier, and recorded it on my phone. Counting every day (to update the scoreboard) and monitoring three days a week was ideal.”

Feedback on the intervention was very positive. It was noted that the intervention had good potential for scale.

“It is very scalable. I recommend that the sign goes near a hotspot. Changing the numbers every day is do-able, operatives can do it as part of daily cleansing routine.”

The partner was asked about the legacy of the existing scoreboards. Given that they are well regarded and have had such a positive impact on dog fouling, the partner would be interested in trialling the idea in other locations.

All three elements of the monitoring and evaluation framework indicate success in this trial.

Impacts and Evaluation - What did you learn?

- What were the outcomes against your indicators, and were they as expected? Please provide details of immediate, intermediate and long term impacts. Can you demonstrate that the outcomes would have been different if intervention had not taken place? Did any negative consequences arise? Which interventions, or aspects of your intervention, were particularly effective, and why?
- If outcomes/impacts were not as expected, it's useful to know why. Did you identify what factor(s) contributed to the project not working as intended?

Overall, the results suggest that the intervention was effective in reducing dog fouling in the park. The evaluation findings indicate that the dynamic social norming messaging and the salience of the scoreboards were key success factors in the design of the intervention. Feedback from Ashfield District Council was that the intervention is practical to deliver and maintain, which indicates that this relatively low-cost intervention could be easily scaled across other areas for broader impact. However, further testing of the intervention is recommended in other areas prior to scaling due to the small sample size used in the pilot. Furthermore, we recommend that future pilots tested the longer term monitoring to assess the longevity of its impacts and effectiveness. For example, monitoring of the intervention could be repeated six months and one year from installation.

What would you do differently?

- What, if anything, would you do differently if you ran a similar project again?
- If outcomes/impacts were not as expected, do you think the factor(s) you identified as contributing to the project not working as intended could be overcome were the project repeated, and if so, how?
- What advice would you give to anyone else running this type of intervention?

Taking all learnings into account, Keep Britain Tidy make the following recommendations for any future iterations or scaling of this intervention:

- The personalisation of the scoreboards to the individual park where they are being used, should be an interchangeable feature, which would allow land managers to use the scoreboards at other parks/playing fields in their area, rather than needing a bespoke scoreboard for each park.
- Other than the park name becoming an interchangeable feature, no other amendments to the design of the scoreboards are required.
- Ultimately, it is recommended this intervention is re-trialled on a larger number / range of sites to build on the existing evidence base and ensure a

more robust sample before scaling.

- Future pilots should include longer term monitoring to assess the longevity of its impacts and effectiveness. For example, monitoring of the intervention could be repeated six months and one year from installation.

What did it cost

Please provide details of your full project costs and contributions in kind (regardless of source), to enable others to understand the funding required to replicate your intervention. This could also include resource cost. Remember to include the costs of monitoring and evaluation. Be specific.

All project costs are outlined below.

20 days of staff time for:

Set up, project management and quality assurance

Developing intervention, scoping out design of intervention and liaising with design agency

Developing monitoring tools (dog fouling monitoring guidance, perception survey and partner interview)

Partner recruitment and briefing session

Data analysis, evaluation and reporting

£4920

Direct costs for:

Dog walker counts

Design and production of the scoreboards

Perception surveys

£4,600 (inc. VAT where applicable)

5.5 days of local authority support – match funding (project planning, 8 weeks dog fouling monitoring, partner interview, data entry, final checks)

£1,250

Next Steps

Based on what you have learned:

- How are you planning to build on the activity yourselves?
- If the project was successful, how could/should this intervention be replicated and/or scaled up by you or others?
- If the project was not successful, how might it be changed to potentially deliver better results?
- What further research or refinement is needed?

As a highly successful pilot, Keep Britain Tidy plans to scale the intervention nationally through its network of Local Authorities and land managers. The scaled project aims to test the intervention further. If successful, the intervention will be sold as a ready-to buy package for local authorities and land managers as a tried and tested dog fouling solution.

To ensure the scoreboards can be used in other locations, we would recommend that the signs are designed to not have the location on, or interchangeable, Keep Britain Tidy now plans to seek funding to further add to this evidence base, by testing the scoreboard intervention in a larger number of parks / playing fields. We would work with our design agency to update the design to include the park name as an interchangeable feature. This intervention could then be trialled in a number of other parks/playing fields suffering from dog fouling, particularly where there is a known problem affecting the use of the playing fields by local sports teams.

Depending upon the results of a future trial, Keep Britain Tidy would then look at how the scoreboards intervention could be packaged and scaled, making it available to local authorities and other land managers across England. Due to the low cost and practical nature of this intervention, we believe that if future trials have similar success to this one, then this intervention has great potential for scale.

Is there any other information you wish to share ?

e.g. Any media regarding the project, correspondence with those affected by intervention, or anything else of relevance.

As this was a nudge intervention, aiming to influence the behaviour of irresponsible dog walkers, we did not undertake any PR and communications to support the project, as we did not want this to influence the result in any way. We wanted to make conclusions about the behavioural intervention in isolation. In the event of a larger scale trial across more sites, Keep Britain Tidy would then look to publish these results through our Network and other channels, with a view to scaling the intervention nationally.

Feedback to us

Your feedback is important to us. We would be grateful for any comments on (or recommendations for future) Litter Innovation Fund management and materials:

Reflecting on the whole process, we can provide the following feedback and hope it's useful:

- The process seems very formal and bureaucratic. We appreciate that there will be certain requirements and stipulations for grant recipients, project delivery and documentation of how the grant was used, etc. There was lots of paperwork to read, which felt daunting and overwhelming. It contained lots of legal/contractual jargon which made it quite difficult and time consuming to read – which seemed at odds with the size of grant being delivered.
- We felt that the budgets available within the fund were quite small which significantly limited what we could deliver and achieve. Perhaps awarding fewer projects with larger budgets might generate more useful insights and provide greater opportunities to get more successful projects scaled quicker.
- The final report template felt quite repetitive, and for the type of projects that we were using it for, we were often documenting the same kinds of information in the different boxes/sections. Similarly, some of the information required in this form was also felt to duplicate information we submitted at the beginning of this process (e.g. project plan). We appreciate that there may be good reasons for this and so perhaps this might be unavoidable.
- In terms of using the insights generated from all the projects awarded by the fund, perhaps a two page case study of each project would be beneficial and more useful for dissemination than the full detail outlined in this form.
- The team at WRAP were on hand and were helpful and a good support.