

# Monitoring & Evaluation Guidance for Local Pilots

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## Glossary of terms

**Baseline** – the minimum or starting point used for comparisons.

**Intervention** – the intentional act of involving, improving or inserting something in order to improve a situation. A new project, campaign, infrastructure or messaging activity designed with the intent to address a problem.

**Evaluation** – the analysis of the effectiveness of an activity and involves making a judgement about progress and impact.

**LEQ** – Local Environment Quality.

**LEAMS** – Local Environment Audit Management System, a methodology commonly used by Keep Wales Tidy and Local authorities to measure the presence of litter on streets.

**Monitoring** – the systematic, regular collection and analysis of information to identify and measure change as an intervention progresses.

**Quantitative** – relating to, measuring, or measured by the quantity of something rather than its quality e.g.: number of complaints or incidents.

**Qualitative** – relating to, measuring, or measured by the quality of something rather than its quantity e.g.: subjective experience and self-reported behaviours.

**SQI** – Street Quality Indicator, another methodology for taking into account litter and other street quality issues.

**Triangulation** – the consideration of a number of collected data sources to create a fuller and more balanced picture.

The following guidance is a brief outline of the options for Monitoring and Evaluation (M&E) which will suit most LEQ projects. This is suited for the development phase of projects and should be considered as part of preparation for any intervention. This document does not include advice on all aspects of project design and it should be noted that behaviour change pilots may require more bespoke evaluation and will require further advice.

Part 1 Provides an introduction to what M&E is and why it is necessary. It outlines some of the considerations that you will need to apply to the development phase of a project.

Part 2 gives a brief overview of some of the M&E tools which are available to you and how they might be applied.

Part 3 provides specific guidance and templates including plans for undertaking M&E for dog fouling, ideas for project design and a modular survey template.

## Part 1: Introduction

This section provides an overview of what Monitoring and Evaluation is, what it entails and the considerations you will need to have when developing your project.

### What Is Monitoring & Evaluation?

Put simply, **monitoring** is the systematic, regular collection and analysis of information to identify and measure change as an intervention progresses. Monitoring is performed while a project is being implemented, with the aim of improving the project design, delivery and functioning while in action.

**Evaluation** is the analysis of the effectiveness of an activity and involves making a judgement about progress and impact. Evaluations study the outcomes of a project (changes in income, housing quality, benefits distribution, cost-effectiveness, etc.) with the aim of informing the design and delivery of future projects.

What binds the two processes into the singular process of monitoring and evaluation are their commonalities; both facilitate the process of understanding how best to structure, design and implement an intervention both now and in the future. To facilitate this learning process, monitoring and evaluation strategies have three common focuses;

### • Effectiveness • Impact • Accountability

**Effectiveness** is the process of comparing an initiative's projected aims, goals and objectives to its actual results. Has the initiative succeeded in doing all it intended to do, and what has made this initiative succeed or fail to meet its objectives?

**Impact** should be the most important focus of any evaluation. The main question here is did the intervention actually make a difference to its intended area or population.

The **accountability** element of M&E is a process of matching inputs to outputs and outcomes, in order to evaluate how efficiently the initiative has performed and whether it constitutes value for money. Increasingly it also includes reference to the process of delivery and the experience of beneficiaries.

Whilst much of what has been described above may sound complicated, monitoring and evaluating need not be complex, expensive or require the input of specialists. In fact, it is possible to argue that the more complex M&E systems and processes become, the less useful they are.

The following guidance is a brief outline of the options for M&E which will suit most small-scale Local Environment Quality projects. This is suited for the development phase of projects and should be considered as part of the preparation for any intervention in its very early stages.

## Considerations

As part of any project, it is necessary to ask what the desired outcomes will be and how they will be measured. It is useful to use the three strands above as a guideline for considering what monitoring and evaluation your project may need.

## Effectiveness

What is the current scale of the problem and how will you go about developing a baseline?

*What does success look like?*

*Who is the target audience?*

## Impact

*What are the desired outcomes on the target environment / people?*

*How will you measure whether the impact was positive or negative?*

## Accountability

*What does success look like and how can it be maintained?*

*What are the cost benefits of the project?*

Consider the following 'real world' scenarios:

- A local skate park is heavily littered by the local young people who use it. Infrastructure on site has been vandalised in the past but a new project which engages the young people and tackle the litter problem is being developed. What standards would be used as a measurement for success and how (and who) would be measuring them?
- A new enforcing scheme has been introduced to a resident area where recycling participation is low. The enforcement looks like it's having an effect but what other M&E may be required for measuring impact and effectiveness?

## Part 2: Methods

This section provides a brief overview of the different monitoring and evaluation tools which can be applied to a project. Good practice M&E involves the '[triangulation](#)' of three or more methods. The type of analysis required in order to reach a robust evaluation of all the collected data should also be written into timescales of a project as this often takes time.

### Research

It is essential to understand the location that you're working in. Projects and much of their evaluation should be designed in accordance with local geography and demographics. It is also essential to know any other similar efforts happening in the area which could affect the way your project is received. Background preparation should include research to:

- Understand the scale and context of the problem
- Understand the priority areas
- Understand the barriers to promoting the successful outcome
- Desktop exercise to gather evidence from similar campaigns / interventions

### Minimally, your project should gather from the outset:

- Socio-economic considerations for the target audience
- Data on the scale of the problem, including level of complaints and comparisons with other areas. If this is not available, you will need to do additional baseline work.
- Other campaigns, stakeholders and influencers
- Geographical factors (eg: seasonal influences)

The most significant factors for projects are likely to be socio-economic factors and seasonal influences. For campaign development, levels of literacy should be considered, and messages should be amended accordingly to more visual forms of communication or should be adapted for face to face conversations. Seasonal variations will have a significant impact on the timing of your project, and you may wish to avoid school holidays, Christmas or any big events as they will affect the reliability of collected data.

## 'Real world' example

A smoking related litter project in Blaenau Gwent was designed to account for socio-economic factors in the county and took a number of factors in the WIMD into account such as;

- Low levels of education meant that the design was predominantly visual and language was kept simple.
- Low fluency and identification with the Welsh language influenced our messaging choices.
- High levels of smokers in the county assured us of good quality baseline and continuing data.

The nature of cigarette butts being small and light and easily moved by winds influenced the decision to start the project in late spring to try to account for the impact of adverse weather conditions.

Other influences which needed to be considered included the prevalence and focus of current enforcement in the county which, anecdotally at least, targeted smokers who littered.

## Useful links

- Keep Wales Tidy – (LEAMS data, Policy, advice and support and community engagement)
- [Welsh Index of Multiple Deprivation](#) (WIMD) Data / Stats Wales
- Local Wellbeing Plans – available on local authority websites
- [LLE portal](#) – Spatial data for local and national statistics
- CHC Cymru – map of Housing associations operating in each local authority area

## Surveys

Surveys are often overused or misused but can be a useful indicator if the right questions are asked. It is important to understand from the beginning what you want to explore and who your target audience is. It is also important to consider whether the information you are trying to gather is more qualitative (described experience, anecdotal and observation) or quantitative (numbers).

Things to consider include:

**Target audience** – visitors or residents? A specific age range or section of community? Are there socio-economic factors that may hinder the ability or enthusiasm for survey completion?

**Method of Delivery** – Survey Monkey (online) or paper surveys? Whilst online surveys can save time they are hard to target at specific audiences and can water down responses. Randomised face to face surveys can often lead to more qualitative responses and more detailed information can be



gathered in this way. More quantitative surveys (quick responses with limited answer options) may be more suited to an online audience.

**Timing** – it is normally desirable to do a ‘pre-survey’ as part of the investigation of the issue and to create some form of baseline of subjective data. Post-surveys, where applicable should also be scheduled in at the end of a project although in some cases these can be carried out at a ‘mid-way’ point – particularly in the case of new campaigns – as a tool for reviewing the project and making any necessary changes for the remainder of the project. Consideration should also be given to external factors such as school holidays and term times, seasonal fluctuations and local and national political events which may affect the number or the emotion of responses.

## Basic rules for survey design:

- Include gender options (including Female, Male, Neither and ‘prefer not to say’) – even if you do not think it is relevant, gender options are good practice to include in surveys to assess any gender impact and equality issues.
- Include an age range and location option (postcode or local authority depending on the score)
- Frame question responses on the Likert Scale of 1-5 (Strongly agree 1 – Strongly disagree 5)
- Be clear about what each question is trying to achieve and take special care to avoid leading questions.
- Surveys can also be used as a comparative method for an intervention by designing two surveys and running them simultaneously.

For sample survey questions, please see [Part 3](#).

## ‘Real world’ example

A survey was designed for a recycling on the go campaign in Swansea. As well as asking direct questions in relation to the survey, additional questions were asked around their experience and motivation for their behaviour. The survey was carried out before the campaign launch and was repeated after 6 months. Although the data for recycling contamination was positive, the picture was a little mixed in some aspects. However, people’s reported behaviour and motivations for both recycling on the go and recycling at home had increased. The survey also showed interesting <https://vimeo.com/keepwalestidy1> results in reported behaviour between gender and even more significantly by age. The results of the survey, combined with the analysis, led us to recommend that campaigns at recycling on the go should not be focused on young people (as many traditionally have been) but rather, target audiences should actually be more geared toward men over the age of 25. Without the qualitative results to complement the quantitative results, these factors would have gone unnoticed.

## Interviews

Interviews, like surveys are generally a subjective form of evaluation and although application is limited, can be a good way of gathering pre-project information with targeted stakeholders. These would normally take the form of semi-structured questions to gather specific information on a problem or a process. For example, interviews with local authority heads on their perspective on the same issue can help to form a solution. Like surveys, they can be carried out pre-project, post-project or at a mid-way point to support changes.

### 'Real world' example

Fly tipping of household waste is an issue for all areas of Wales. The primary sector for where these issues collide most keenly is social housing. Housing Associations or councils with housing stock are not only landlord's responsible for waste provision and information but many are landowners too and both recognise the impact of fly tipping from a resident point of view and in terms of organisational cost. In depth interviews have been undertaken with some of the Housing associations in Wales who have successfully tackled the problem. This has allowed us to gather information on best practice, common solutions and common barriers to dealing with this issue which would have been difficult to acquire by any other method.

## Monitoring methodologies

In almost all projects where an intervention is being used, there will be a need for a baseline survey. This should be carried out at least once before the intervention. If the intervention is removed (as it is with most behavioural change trials) and other 'end' baseline can also be applied although this is not always required.

The important rules for monitoring which should not be changed during the intervention period are:

- Monitor at the same time / day each week (the day chosen needs to consider existing cleansing schedules and waste collection days to avoid skewed results)
- The method of monitoring must be the same throughout the project
- The monitoring area must remain the same as the baseline

Keep Wales Tidy have a suite of monitoring tools and can be amended to fit the majority of situations for LEQ projects.

## LEAMS (Local Environment Audit Management Surveys)

Local authorities will be familiar with the LEAMS methodology to monitor street cleanliness. More information can be found [here](#).

LEAMS can be adapted to suit the monitoring of projects, particularly in street and urban areas. For example, a smoking related litter project may go into more detail around the numbers of cigarette butts, but it may still be desirable to count additional littered items in the intervention

area. The monitoring area can be changed and added to for the purposes of monitoring (for example, extension of monitoring to grass verges). The area being monitored must be agreed beforehand and remain the same throughout the project.

Keep Wales Tidy has developed a free app for local authorities to carry out LEAMS on phones or tablets. For more information on LEAMS methodology and data or for information about the app for local authorities, please contact: [leq@keepwalestidy.cymru](mailto:leq@keepwalestidy.cymru)

## SQI

The **Street Quality Indicator survey (SQI)** measures **all the issues** that affect a street's local environmental quality as well as taking into account how important the public perceive these issues to be in terms of local environmental quality. The SQI survey can be used to provide a **full picture** of **street quality** as perceived by members of the public. The results can be broken down into worst scoring areas and be used to highlight problem characteristics affecting streets. The survey is very effective at showing how streets or areas are scoring badly and can be used as an effective tool when needing to target resource use and identify issues on the street.

**Methodology:** At each street in the study area, a 50m length of street (known as a transect) is surveyed. On streets longer than 100m two transects may be surveyed. This includes the area from one back wall to the other, including both sides of the street, the footway, any verges and carriageway and surrounding areas. This survey is ideally used to monitor progress where intensive work is taking place across small areas/estates/parks to target multiple LEQ issues.

The environmental issues that are recorded during the survey are known as indicators and are graded A-E and reflect the condition of the transect. Further information about the methodology can be obtained by contacting the LEQ team at Keep Wales Tidy [leq@keepwalestidy.cymru](mailto:leq@keepwalestidy.cymru)

## Social Media Reach

Social Media is an important communication tool. Consider your target audience and develop messages on social platforms to maximise the impact and reach. Facebook, Twitter, Instagram and others all have a part to play in communicating local campaigns. Using a multi-platform site such as Hootsuite can help with scheduling messages to all linked accounts.

Note that for some behaviour change campaigns, you may want to abstain from publicising the intervention until after evaluation has been completed.

It is good practice for local campaigns to develop a 'hashtag' for social media use – this is also a very useful tool in analysing social media reach. The hashtag (eg: #KeepWalesTidy) should be used in all campaign materials and communications. Analysis can then be viewed by the reach of your # across various platforms.

There are a number of free analytic tools that you can use to monitor your reach although there are limitations (normally restricted time frames for you to view the data eg; the past week). Facebook and Twitter both have their own basic tools analytics and many multi-platform sites also offer basic analytical functionality such as [Hootsuite](#) or [Tweetdeck](#), as well as Facebook Pages. Many analytics sites also offer free trials and paid for sites can give a massive depth of insight into any campaign.

## Useful links:

Tweetreach : <https://tweetreach.com/>

Social Mention: <http://www.socialmention.com/>

Sumall: <https://sumall.com/>

## 'Real world' example

By promoting an activity or campaign through specific hashtags and encouraging all participants to engage on social media, Keep Wales Tidy are able to measure the extent, geography and 'mood' of activities on the ground. This is especially useful for national campaigns where data may go unrecorded, is too vast to collate or is happening in a small timeframe.

An example of this is evaluation of Marine Clean Cymru campaign, which had clear social media targets for reach of the campaign hashtags #marinecleancymru #glanhaumoroeddcymru. See the [full report here](#) which includes a breakdown of the social media reach (also included below.) By comparing data with previous campaigns, you can track progress as work develops and gather comments, photos and videos shared by volunteers who are using #s.

#marinecleancymru	#glanhaumoroeddcymru	Combined
Total tweets - 1,481	Total tweets - 227	Total tweets - 1,708
Total contributors - 536	Total contributors - 101	Total contributors - 637
Potential impressions - 5,572,311	Potential impressions - 1,390,893	Potential impressions - 6,963,204
Potential reach - 1,497,795	Potential reach - 352,525	Potential reach - 1,850,320

## Triangulation

Data Analysis should be undertaken for each stage of M&E (e.g.; street surveys, public surveys, etc) but the full evaluation picture can only be gained through a triangulation of all of these elements. Put simply, this means considering a number of data sources to create a fuller and more balanced picture.

Data analysis for item / incident monitoring is usually straightforward and will immediately consider the initial increase or decrease of events pre and post intervention. However, it may be necessary to consider whether the issue has moved location. When combined with survey results and any observational data, issues moving or a decrease in users may signal adverse impacts. Similarly, a reliance on quantitative data can sometimes overlook people's experiences and observations.

Survey analysis is largely dependent on the questions and answers and filtering rules on Survey Monkey can provide interesting insights. Gender and age aggregation, at a minimum, should always be considered in case of unintended equality impacts.

Triangulation considers three elements of M&E and combines them into one picture. Most usually, this will be through surveys, incident monitoring and some other form of qualitative or quantitative data. The analysis should consist of measurements of effectiveness, impact and accountability.

## Part 3: Specific guidance and templates

### Guidance on measuring the impact of Dog Fouling Interventions

To understand how successful an intervention is, it is advised that you monitor the issue before, during and after.

This involves cleaning up dog fouling in the area in the first instance and then counting and recording the number of instances the following week as a baseline. The monitoring area(s) should be agreed at the outset. This could be a 50m square area of a park or a length of walking route, measured to a certain distance from the paths edge on either side. The size of the area will be dependent on the type of area but it is critical to establish the desired parameters from the outset. The monitoring area should extend further than the actual intervention (if applicable) so that it shows that the problem hasn't simply moved.

If possible, areas which do not have any interventions should also be monitored to be used as a comparison. Ideally, areas should be monitored on a weekly basis and the area cleaned weekly. Below is guide as to how a dog fouling intervention could be measured.

A minimum of 3 weekly counts with two baseline counts would be advised although the longer monitoring continues the better the data will be over time. In some case, it may not be necessary or desirable to remove the intervention after (week 5), if the intervention is looking successful, it would be recommended to replicate and / or scale up the project with further monitoring if required.

If possible, it is always good practice to have a comparison area which is of similar size and scale which can be monitored simultaneously. Monitoring a comparison area at the same time, without interventions, will allow for any external influences to be accounted for such as weather or time of year.

Triangulation of evaluating methods will give more robust results. A survey on perceptions in regard to dog fouling or the intervention could be carried out to provide more qualitative data. Commonly, councils like to monitor complaints records when undertaking a campaign although this should be done with caution (and never as a sole technique) as it is commonly the case that complaints stem from the most affluent and least affected areas and may well not be indicative of the scale or location of the problem.

A minimum of 3 weekly counts would be advised although the longer monitoring continues the better the data will be over time. In some case, it may not be necessary or desirable to remove the intervention after (week 5), if the intervention is looking successful, it would be recommended to replicate and / or scale up the project with further monitoring if required.

Dog Fouling Recording Template				
Date / Day / Time	Location 1	Location 2	Location 3	

E.g: 1/1/20 Tues, 10am	No. of counts	No. of counts	No. of counts	Baseline
E.g: 7/1/20 Tues, 10am	No. of counts	No. of counts	No. of counts	Baseline
	Interventions installed e.g. Signage, bins	Interventions installed e.g. Signage, bins	Interventions installed e.g. Signage, bins	

Phase	Day / time	Activities in <u>Intervention</u> Area	Activities in <u>Comparator</u> Area (without intervention) - where appropriate	Additional activity	
Week 1	E.g. Tuesday, 10am	Cleanse area(s)	Cleanse area(s)	A pre-project survey should be carried out at this stage if required	Social media monitoring throughout this period can add to survey data and gauge public perceptions
Week 2	E.g. Tuesday, 10am	Baseline count followed by cleansing	Baseline count followed by cleansing		
Week 3	E.g. Tuesday, 10am	Baseline count followed by cleansing	Baseline count followed by cleansing		
		Installation of intervention	Installation of intervention		
Week 4	E.g. Tuesday, 10am	Count #1 followed by cleansing	Count #1 followed by cleansing		
Week 5	E.g. Tuesday, 10am	Count #2 followed by cleansing	Count #2 followed by cleansing		
Week 6	E.g. Tuesday, 10am	Count #3 followed by cleansing	Count #3 followed by cleansing	An end-project survey should be carried out at this stage if required	
		Removal of installation	Removal of installation		
Week 7	E.g. Tuesday, 10am	After Count	After Count		

## Examples of Project Evaluation Design Methods

Below are three different examples of project design which can be applied to local interventions and provides the basis of how M&E could be considered depending on the scale of the project.

### Example Evaluation Design: Simple intervention monitoring without comparison

Use for: Simple interventions in singular locations (should be replicated in all areas where intervention is applied).

External factors such as weather, holidays and events will have to be accounted for.

Ideal for: Bin / Message installation impact in parks or other enclosed areas.

Week 1	No intervention	Baseline	+ User surveys
Week 2	Installed intervention	Monitoring	
Week 3	Installed intervention	Monitoring	
Week 4	Installed intervention	Monitoring	
Week 5	Removal of installation	Baseline	+ User Surveys

Note:

Monitoring should take place on the same day and time (am or pm) each week.

Cleansing would ideally be scheduled before the baseline and should be avoided during installation period.

Enforcement should not be carried out in the target area during the time of the intervention

### Example evaluation design: Simple comparative design

Use for: comparison of two different interventions OR to monitor the effectiveness of an intervention against a 'control area' with no intervention.

Seasonal events or weather will have less of an impact.

Ideal for: Most interventions and infrastructure scenarios

	Location 1	Location 2	Monitoring	Additional
Week 1	No intervention	No intervention	Baseline	+ User surveys
Week 2	Installed intervention #1	No intervention OR Installed intervention #2	Monitoring	
Week 3	Installed intervention #1	Installed intervention #2	Monitoring	
Week 4	Installed intervention #1	Installed intervention #2	Monitoring	
Week 5	Removal of installation	Removal of installation	Baseline	+ User Surveys

Note: Monitoring should take place on the same day and time (am or pm) each week.

Cleansing would ideally be scheduled before the baseline.



## Example Evaluation Design; Testing multiple interventions

Use for: Testing the effectiveness of multiple interventions / messages. Seasonal events or weather will have less of an impact. Ideal for: Message / Campaign testing and behaviour change projects						
	Location 1	Additional	Location 2	Additional	Location 3	Additional
Week 1	Baseline	+ user surveys	Baseline	+ user surveys	Baseline	+ user surveys
Week 2	Intervention #1		Intervention #3		Intervention #2	
Week 3	Intervention #2		Intervention #1		Intervention #3	
Week 4	Intervention #3		Intervention #2		Intervention #1	
Week 5	No Sign	+user surveys	No Sign	+user surveys	No Sign	+user surveys

Note: Monitoring should take place on the same day and time (am or pm) each week.  
Cleansing would ideally be scheduled before the baseline.

## Public Surveys- Modular Framework

The next few pages detail the types of questions that can be applied to various concepts, depending on the issue that you want to address. This is not a survey in itself but provides the questions needed for survey design. It is important to copy the survey questions and answers as written as the wording of each question is important to the quality of responses.

All surveys which are directed at the public should be bilingual. If you are inputting this into SurveyMonkey, please note that the Welsh and English should not be separate surveys. This will save a lot of work once the survey is closed as it avoids the need to 'add up' two separate sets of data.

## General questions

### Introduction

	Topic / construct	Item(s)	Response options / Scale	Source
2.1.1	<ul style="list-style-type: none"><li>- Introduce subject/objective</li><li>- Ensure ethics<ul style="list-style-type: none"><li>o Anonymity</li><li>o Voluntary engagement</li></ul></li></ul>	<p>We hope that you are able to help us with completing this questionnaire on [insert subject here]. The survey is part of a collaboration between Cardiff University and Keep Wales Tidy. We value your comments and would be most grateful if you could spare the time to complete our questionnaire. The survey is completely anonymous and will only be used for research purposes. When you have completed the questionnaire, please hand it back to the person who gave it to you. Please note that:</p> <ul style="list-style-type: none"><li>• There are no right or wrong answers. We are interested in your views and opinions.</li><li>• Participation in this study is entirely voluntary.</li><li>• You do not have to answer the questions if you do not want to.</li><li>• The survey is completely anonymous. We will not ask for any identifying information.</li></ul>	N/A	Bespoke
2.1.2	Date	Date	Dd / mm / yyyy	

## Socio-demographics and background information

#	Topic / construct	Item(s)	Response options / Scale	Source
2.2.1	Gender	What is your gender	[Male, female, other, prefer not to say]	
2.2.2	Age	Which of the following age bands do you fall into?	[16-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65 and over]	(Poortinga et al., 2017)
2.2.3	Level of education	What is your highest educational qualification?	[No qualifications, GCSEs or equivalent, A-levels or equivalent, Undergraduate degree (e.g. BA or BSc), Postgraduate qualification (e.g. MSc or PhD), Other (please specify)]	
2.2.4	Marital status	What is your marital status?	[Single, Cohabiting/living together, Engaged, Married or civil partnership, Separated, Divorced, Widowed]	(Poortinga et al., 2017)

2.2.5	Employment status (PICK ONE QUESTION)	Which of the following best describes your current employment status?	[Full time employed (>30 hrs per week), Part time employed (<30 hrs per week), Self-employed, Unemployed and looking for paid work, Full time looking after home or family, Full time student, Retired from paid work, Long term carer, Permanently unable to work because of long-term illness or disability, On a government scheme for employment training]	(Poortinga et al., 2017)
		Which of the following best describes your current employment status?	[Employed, unemployed, Retired, unable to work, Carer, Student]	(Rogerson et al., 2017)

## Mental and physical health and activity

### General health

#	Topic / construct	Item(s)	Response options / Scale	Source
3.1.1	General health (physical)	In general, would you say your health is	[Excellent, Very good, Good, Fair, Poor]	Welsh Health Survey (ONS, 2018)
3.1.2	Changes in general health	Compared to one year ago, how would you rate your health in general now?	[Much better now than one year ago, somewhat better now than one year ago, About the same as one year ago, Somewhat worse now than one year ago, Much worse now than one year ago]	

### Mental health and well-being

#	Topic / construct	Item(s)	Response options / Scale	Source
3.2.1	Mental wellbeing	Overall, how satisfied are you with your life nowadays?	Scale 0-10 [not at all, completely]	Welsh Health Survey (ONS, 2018)
3.2.2		Overall, to what extent do you feel that the things you do in your life are worthwhile?		
3.2.3		Overall, how happy did you feel yesterday?		
3.2.4		On a scale where 0 is 'not at all anxious' and 10 is 'completely anxious', overall, how anxious did you feel yesterday?		

3.2.5		Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last two weeks	14 items [I've been feeling optimistic about the future, I've been feeling useful, I've been feeling relaxed, I've been feeling interested in other people, I've had energy to spare, I've been dealing with problems well, I've been thinking clearly, I've been feeling good about myself, I've been feeling close to other people, I've been feeling confident, I've been able to make up my own mind about things, I've been feeling loved, I've been interested in new things, I've been feeling cheerful]	The Warwick Edinburgh Mental Wellbeing Scale (Stewart-Brown et al., 2011)
3.2.6	Feelings of positivity	On a scale of 1- 10, how positive do you feel at the moment	Scale: 0-10 [not at all, completely]	(Rogerson et al., 2017)

## Physical activity

#	Topic / construct	Item(s)	Response options / Scale	Source
3.3.1	Physical activity	In the past week, on how many days did you do exercise or physical activity for at least 30 minutes? [LIGHT EXERCISE, for example: walking at an average pace, golf, light gardening (e.g., weeding), light housework (e.g., Hoovering, dusting); MODERATE EXERCISE, for example: fast walking, dancing, gentle swimming, heavy gardening (e.g., digging), heavy housework (e.g., spring cleaning, walking with heavy shopping); VIGOROUS EXERCISE, for example: running, jogging, squash, swimming lengths, aerobics, fast cycling, football, rugby]	6-point scale [None, One, Two, Three, Four, Five or more]	(Poortinga et al., 2017)
3.3.2		In the past week, on how many days have you done a total of 30 minutes or more of physical activity which was enough to raise your breathing rate? (This may include sport, exercise, brisk walking, cycling or gardening for recreation or to get to and from places)	8 point scale [0 – 7]	

## Social and community

### Social contacts and support

#	Topic / construct	Item(s)	Response options / Scale	Source
4.1.1	Social contacts	Please tell us how much you agree with the following statements by ticking the appropriate box for each one [There are people in my life who really care about me; I regularly meet socially with friends and relatives; I find it difficult to meet with people who share my hobbies or interests]	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	(Rogerson et al., 2017)
4.1.2		How often do you meet socially with friends, relatives or work colleagues?	[Never, less than once a month, Once a month, Several times a month, Once a week, Several times a week, Every day]	European Social Survey
4.1.3	Social support	To what extent do you agree or disagree with the following statements? [My family tries to help me; I get the emotional help and support I need from my family; My friends really try to help me; I can count of friends when things go wrong; I can talk about my problems with my family; I have friends with whom I can share my joys and sorrows; My family is willing to help me make decisions; I can talk about my problems with my friends]	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	MSPSS (Zimet et al., 1988)
4.1.4	Neighbourhood social capital	To what extent do you agree or disagree with the following statements?		(Poortinga et al., 2017)



		[People around here keep an eye out for each other; People around here keep an eye out for each other's property]		
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## Neighbourhood attachment

#	Topic / construct	Item(s)	Response options / Scale	Source
4.2.1	Neighbourhood attachment	To what extent do you agree or disagree with the following statements? [Overall, I am attracted to living in this neighbourhood; I feel like I belong to this neighbourhood; I have many friends and family in this neighbourhood; The friendships that I have in my neighbourhood mean a lot to me; Given the opportunity; I would like to move out of this neighbourhood; I plan to stay in this neighbourhood for a number of years; I rarely have a neighbour over to my house to visit]	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	(Buckner, 1988)
4.2.2	Neighbourhood interactions	To what extent do you agree or disagree with the following statements? [I don't really know my neighbours; I borrow things and exchange favours with my neighbours; If I need advice about something, I could go to someone in my neighbourhood; I rarely have a neighbour over to my house to visit]		

## (Contact with) nature

### Nature relatedness and contact with nature

	Topic / construct	Item(s)	Response options / Scale	Source
5.1.1	Nature relatedness	For each of the following, please rate the extent to which you agree with each statement, using the scale from 1 to 5 as shown below. Please respond as you really feel, rather than how you think "most people" feel. <i>[My ideal vacation spot would be a remote, wilderness area; I always think about how my actions affect the environment; My connection to nature and the environment is a part of my spirituality; I take notice of wildlife wherever I am; My relationship to nature is an important part of who I am; I feel very connected to all living things and the earth.]</i>	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	(Nisbet & Zelenski, 2013) (Short form)
5.1.2	Contact with greenspace	How much contact do you normally have with nature and greenspace? (E.g. going to the park, woods, countryside, beach etc.)	[Daily, 2-3 times a week, Once a week, Once a fortnight, Once a month, Once every 2-6 months, Less than once every six months; Never]	(Rogerson et al., 2017 (Adapted))
5.1.3		How often do you visit parks and other green spaces?	Daily, 2-3 times a week, Once a week, Once a fortnight, Once a month, Once every 2-6 months, Less than once every six months; Never	Bristol Quality of Life in your Neighbourhood Survey

5.1.4	Natural elements at neighbourhood level	To what extent do you agree or disagree with the following statements? [There are plenty of trees in my neighbourhood; There is plenty of greenery in my neighbourhood; There are plenty of safe spaces for children to play in in my neighbourhood; There are plenty of parks/green spaces in my neighbourhood; From my street there is a view of the natural environment (e.g. fields, mountains, woodlands)]	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	(Poortinga et al., 2017)
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## (Impact of) volunteering

### Volunteering

#	Topic / construct	Item(s)	Response options / Scale	Source
6.1.1	Frequency of volunteering	How often have you taken part in [activity] before today?	[Never, Once, Twice, Three times, Four times or more often]	
6.1.2		In the past 12 months, how often did you take part in charitable or voluntary activities?	[At least once a week, At least once a month, At least once every three months, At least once every six months, Less often, Never]	
6.1.3		Approximately how many hours in total have you spent taking part in charitable or voluntary activities in the past four weeks?	Open ended question	(Welsh Government, 2019)

6.1.4	Type of volunteering	Which of these clubs or organisations, if any, are you currently giving your time to for free? (tick all that apply)	[Charitable organisation; School or young person's group; Tenants / residents group or neighbourhood watch; Religious group / organisation; Pensioners group / organisation; Sports club; Arts groups (e.g. drama, music, arts or crafts; Environmental group; Museum / heritage site; Other club or organisation; None of these]	(Welsh Government, 2019)
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## Impact of engagement in activity

#	Topic / construct	Item(s)	Response options / Scale	Source
6.2.1	Self-reported impacts of activity	<p>Please indicate to what extent you agree or disagree with the following</p> <p>Taking part in this activity...</p> <p>[...makes me feel useful; ...makes me feel good about myself; ...makes me feel healthy; ...makes me feel relaxed; ...makes me feel less stressed; ...makes me feel close to other people; makes me feel loved]</p> <p>[...allows me to visit parks and other green spaces; ...allows me to spend time in nature; ...allows me to meet other people; ... allows me to stay healthy; allows me to be physically active]</p>	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	Bespoke

## Local environmental quality

#	Topic / construct	Item(s)	Response options / Scale	Source
7.1.1	Neighbourhood quality	<p>To what extent do you agree or disagree that the following issues are a problem in your neighbourhood?</p> <p>[Vandalism; Graffiti; Litter and rubbish; burglaries; anti-social behaviour; Poor condition of pavements; Dog fouling; Poorly maintained public facilities (e.g. benches, lampposts, etc.)]</p>	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	(Poortinga et al., 2017)
7.1.2		<p>To what extent do you agree or disagree with the following statements?</p> <p>[People take pride in their gardens in my neighbourhood; People in this neighbourhood take good care of their property; People in this neighbourhood take good care of their garden; People in this neighbourhood often decorate their front gardens (e.g. with flower pots and baskets).]</p>		

## Quality of life vs local area

#	Topic / construct	Item(s)	Response options / Scale	Source
7.2.1	Quality of life vs. quality of local area <b>(these questions both need to be included)</b>	How important are the following to your quality of life? [Access to local services; The level of crime; How well neighbours get on with each other; The level of traffic noise; How clean the street is; The level of air quality; The amount of dog fouling; The amount of litter; The physical state of pavements and roads; The amount of fly tipping]	[Very important; Fairly important; Neither important nor unimportant; Fairly unimportant; Not at all important]	(Cox et al., 2015)
7.2.2		How would you rate the following aspects of the local area where you live? [Access to local services; The level of crime; How well neighbours get on with each other; The level of traffic noise; How clean the street is; The level of air quality; The amount of dog fouling; The amount of litter; The physical state of pavements and roads; The amount of fly tipping]		

## Litter

#	Topic / construct	Item(s)	Response options / Scale	Source
8.1.1	Definition of litter	In your opinion, which of the following items could be described as litter? [Fast food cartons (including uneaten food contents); Sweet wrappers and crisp packets; Plastic soft drink bottles and/or soft drink cans; Discarded newspapers and scraps of paper; Glass bottles (including beer or wine bottles); Plastic carrier bags; Cigarette butts and cartons; Chewing gum; Mattress or furniture left on the street; Drug-related items (e.g. needles), Dog fouling; Banana skins, apple cores, and similar items]	[Not litter, Maybe litter, Definitely litter]	(Cox et al., 2015)

8.1.2	Reported littering behaviour	Please select which of the following applies to you (NB please answer honestly - your individual answers will be anonymised and will not be revealed to anyone beyond the research team)	[I sometimes drop litter by accident (e.g. it falls out of my pocket); I don't ever drop litter, and never would, so none of the answers apply; I really don't want to leave litter, but sometimes it can't be avoided; Sometimes there aren't any bins, or the bins are all full; I occasionally drop things, but feel a bit guilty about it; As long as it's only small bits and pieces I don't worry too much about leaving litter; Place are so dirty these days - it doesn't really matter if I leave litter; Leaving litter isn't a problem if I know it's going to be cleaned up afterwards; I don't feel guilty about leaving litter- it's not a big issue]	(Cox et al., 2015)
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8.1.3	Perceptions of litter in different situations	<p>How do you feel about [insert type of litter]* in different locations?</p> <p>[Roadside; Scenic areas; Parks and recreation areas; Town and city centre; Residential street]</p> <p>*Fast food cartons (including uneaten food contents); Sweet wrappers and crisp packets; Plastic soft drink bottles and/or soft drink cans; Discarded newspapers and scraps of paper; Glass bottles (including beer or wine bottles); Plastic carrier bags; Cigarette butts and cartons; Chewing gum; Mattress or furniture left on the street; Drug-related items (e.g. needles), Dog fouling; Banana skins, apple cores, and similar items</p>	[Not a problem at all; A small problem; A fairly big problem; A very big problem]	(Cox et al., 2015)
8.1.4	Perceptions of local litter	What do you think is the most problematic litter issue here?	[Fast food; Drinks bottles; smoking related litter; confectionary; Other please state]	Template Jemma
		What is the issue which concerns you most about your local environment?	[Littering; Fly-tipping; Vandalism; Dog fouling; Other please state]	Template Jemma
8.1.5		Thinking about littering in this area – how do you think this has changed in the past 3 months?	1-5 scale [There is a lot less litter than before; There is a bit less litter than before; The amount of litter is the same as before; There is a bit more litter than before; There is a lot more litter than before]	Template Jemma



8.1.6	Perceptions of litter post-volunteering / activity	After attending [activity], what is your view on the amount of litter that there is in the places where you go?	[There is a lot less litter than I thought there was; There is a bit less litter than I thought there was; There is about the same amount of litter as I thought there was; There is a bit more litter than I thought there was; There is a lot more litter than I thought there was]	(Cox et al., 2015)
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## Miscellaneous

### Smoking

#	Topic / construct	Item(s)	Response options / Scale	Source
9.1.1	Smoking behaviour	Which one of these best describes you?	[I smoke daily, I smoke occasionally, but not every day, I used to smoke daily, but do not smoke at all now, I used to smoke occasionally, but do not smoke at all now, I have never smoked]]	(Welsh Government, 2019)
9.1.2	Smoking behaviour	What do you typically smoke? (Choose the one you smoke most)	[Roll up cigarettes; tailormade cigarettes; I don't smoke]	Bespoke
9.1.3	Frequency	On average, how many cigarettes do you smoke per day?	[1-20; 21+]	(Rath et al., 2012)
9.1.4	E-cigarette use	Have you ever used an e-cigarette?	[Yes; No; Don't know]	(Welsh Government, 2019)
		Do you use an e-cigarette at all nowadays?	[Yes; No; Don't know]	
		How often do you usually use an e-cigarette?	[Daily; Occasionally but not every day; Don't know]	

9.1.5	Harmfulness of cigarette litter	To what extent do you agree or disagree with the following statements? [Roll up cigarette butts are litter; Tailormade cigarette butts are litter; Roll up cigarette butts are biodegradable (break down naturally); Tailormade cigarette butts are biodegradable (break down naturally); Cigarette butts are harmless to the environment; Cigarette butts are harmless to animals; It can be dangerous to throw a cigarette butt in a bin]	5-point scale [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	Adapted from (Rath et al., 2012)
9.1.6	Perceptions of cigarette litter	Do you consider cigarette butts to be litter?	[Yes; No; Don't know]	(Rath et al., 2012)
9.1.7	Pocket ashtrays	Do you personally use a pocket ashtray?	[Yes, I use this (please tick one of the following) [Never; Rarely; Sometimes; Always]; No; I have never heard of a pocket ashtray]	Bespoke
9.1.8	Littering behaviours	The last time you smoked a cigarette on the street, what did you do?	[Dispose of the cigarette in street bin but only if it has a proper ashtray; Dispose of the cigarette in a street bin whether or not it has an ashtray; Dispose of the cigarette down a drain; Dispose of the cigarette in a proper cigarette bin; Use the pocket ashtray; Throw the cigarette on the floor]	Bespoke
		Imagine when smoking a cigarette on the street and you could not find a bin. What would you do with the cigarette?	[Dispose of the cigarette on the floor; Keep hold of the cigarette until you find a means to dispose of it; Throw it down a drain; Use a pocket ashtray; Other, please specify]	Bespoke

9.1.9	Environmental impact of smoking litter	The following objects can be seen as an environmental issue [insert location]. Please rank the following objects from 1 (no problem at all) to 5 (severe problem).	[Chewing gum; Cigarette butts; Confectionary (sweet wrappers etc.); Drink packages (cans, plastic bottles, glass bottles etc.; Fast food packaging]	Bespoke
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## Dog fouling

#	Topic / construct	Item(s)	Response options / Scale	Source
9.2.1	Severeness of dog fouling	How bad is dog fouling in your area?	[No problem at all; Slight problem; Quite problematic; Very bad; Exceptionally bad]	(Surveymonkey.com, 2020)
9.2.2		Do you consider uncollected dog waste to be a problem in and around the area where you live?	5-point scale [1 (not a problem at all - 5 (A significant problem that needs to be addressed)]	(Warrington Borough Council, 2016)
9.2.3		How frequently do you spot uncollected dog waste	[Never; Daily; Weekly; Monthly; Yearly; Other, please specify...]	(Warrington Borough Council, 2016)
9.2.4		For how long would you say you typically have to walk before you witness new uncollected dog waste in your area?	[Up to 5 minutes / Quarter of a mile; For around 20 minutes / 1 mile; For more than 20 minutes / 1 mile; Not applicable]	(Warrington Borough Council, 2016)
9.2.5		How would you quantify the amount of uncollected dog waste you witness? Please estimate how many instances of uncollected dog waste you see on the days when you come across it. (Select one option only)	[1-4; 5-9; 10-19; 20+]	(Warrington Borough Council, 2016)
9.2.6	Historical perception	Do you think dog fouling has increased or decreased in [insert area] since [insert date]	[Increased, Decreased; No change]	(Surveymonkey.com, 2020)

9.2.7	Reporting	If you saw somebody leave their dog poo – who would you report it to? (if anybody)	Open-ended	(Surveymonkey.com, 2020)
9.2.8		How often do you report information about specific individuals responsible for leaving dog waste? [include reporting contact details of council]	[Never; Never but I will now; Sometimes; Always]	(Warrington Borough Council, 2016)
9.2.9		Who do you think should be responsible for reporting those who allow their dog to foul and do not collect it? (Tick all that apply)	[Local council; Parish councils; social landlords / housing associations; Individual members of the public; Residents Associations; The police; Police community support officers; other, please specify...]	(Warrington Borough Council, 2016)
9.2.10	Self-efficacy	Do you pick up your dog's poo?	[Yes; No; Sometimes; I don't have a dog]	(Surveymonkey.com, 2020)
9.2.11		What would encourage you or others to pick up dog poo that belongs to your dog(s)?	Open-ended	(Surveymonkey.com, 2020)
9.2.12	Location	Where do you typically see dog waste (Select all that apply)	[Sports / Playing fields; Park land; Grass verges; Residential road sides; 'Poo trees' (or other places where collections of waste have been bagged but left for others to properly dispose of); other, please specify...]	(Warrington Borough Council, 2016)
9.2.13	Dog fouling vs. other litter	How does uncollected dog waste compare with other environmental annoyances? Please rate the following littering and environmental issues from most annoying (1) to least annoying (8) [Chewing gum; Cigarette butts; Takeaway waste; Dog waste; Graffiti; Fly tipping; Abandoned vehicles; Fly posting]	8-point scale	(Warrington Borough Council, 2016)

## Feeling of safety

#	Topic / construct	Item(s)	Response options / Scale	Source
9.3.1	Defensible space	To what extent do you agree or disagree with the following statements? [I have a clear view of the street from my house; I can clearly see my neighbours' houses from my house; All front doors and windows of my house are clearly visible from the street]	5-point [Strongly disagree, Tend to disagree, Neither agree nor disagree, Tend to agree, Strongly agree]	(Poortinga et al., 2017)
9.3.2	Neighbourhood watch	Do you belong to a neighbourhood watch scheme?	[Yes, No]	

## Pro-environmental behaviour

#	Topic / construct	Item(s)	Response options / Scale	Source
9.4.1	Engagement in pro-environmental behaviours	How often do you do the following? [Recycle glass, paper and metal; Use energy saving light bulbs; Turn off power at the plug on appliances when not in use; Turn off the tap whilst brushing your teeth; Buy organic or local food; Prefer to walk, cycle or use public transport rather than drive short distances; Put out food for birds or other wildlife]	[Always; Often; Sometimes; Rarely; Never]	(Rogerson et al., 2017)

## References

- Buckner, J. C. (1988). The development of an instrument to measure neighborhood cohesion. *American Journal of Community Psychology*, 16(6), 771–791. <https://doi.org/10.1007/BF00930892>
- Cox, J., King, G., & Hughes, O. (2015). Public perceptions and concerns around litter: Qualitative insight research. Zero Waste Scotland / Brook Lyndhurst.
- Nisbet, E. K., & Zelenski, J. M. (2013). The NR-6: a new brief measure of nature relatedness. *Frontiers in Psychology*, 4. <https://doi.org/10.3389/fpsyg.2013.00813>
- ONS. (2018). Surveys using our four personal well-being questions: A guide to what surveys include the four ONS personal well-being questions. ONS. <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/surveysusingthe4officeforationalstatisticspersonalwellbeingquestions>
- Poortinga, W., Calve, T., Jones, N., Lannon, S., Rees, T., Rodgers, S. E., Lyons, R. A., & Johnson, R. (2017). Neighborhood Quality and Attachment: Validation of the Revised Residential Environment Assessment Tool. *Environment and Behavior*, 49(3), 255–282. <https://doi.org/10.1177/0013916516634403>
- Rath, J. M., Rubenstein, R. A., Curry, L. E., Shank, S. E., & Cartwright, J. C. (2012). Cigarette Litter: Smokers' Attitudes and Behaviors. *International Journal of Environmental Research and Public Health*, 9(6), 2189–2203. <https://doi.org/10.3390/ijerph9062189>
- Rogerson, M., Barton, J., Bragg, R., & Pretty, J. (2017). The health and wellbeing impacts of volunteering with The Wildlife Trusts. University of Essex. <https://www.uclan.ac.uk/research/explore/projects/assets/wellbeing-impacts-of-volunteering-with-the-wildlife-trusts.pdf>
- Stewart-Brown, S., Platt, S., Tennant, A., Maheswaran, H., Parkinson, J., Weich, S., Tennant, R., Taggart, F., & Clarke, A. (2011). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a valid and reliable tool for measuring mental well-being in diverse populations and projects. *Journal of Epidemiology & Community Health*, 65(Suppl 2), A38–A39. <https://doi.org/10.1136/jech.2011.143586.86>
- SurveyMonkey.com. (2020). Pick Up Their Poop! Dog fouling in Cambridgeshire. SurveyMonkey.com. <https://www.surveymonkey.com/r/HWGTLL>
- Warrington Borough Council. (2016). Dog Fouling in Warrington Survey - Summary. Warrington Borough Council. [https://www.whatdotheyknow.com/request/443659/response/1079351/attach/9/Dog%20Fouling%20in%20Warrington%20Survey%20Summary%20v27Jul16%20PDF.PDF.pdf?cookie\\_passthrough=1](https://www.whatdotheyknow.com/request/443659/response/1079351/attach/9/Dog%20Fouling%20in%20Warrington%20Survey%20Summary%20v27Jul16%20PDF.PDF.pdf?cookie_passthrough=1)
- Welsh Government. (2019). National Survey for Wales: 2019–20 questionnaire. Welsh Government.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. [https://doi.org/10.1207/s15327752jpa5201\\_2](https://doi.org/10.1207/s15327752jpa5201_2)

