Material change for a better environment

Improving the Performance of Waste Diversion Schemes: A Good Practice Guide to Monitoring and Evaluation

Chapter 4

Monitoring awareness, claimed behaviour and satisfaction

Whether residents are aware of your service or schemes and happy to use them are important factors in determining if they are used properly. The kind of monitoring described in this chapter relies on asking residents questions. It explains how to decide what type of investigation to undertake, how to conduct different types of surveys, how to sample and design questionnaires, and how to analyse and report data.

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WRAP helps individuals, businesses and local authorities to reduce waste and recycle more, making better use of resources and helping to tackle climate change.

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Monitoring awareness, claimed behaviour and satisfaction

4.1 Introduction

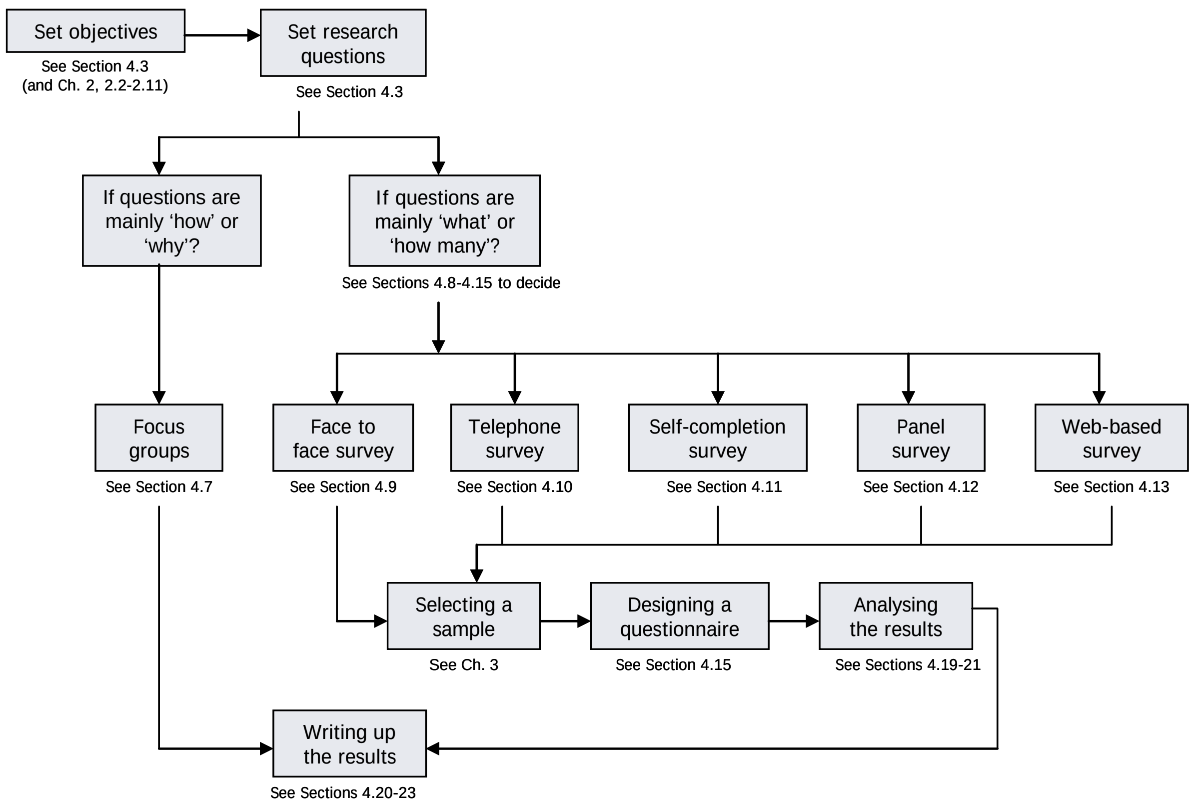
This chapter is about monitoring awareness, claimed behaviour and satisfaction. It looks at the different methods you can use to ask your residents about what they think, what they understand, how they claim to behave and how they feel. This information can help you:

- design and improve your service or schemes; and
- develop effective communications campaigns that address the real issues faced by householders.

You may want to assess performance or the impact of change through these approaches.

The chapter is structured according to the different types of approach you can use to find out what people think. Use the flowchart shown in Figure 4.1 to help you navigate through the chapter.

Figure 4.1 Flow chart to help you decide what type of investigation to carry out



4.2 I have information from helpline calls and feedback forms – what are the limitations of using this to assess what my residents think?

Making use of information that you collect for other purposes is very sensible but you have to be careful about generalising from it. People who call helplines usually do so to complain or to ask for information; very few people call the helpline to say what a good job the council has done or what a user-friendly scheme it has implemented. Information of this kind can help highlight problems but you shouldn't use it as the only basis for evaluating services or schemes.

"Be careful about generalising. People who call helplines usually complain or ask for information; very few call to say what a good job the council does or what a user-friendly scheme it has ..."

Similar issues apply to using feedback forms where you ask for people's views as part of a communication with them, e.g. a leaflet or a consultation document. The people most likely to respond are those who feel strongly about the subject, either positively or negatively. There are also sometimes problems with the content of the leaflet influencing the way people think. For these reasons you shouldn't assume that responses on feedback forms are reflective of the views of the population as a whole.

This chapter is about ways of finding out what views represent those of the general population in your area.

4.3 How do I decide what I need to do?

It is essential to set aims, objectives and key performance indicators (KPIs) for the monitoring as this will help you to decide what to monitor and the method that will be needed.

If you do not have clear aims, you run the risk of carrying out the work only to find that you actually asked the wrong questions and have not achieved the purpose of the exercise. (Chapter 2 deals with aims and objectives in detail and should be read before proceeding any further here.)

The first step is to ask yourself: What do I want to find out?

The aim of your survey will be to answer one or more broad questions, such as the example in Table 4.1. Once you are clear about this aim, the next step is to make a list of all the things that you want to know in order to answer these broader questions. These are called the research questions, which are the questions you want answered. You should write these out first as a long list against each of your aims. It is worth noting that research questions are not survey questions (i.e. those which make up the questionnaire) – research questions are much broader. They set the framework for your survey and describe the overarching issue(s) you wish to investigate.

Table 4.1 Example of research questions for a particular monitoring aim

Aim	Research questions
To measure the level of satisfaction of householders with the kerbside scheme before a service change is implemented.	What proportion of householders is satisfied with the collection frequency? Why aren't they satisfied? What proportion of householders is satisfied with the collection crew? Why aren't they satisfied? What proportion of householders is satisfied with the container(s)? Why aren't they satisfied (e.g. too large, too small, too many, need a lid, colour unacceptable)? What proportion of householders is satisfied with the materials that they can put out? What other materials would they like to be able to put out?

Don't try to form these research questions into something that is suitable for asking the public at this stage. You can do that when you design your questionnaire or topic guide for focus groups – or your contractors will do it if you decide to commission someone else to do the work. (Note that even if you are planning to contract out the study, you should always write your own research questions or work with the contractor to develop them.) Don't try to structure them into groups or sections at this stage – just get them down on paper. Your questions should start with words like 'why', 'how', 'when', 'how many' and 'what proportion'.

4.4 I've decided on the research questions, but how will I get answers?

When you have your long list of questions, group them into two sets.

- Set 1 should include questions that ask 'what', 'how many', 'what proportion' and 'when'.
- Set 2 should include questions that ask 'how' and 'why'.

'**What**', '**how many'** and '**when**' questions have a limited range of answers and these categories can be known in advance. There would be little to be gained from having a discussion about them. For example, 'How many times a month do you use the recycling site?' is a simple factual question, though you may want to go on to ask 'why'. Such questions can be answered through a questionnaire survey.

'**Why**' and '**how**' questions have complex and varied answers that cannot easily be grouped into categories in advance. Even if they can be grouped, the answers are more valuable when they are in people's own words or produced as a result of discussion. For example, 'How should the council develop its recycling services?' These are best answered through an open approach such as focus groups.

Use Table 4.2 to decide which approach to use.

Table 4.2 Different approaches to answer different research questions

Where do most of your questions fall?	Appropriate approach
In Set 1: 'What, how many, what proportion, when'?	Use a questionnaire survey. You might also want to consider focus groups to test the questions or help you identify issues you haven't thought of – but this probably isn't necessary.
In Set 2: 'How, why'?	Use focus groups. Once you have completed work with focus groups, you will be in a better position to devise questions that ask 'what', 'when', 'how many' and 'what proportion'. You can use this as the basis of a questionnaire survey if you think one would be valuable.
Equally in Set 1 and Set 2	Start with focus groups and go on to do a survey. Use the results of the focus groups to help you devise questions that ask 'what', 'when', 'how many' and 'what proportion' so you can quantify the issues the groups have brought out.

Before finally deciding on the approach, go back and assess carefully whether you have assigned the research questions correctly. A 'what' question, for example, might be masquerading as a 'how' question.

When you have formulated your research questions, you can clarify objectives. An aim is a broad statement of what you hope to achieve. It is usual to have only one aim. Objectives are designed to meet your aim and are very specific statements of what you hope to achieve (see Chapter 2, Section 2.7 on how to set SMART objectives). Your KPI is a unit of measurement that will be the measure of success in meeting your aim and objective(s) (usually expressed as a percentage or number) and is not the same as statutory national indicators. These KPIs are specific to the objective that you want to measure and will help you to determine what type of monitoring is needed.

For example:

Objective:	To measure the outcomes of the communications campaign on residents' logo recognition.
Corresponding KPI:	Percentage of people who recognise the logo.

4.5 Who are you going to ask? Where are they?

Your objectives should make it clear what geographical area you want your results to say something about:

- the whole local authority;
- a partnership of local authorities;
- the households covered by a particular scheme;
- a particular estate or a particular collection round.

In this document we refer to this as the target population to be clear that this can be different from the general population of your area. Once you have decided what your target population is, you mustn't change your mind halfway through the project.

> The **target population** is the collection of people that you want to say something about; it could be all the households within your local authority area, all the households served by your kerbside scheme or the households in an under-performing neighbourhood.
>
> The **target area** will then be the geographical area that defines your target population – the local authority area, the area served by the kerbside scheme, or the under-performing neighbourhood.

However, you won't be able to talk to everyone in your chosen target population. This is where a sample comes in (Chapter 3 discusses sampling in depth).

> The **sample** is a sub-set of the target population to whom the questions are put. A sample is normally needed because it is impractical to ask everyone.

For example:

> The **population** of your district might be 40,000 people living in 18,000 households.
>
> The **target population** for your monitoring may be 10,000 households (a target population can be individuals or households) on six low-performing rounds within your district.
>
> The **sample** will be 1100 households that represent the target population.
>
> You also have to consider that, if you carry out a doorstep or postal survey, not everyone will be in at the time of the survey or will respond to the mailshot. To allow for non-response, you need to contact a larger number of households to achieve the target sample of completed questionnaires. You may need to contact as many as 4000 households to achieve a final sample of 1100.

4.6 When should I conduct the survey or set up focus groups?

The timing of when you should measure awareness, claimed behaviour or satisfaction depends on the aims of the monitoring.

If you have decided to conduct a survey and it is to measure the effect of a scheme change or a communications campaign, then you will need to plan two surveys – one in advance and another after the event for comparison.

When monitoring a communications campaign, you can survey up to the date your campaign starts. For the post-campaign monitoring you should wait for one month after it has ended.

When monitoring a service change, you will need to:

- complete the pre-campaign survey before any advance communication regarding the service change; and
- wait for the service to bed-in for three months after the roll-out is complete.

For phased roll-outs, you can start to survey in areas at the beginning of the roll-out but this might mean that the survey is continuing over a number of weeks, which is not ideal.

These timings will be easy to adhere to if you are doing the survey face-to-face or by telephone. But if you are relying on self-completion (whether by post or via a web-based survey), you will need to factor in time for the responses to be returned – including second mailings/reminders.

If you are conducting an annual survey, it needs to be at an optimal time each year and certainly in the same month.

The amount of time a survey will take depends on the resources that you put into it. If you are doing a face-to-face or telephone survey, you can shorten the amount of time it will take by using more interviewers. For a postal survey, the length of time is based on the number of mailings you decide to send.

If you are using focus groups, the timing of these will depend on their purpose. You may want to do focus group work in advance of a survey in order to inform the content of your questionnaire.

If the purpose of the focus groups is to inform the design of a communications campaign or scheme change, then the focus groups will need to be held early enough to allow changes to be made as a consequence of the outcomes.

Alternatively, focus groups could be useful after a communications campaign to find out why it worked or didn't work.

4.7 I've decided to hold some focus groups – how do I go about it?

4.7.1 Background

The focus group is a research method that involves several participants (usually between six and ten) and a facilitator / moderator. It is a way of getting much deeper insight into issues compared with a survey. It is a form of group interview where a specific topic (e.g. understanding why some people recycle and some people don't) is discussed in detail. Group interaction distinguishes it from other research methods and it can be used not only with residents but also with staff, contractors and crews. As well as being ends in themselves, the results of focus groups can also be used to help design survey questionnaires. They are particularly useful for 'hard-to-reach' areas where people tend not to respond to surveys and you aren't really sure what issues they may have.

The focus group can give much deeper insight into issues than a survey ... Group interaction distinguishes it from other research methods and it can be used flexibly – with residents, staff, contractors and crews.

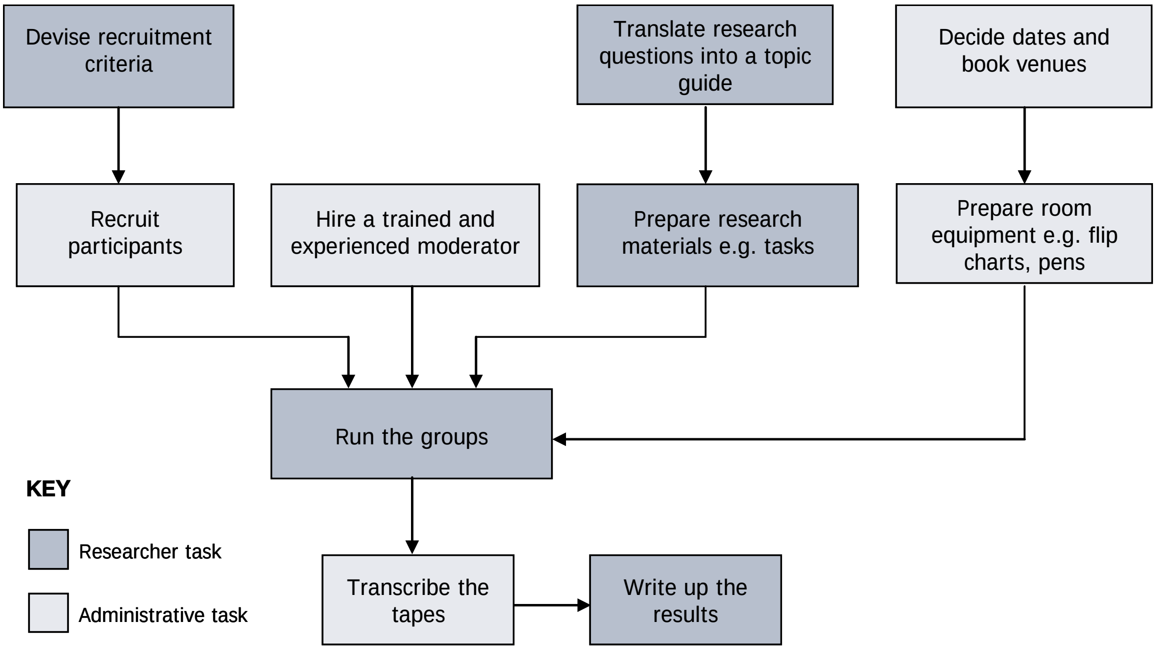
Because the views expressed in focus groups can't be generalised to a wider population, they aren't appropriate for measuring the impact of a scheme or campaign. But they can be used to understand why you have observed a particular impact when you've run a survey or carried out participation monitoring. They can also be useful for obtaining feedback from residents on what they think about, or how they respond to, communications messages and materials that you plan to use or have used for a communications campaign.

It is normal practice to tape record focus groups. This allows the moderator to focus entirely on directing the group rather than writing notes. All participants should be informed in advance that the groups will be taped. Video is also an option because it makes it possible to capture body language and other non-verbal communication.

4.7.2 Planning focus groups

The flowchart in Figure 4.2 shows the stages of planning, running and writing up the results of focus groups. Each stage is then described. For between two and eight focus group sessions, you should allow a minimum of eight weeks to complete the process – more if you want to run more groups.

Figure 4.2 Flow chart showing the process of running focus groups



4.7.3 Step 1: Devise recruitment criteria

Because the idea of a focus group is to gain insight and understanding rather than generalise about a target population (see Section 4.5 and Section 3.2 of Chapter 3 for a definition of target population and more help), participants don't need to be representative in the same way that survey respondents need to be. However, it is good practice to run separate groups for different types of people to ensure that the group dynamics work. You may choose, for example, to have one group of retired women, another of young professionals and another of fathers of toddlers. Your choice of groups should be guided by your expectations of which types of people are likely to have different views combined with an understanding of the profile of your area (see Annex 4 on using census data) and your target group.

Your recruitment criteria should look something like the example shown in Table 4.3.

Table 4.3 Example recruitment criteria

Focus group 1 (North Town)	Parents of under 5s (four male, four female)
Focus group 2 (South Town)	Asian women aged over 50 (four recyclers and four non-recyclers)
Focus group 3 (West Town)	Non-recyclers (four under 40, four aged 40 and over)
Focus group 4 (East Town)	Committed recyclers (four under 40, four aged 40 and over)

4.7.4 Step 2: Decide dates and book venues

Follow these guiding principles.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- Don't set the dates for the focus groups too close to the planning stage – allow yourself plenty of time;
- Choose dates that don't clash with significant events (e.g. international sports events, religious festivals);
- Choose weekday evenings rather than weekends;
- Hold the focus groups in the early evening when the greatest number of people will be able to attend;
- If possible, time your focus groups to take place in the summer when the evenings are light; certain groups of people may be reluctant to attend alone on dark evenings; and
- Choose a central venue that most people will know, which has good public transport links and nearby parking. Function rooms in pubs, hotels and cafés are a good choice as they generate the informal atmosphere that is important for the success of a group. If you choose a council building, make sure people will be able to access it in the evening. Consider attendees' personal safety.

4.7.5 Step 3: Hire a skilled and experienced moderator

The job of the moderator is to lead the discussion, making sure everyone has an opportunity to speak, and to make best use of the pre-prepared tasks and exercises for the participants. Market research organisations employ people specially trained for this role. Often the moderator has a background in psychology and understands the theory behind the exercises, as well as having skills in bringing the best out of people while being firm with those who monopolise the group. Simply being a good listener is not normally enough. If you are planning to use an inexperienced moderator, look for training opportunities; some market research companies offer this as a service.

Moderators must be trustworthy, as they will normally be carrying a cash-filled envelope for each participant. Paying incentives is normal practice and can make the difference between people attending and not attending. Incentives are normally between £25 and £50 per person and are paid at the end of the session.

4.7.6 Step 4: Translate your research questions into a 'topic guide'

Focus groups don't make use of structured questionnaires but a list of discussion areas is essential, perhaps with specific issues to explore. This is normally known as a topic guide. You should give some thought to the structure and ordering of the topic guide so that it makes sense to those taking part. For each area of discussion you should decide how you are going to approach it. Test out your topic guide on impartial colleagues (not professionally involved in the field) to make sure what you are asking makes sense.

4.7.7 Step 5: Prepare research materials

Specific tasks can be very useful, for example, asking people to draw on a picture of a house where recyclable materials arise or asking them to rate different containers. Exercises such as these can generate a better quality of discussion than simply asking questions. Pre-tasking is also an option where people are recruited well in advance and asked, for instance, to fill in diaries.

Professional research companies will incorporate psychological theory into the development of materials. If you are preparing this yourself, test it out on colleagues to make sure that what comes out of it is valuable and in the format that you expect.

4.7.8 Step 6: Recruit participants

The most challenging part of running focus groups is making sure that the correct number and type of people turn up. Always over-recruit by at least two. As people arrive for the meeting, keep count and when you have enough of those required for the focus group, it is normal practice to pay off any additional people and to explain that they are not needed. This needs to be done discreetly by a member of the field team, as the moderator may be busy. It is better to do this than to have too many.

Use the following to make sure your participants turn up on the day.

- Remind the participants the day before the focus group and make sure they have good directions and instructions. It can be an advantage if this is done by the moderator because a bond can be built up prior to the focus group itself;
- Use incentive payments to encourage people to come (see above). If you are a local authority, you will need to think about how you can obtain cash to hand out in this fashion. Vouchers are not such a strong incentive but can be used if securing cash is not possible. Vouchers redeemable at a range of high street stores can be purchased from the Post Office;
- Offer to pay transport costs and/or collect people by car and bring them to the group. This can make it more likely that you will be able to involve particular types of people including the elderly, students and the disabled;
- Make it clear that children should not be brought to the group under any circumstances as they can be very disruptive. If you are running a group whose participants are likely to have children that they have to bring (e.g. single mothers of young children), make arrangements for a crèche in a separate room; and
- Explain at the recruitment stage that the groups will be taped and make sure that people have no objection to this.

4.7.9 Step 7: Prepare the room and the equipment

Arrive well before the participants and use the following ‘top tips’ to make the group a success.

- Have flip charts and other creative thinking tools available;

- Make sure your tape recorder has working batteries and, if it uses tapes, that there are spare ones; if it is digital check that it has sufficient recording capacity remaining (take spare batteries or a charger along with you in case the power runs low). You can also use digital recording options on laptops, rather than tape-recorders; this has the benefit of removing the need to download files from the recording equipment – they can often be very large files;
- Make sure there are enough exercise sheets and other materials such as photos or examples;
- Use round tables or arrange chairs in a circle without a table if appropriate as this gives a sense of equal importance to all participants, enables eye contact with all, and gives a sense of equality in the arrangement of the room. It also allows the moderator to bring everyone into the discussion more easily;
- Have light refreshments available as well as tea and coffee;
- If you are using someone else's venue, have no qualms about rearranging it as you need it – the atmosphere should be friendly, informal and relaxed; and
- Make sure the temperature of the room is comfortable.

4.7.10 Step 8: Run the groups

Start the group with refreshments, including both food and drink. This will give you a chance to observe the people and interact with them. It will also ensure that the participants are comfortable for the duration of the discussion.

Ask everyone to take a seat. Rearrange people if you think you need to in order to mix up the confident and the shy ones. Sit yourself by the shy people so you can encourage them to speak; the confident ones will express their views regardless of how far away from you they are.

Explain again that the group will be recorded and what will happen to the information recorded. Explain also what the research is intended to do. Think carefully about whether you want to reveal who is responsible for the research. You don't have to tell participants that it is the local authority, and you may get different views expressed if you do. It is good practice to reveal the funder at the end of the discussion and encourage questions at that stage.

Make a record of everyone's name, perhaps by drawing a picture of the seating arrangement, or by asking the participants to identify themselves for recording purposes giving their name. This helps to identify who is speaking when transcribing the recording. Use people's names when you ask them for their views – this keeps up the informal and friendly atmosphere.

Keep control throughout. If someone is being disruptive, ask them to leave. Similarly if the group dynamics are going wrong, shake it up – move people around, change the subject or take a tea break. You can also ask people to leave if you are just not getting what you need from them. Pay them their incentive payment in these cases. Make sure the quieter people get a chance to have a say.

Groups shouldn't last for more than 90 minutes because people get tired and lose interest.

Pay the incentives at the end. It is good practice to ask participants to sign for their payment, not least so that you can't be accused of stealing.

CASE STUDY

Hackney food waste trials focus groups

The London Borough of Hackney has been running a food waste 'bring' trial for residents in flats or multi-occupancy dwellings since October 2007.

The Council wanted to gain insight into the residents' views regarding the trial and so conducted three focus groups with residents of Hackney in February 2008. The research focussed on three key aspects of the food waste service: service delivery; containers and liners (provided free of charge to residents);, and promotion of the service.

The results shed some light on how people perceived and used the service. Overall the residents seemed satisfied with the service and facilities. There was some confusion how more liners could be acquired and there was a reluctance to pay for liners. People generally felt that the aperture on the black street level collection container was too small. Some residents were keen to know where the food waste was being taken and how it would be processed and used.

For more information, see full case study in Annex 1.

4.7.11 Step 9: Transcribe the recordings

The recordings should be transcribed word-for-word. This enables the person writing the report to review the group sessions and extract relevant quotes, which help to liven up the report. The transcription should ideally include descriptions of non-verbal communication where this has a relevant impact on the meaning behind the conversation.

Keep copies of the recordings securely once you have finished with them.

4.7.12 Step 10: Write up the results

In your write-up you should draw out the main messages of the discussions, highlighting differences of opinion or behaviour between the different groups and using quotes to bring it to life. When you use quotes they should be anonymous but use a description of the person (e.g. male aged 50+). The presentation of the results, which will be an analysis of the findings, should be as objective as possible, illustrated with some examples/quotations. Conclusions and recommendations should follow, taking into account other relevant studies or sources of information. Finally, the report should be viewed in the context in which the data was gathered and, alongside other relevant information, used to evaluate the implications of the findings.

The rest of this chapter deals with surveys. If this isn't relevant to you, skip to another chapter or return to Chapter 1 for help in deciding what else you need to do.

4.8 Surveys

4.8.1 What can a survey measure?

Measuring awareness
Do householders know about your services / schemes? It is known that there is a definite link between awareness and behaviour – people can't take part if they don't know about it, although that isn't to say that everyone who knows about a service / scheme takes part. If you discover that most of your householders don't know about your kerbside recycling service, you might want to make changes to your communications activities. For example, issue new leaflets or use the local press to raise awareness.

TOP TIP

A **questionnaire** is the set of questions that you ask your target population during a survey.

A **survey** is the process of obtaining responses from your target population on the content of the questionnaire.

Measuring claimed usage
There is always a proportion of householders who are aware of the services but don't use them. Understanding why people don't use the services, even though they know about them, can be important in redesigning services and developing communications campaign materials such as leaflets and posters. Be wary, though:

- many people will say they use the service even if they have stopped doing so or do so very infrequently; and
- some people will claim to use it even though they have never done so just because they feel they ought to be using it.

Measuring satisfaction
Even householders that do use your services / schemes may not be happy with them. A survey can help you determine which aspects of your service / scheme are the most irritating to residents so you can make changes or address them

through your communications with them. You may have already decided that you are going to change your scheme. Finding out about problems that householders are having with the existing service can help you decide what changes to make and, perhaps, how to communicate those changes to householders. For example: "We have changed the collection frequency because you told us that you wanted …". It is good practice not to raise expectations by asking open questions such as "what materials would you like us to collect" if you are not intending to make changes.

Measuring understanding

Residents who use the service / scheme may be using it incorrectly. If you have a problem with contamination, a survey can help you find out why people misunderstand what can and can't be put into the kerbside collection. (For more about measuring contamination, see Chapter 8)

Residents may be using the collection correctly but may not be aware of the full range of materials that it accepts. A survey will identify the focus for communication activity, such as a door-to-door canvassing aimed at increasing residents' understanding.

Measuring campaign success

If people's knowledge and awareness are measured before any campaigning takes place, a survey can be repeated after the campaigning activity has ended and the difference attributed at least in part to the campaign. It is important, though, to take account of any service / scheme changes that may have happened over the same timescale or any other influences such as a national campaign running concurrently.

4.8.2 Is there a preferred approach to carrying out a survey?

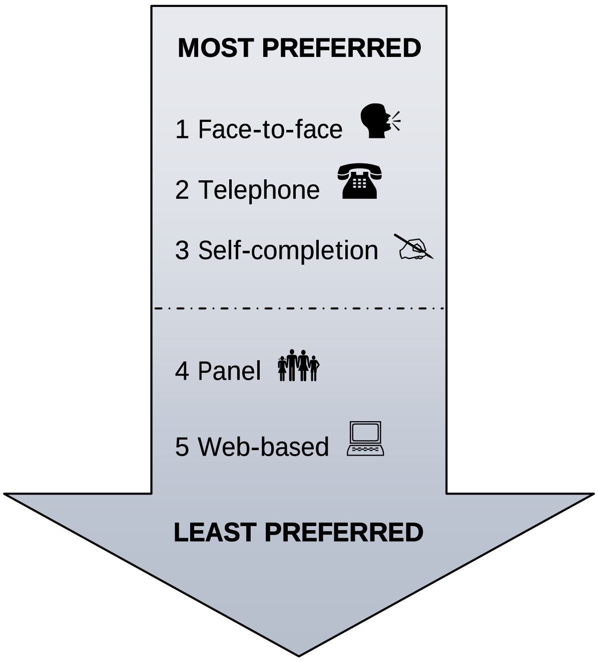
There are five main ways in which to carry out a survey:

- face-to-face;
- telephone;
- paper-based self-completion;
- panel; and
- web-based self-completion.

Each has advantages and disadvantages (Table 4.4).

WRAP recommends the hierarchy of survey approaches shown in Figure 4.3 – you should aim for the top of the hierarchy and move to options lower down only if resources are not available. Where WRAP is funding the survey, it is likely that only options 1–3 will be acceptable unless convincing arguments can be made; you should discuss this with WRAP at the earliest opportunity.

Figure 4.3 Hierarchy of survey approaches



Mixing the different survey methods is acceptable provided that there are good reasons for doing so. For example, if questions on service satisfaction are being asked as part of a wider postal survey run by your authority, there is no point repeating them in a face-to-face survey. It is not good practice, though, to ask the same question using several methods and then combine the results together. This is because different methods are open to different types of error and bias.

The advantages and disadvantages of each method are summarised in Table 4.4 and discussed in more detail below.

Table 4.4 Advantages and disadvantages of different survey approaches

Approach	Main advantages	Main disadvantages
Face-to-face	Can ask complex questions. Can have complex routing. Can use visual prompts and show cards. Can use shuffle cards. Can access people in other languages. Can access people with literacy problems. High response rates. Can set quotas for representativeness. Can provide information at the end.	Expensive. Best done in good weather. If done in-house: ■ time-consuming to organise and oversee; ■ staff safety needs thinking about; ■ interviewers need training; and ■ research expertise is required to design questionnaires and set quotas.
Telephone	Cheaper than face-to-face surveys. Can be overseen from a central location to ensure quality. Survey as a whole can be completed in a shorter timescale than face-to-face surveys. Can be done in the winter when face-to-face surveys are not ideal; not affected by weather conditions.	Higher rates of non-response / refusals than face-to-face surveys. Can have issues with unlisted telephone numbers and no coverage of those without landlines. Without careful control, you can end up surveying too many retired people, home workers, shift workers and young parents who tend to be at home. Can't use visual material such as show cards. Difficult to interview people who do not have good English.
Paper-based self-completion	Cheaper than face-to-face and telephone surveys. Can allow people to 'look up' information. Can reach isolated and rural areas. Enable people to answer sensitive questions entirely anonymously. Can be done in the winter when face-to-face surveys are not ideal; not affected by weather conditions.	Poor response rates normally. Questionnaire must be short and very self-explanatory. Can't use complex routing – people don't follow it. Excludes people with literacy problems. Questionnaires must be translated into community languages adding expense. Self-selecting sample so weighting may be needed at analysis stage. Lengthy process because you have to send out reminders and allow time for response.
Panel	Cheaper than the three previous methods, especially if done through a council-wide panel. You can access expertise in designing questions and having the data analysed for you.	The same disadvantages as paper-based self-completion surveys. Also: ■ may be biased towards people with extreme views; ■ can only have quite limited questions on your topic as other issues must be covered too; and ■ tend to be aimed at assessing satisfaction for Best Value so your questions may not 'fit in'.
Web-based self-completion	Potentially the cheapest method if you can get it done in-house. Quick and easy – no effort involved for you beyond designing the questions. Can use complex routing as this is done automatically. Data are processed automatically. Can be done in the winter when face-to-face surveys are not ideal; not affected by weather conditions.	Predominantly the same disadvantages as paper-based self-completion. Also: ■ excludes people with no Internet access; and ■ questions must be more limited than paper-based self-completion (10 simple ones max).

4.8.3 What are the pros and cons of face-to-face interviewing?

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This involves staff carrying out an interview with a resident at their front door, in the street or at another public place. It is important to note that interviewing residents at their front door is not the same as door-to-door canvassing. Canvassing is a specific social marketing technique, not a survey technique.

Face-to-face surveys should be everyone's first choice. Some of the many characteristics that make them appealing are given below.

- Complex questions are possible because the interviewer can explain things using pre-worded 'prompts' and ask for further explanation using pre-worded 'probes'. Prompting uses set wording that an interviewer reads out if a respondent is struggling to answer a question; using anything other than the pre-set wording is not acceptable. An example might be reading out a set list of possible responses for the interviewee to select from. Probing is used when a respondent has not given enough information for their response to be coded, perhaps due to lack of focus; this also uses set wording, where possible, so as not to bias answers. An example might be the interviewer asking: "Could you explain what you mean when you say that you don't like the way they collect the recycling?"
- Because an interviewer is administering the questionnaire, difficult question routing is possible. This means that, if a question is not appropriate to a respondent (e.g. a question on using nappies for a respondent with no children), the interviewer can follow 'skip' and 'go to' directions. This is difficult with questionnaires that people fill in themselves as they often fail to follow these instructions correctly;
- Visual prompts can be used. This can be important, for example, when testing recognition of adverts or campaign literature;
- Show cards (sometimes called 'flash cards') can be used if respondents are being asked multiple-response questions, or sensitive questions where they may prefer to point to an answer rather than say it aloud. Show cards contain lists of answers with codes next to them. The respondent is asked to say the code number rather than the actual answer. One example of a sensitive question that might be used for socio-demographics is salary band;
- Shuffle cards can be used. Shuffle cards enable you to vary the order of answers, as there is evidence that respondents tend to choose the first few options regardless of whether they apply to them. Some questions also imply that certain options are better than others by listing in a specific order. Housing type is a good example where many questionnaires start with the detached houses and work downwards to flats and bed-sits; respondents may be reluctant to admit they fall into the 'lowest' option. The simplest approach is to print show cards two-sided, reversing the response order on each side. A respondent is shown one side of the card, and the interviewer alternates which side they use;
- Responses can be obtained from a person whose first language is not English, provided of course that interviewers have suitable language skills. The same applies to people with literacy problems who would be unable to complete a questionnaire themselves;
- High response rates are possible because you keep going until you've got the number you need;
- Interviewers can 'choose' their respondents based on required profiles (known as 'quotas' – see Chapter 3, Section 3.7.3). This enables a representative sample to be interviewed and is important when specific characteristics are required that probably would not be encountered by chance (e.g. families with children wearing nappies). However, bear in mind that because these characteristics are special, it could take a long time to find someone suitable so surveys that require quotas are more expensive to run and different measures may need to be taken to find a suitable sample; and

"Face-to-face surveys should be everyone's first choice ... They offer potential for complex questions and routing; use of visual prompts, flash / shuffle cards; interaction to overcome language / literacy barriers; initial selection based on specific profiles; and high response rates."

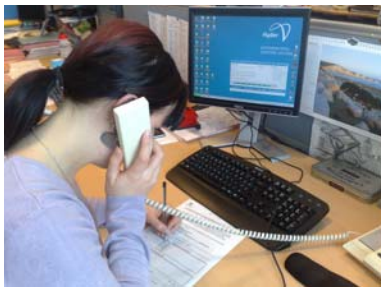
- At the end of the interview, the interviewer can give information to the respondent on the subject of the study, e.g. promotional leaflets on recycling or a giveaway cloth bag. The interviewer can also answer any questions the respondent has. Be aware, though, that market research companies employ interviewers who are trained to gather information and not give it; you may need people with different skills to play this dual role. See also Section 4.9.13 on door-to-door canvassing.

Face-to-face surveys do have some drawbacks that need to be worked around, including:

- they are expensive because a good interviewer's time is costly. Quota sampling makes them even more expensive and quotas need to be set to ensure that interviewers select a representative sample (see Chapter 3 for full information on sampling);
- face-to-face surveys are best carried out during the spring, summer and autumn when the weather is better and the days are longer. People are less inclined to open their doors to answer survey questions in winter or to stop on a cold and rainy shopping street;
- they can be time-consuming to organise and carry out;
- staff safety is an issue and lone working policies need to be thought through. Interviewers should not enter people's homes, for example, and it is good practice to survey areas in pairs; and
- staff training on conducting questionnaire surveys is needed unless a specialist agency is employed.

If you've decided that you want to do a face-to-face survey, Section 4.9 tells you how to go about it.

4.8.4 What are the pros and cons of telephone surveys?



Telephone interviews are a good choice if resources are limited. They have many of the same advantages as face-to-face surveys (complex questions, difficult routing, ability to get information from people who do not speak English or who have literacy problems, provision of information and answering questions). Lists of phone numbers can be purchased in a way that ensures a reasonably representative sample and quotas can be set, although it is more cumbersome to achieve these than with face-to-face surveying. Other appealing characteristics include:

- they tend to be cheaper than face-to-face surveys because travel time and costs are avoided;
- they are usually done from a central location. This means that quality can be routinely monitored (most professional agencies have 'listen-in' facilities) and the achievement of quotas can be regularly checked and adjusted; and
- they are quicker to implement than face-to-face surveys because you don't have to think about the logistics of getting interviewers to survey locations.

There are several significant disadvantages compared to face-to-face surveys which may make them inappropriate:

- the number of people refusing to take part will be higher than face-to-face surveys so additional effort will need to be expended in obtaining the required response levels;
- more and more people are delisting their phone numbers or screening calls, and this may lead to problems obtaining a representative sample;
- telephone interviews have to be shorter than face-to-face interviews because people are more likely to cut an interview short on the phone if they lose patience or interest;

- visual materials such as show cards and shuffle cards cannot be used. This means that campaign recognition cannot be done by telephone; and
- there is no coverage of those without landlines.

If you've decided you want to do a telephone survey, Section 4.10 tells you how to go about it.

4.8.5 What are the pros and cons of paper-based self-completion surveys?

In this type of survey participants receive questionnaires by mail, by hand delivery or by picking them up, for example, from a library or council office. Completed questionnaires are then collected, returned by post or submitted via a central collection point.

This type of survey works well in areas of low transience, medium to high levels of affluence, high levels of literacy and a large majority of English speakers. In areas such as this, a short and interesting survey for which two reminder mailings have been sent out has been known to reach response rates of 70%. By contrast, other postal surveys have achieved response rates of just 3%. You shouldn't expect response rates more than 50% (if you get them it's a bonus) and should aim for 20%. Response rates for businesses are lower – 10% would be a reasonable aspiration.

Response rates are dependent on a number of factors including:

- how it is delivered;
- how it is addressed;
- who it is from;
- communications on the envelope;
- covering letter;
- design of the questionnaire;
- design of the questions; and
- the subject matter of the questionnaire.

Incentives can also help and reminders will certainly boost response rates. The lower the response rate, the more your final sample will differ from the profile of your target population.

Some notable advantages over face-to-face and telephone surveys include:

- they are the cheapest method because limited human resources are required (postage and printing costs are low in comparison to methods which require more manpower);
- they are useful if you want people to look up information that may not readily be to hand, for example if, as part of a broader municipal waste survey, you are asking trade premises about the amount of waste they had collected in the previous year;
- they can reach isolated and rural areas where face-to-face surveying may be impossibly expensive; and
- they enable people to answer sensitive questions anonymously.

The disadvantages with postal surveys are unfortunately significant and they cannot be recommended without strong reservations for waste-related surveys where the issues can be complex. This is because:

- they are often associated with poor response rates – although as mentioned above this does depend on the area, whether the questionnaire seems interesting to the respondent, whether the design and layout is appealing,

CASE STUDY

A web-based survey in Rushcliffe

Rushcliffe residents had indicated in previous consultations that they would be open to the idea of communicating with the council over the Internet. So the Council decided to put together an online questionnaire. The survey has been running for several months and so far there have been 153 responses with more expected in the future.

Valuable lessons have been learnt and Rushcliffe won't be abandoning the idea of online surveys, but will in future consider:

- offering an incentive such as a prize draw, a Recycling2Go wrist band, or a charity donation for completing a survey;
- reducing the questionnaire to no more than 10 questions; and
- generally improving the website including use of professional photographs.

For more information contact Kevin Pickaver at kpickaver@rushcliffe.org.uk.

and the number of reminder mailings sent out to non-respondents. It is good practice to send out two reminders. It is also important to remember this when deciding how many questionnaires to send out: if only 50% are expected to reply, you need to send out double the minimum number required to achieve an acceptable level of response;

- the questionnaire must be limited in length and complexity. Questions must be very self-explanatory, language must be kept simple, instructions for completion should be clear and question-skipping kept to a minimum. As there is no interviewer to help the respondent through the questionnaire, complicated routing cannot be used and this limits the kinds of questions that can be asked;
- postal surveys exclude people with literacy problems from responding;
- postal surveys can exclude people whose first language is not English. You can overcome this by sending out translated questionnaires but this may not necessarily help if there are high levels of illiteracy in general and it adds to the expense of a survey;
- open-ended questions where people write in responses freehand need to be limited to one or two because they are difficult and time-consuming to analyse. The responses have to be 'coded', i.e. grouped into meaningful categories to be analysed, otherwise the information just comes out as long lists of answers. See Sections 4.15.4 and 4.20 for more information;
- respondents don't always answer the questions in the order you intend – people can skip to questions that most interest them and can forget to answer others;
- respondents decide whether or not to fill in the survey, i.e. they are self-selecting. This means that the sample may not be representative of the population that you are interested in and answers have to be adjusted afterwards by a technique known as 'weighting' (see Chapter 3, Section 3.11). This can be complex if several factors are important, e.g. housing type, ethnicity and household size;
- it takes a long time to complete from start to finish because you have to allow time for response and for several reminder mailings;
- you need to be able to cope with potentially large volumes of questionnaires being sent to you through the post (investing in a sturdy letter-opener is essential!) and have the resources to input the responses into a database; and
- there is little checking of the sense and quality of the responses compared with interviewer-led surveys (face-to-face and telephone).

4.8.6 What are the pros and cons of panel surveys?

Many local authorities now have a panel survey. These are often referred to as 'Citizens' Panels' and are usually outsourced to market research agencies. They operate by recruiting a group (or 'panel') of residents who agree to complete a set number of surveys each year and volunteer to be asked to take part in other consultative processes. The main purpose of the surveys is to gather satisfaction data for reporting against targets.

The advantages of panel surveys are that they are cheap and that most of the work is done for you. Because residents are recruited in advance, response rates are usually acceptable. There are five key disadvantages:

- space is limited in a panel survey as normally several council services will be included;
- because panels are mainly about satisfaction in relation to Best Value targets, more exploratory and 'open' questions may not be acceptable;
- because most panel surveys are done by post, the same difficulties apply as with other paper-based self-completion surveys – limited complexity, simple routing, and limited opportunity for visual prompts;

- there are issues around whether the panel members are truly representative of the area as a whole; and
- there is little checking of the sense and quality of the responses compared with interviewer-led surveys (face-to-face and telephone).

Some Citizens' Panels are better designed and run than others and, if you are thinking about using this approach, you should make in-depth inquiries about your panel. These are some of the questions you should ask the panel manager:

- How are panel members recruited? How do they make sure the sample is representative?
- How frequently is the panel refreshed? How do they ensure that the refresher sample makes the sample representative when taken as a whole?
- How do you ensure that you get people who are neither very interested nor very disinterested in what the council does?

Using a Citizens' Panel as the basis for a survey is attractive. However, if there is any doubt whether the panel is truly representative then you should avoid using it. Any results from a Citizens' Panel survey should be treated with caution until the method used for obtaining them is clear and deemed acceptable by you. For local authorities funded by WRAP, Citizens' Panel surveys are unlikely to be accepted as a valid means of monitoring attitudes, behaviour and satisfaction unless a clear case can be made.

4.8.7 What are the pros and cons of web-based surveys?

In the last few years there has been growth in the use of web-based surveys in which respondents visit a website to complete a survey online. The advantages of this approach include:

- the surveys can incorporate complicated question routing as this is done automatically through the electronic questionnaire;
- the answers from a survey can be automatically programmed to download to a database, so that there is less manpower required for entering results; and
- they are normally cheaper than other survey methods because no printing or postage is required, although this may be offset by the costs of design if this can't be done in-house.

However, this approach also has some significant disadvantages. These mean that it comes at the bottom of the list of preferred options (see Section 4.8.2). The disadvantages are as follows:

- As not everyone has access to the Internet or e-mail, there may be an issue about biased samples. There is no way of controlling the type of person that responds to the survey, so the respondents are unlikely to form a representative sample of the population. For example, the type of person that is more likely to be online is likely to have different characteristics in terms of literacy, education, age and wealth compared with those that are not online;
- Response rates can be low depending on how well publicised the survey website is, whether there is an incentive for completing the questions and how attractive the host website is to gain people's interest in the survey;
- Questionnaires have to be very brief (10 questions maximum) with no open-ended questions. This is because people have a greater tendency to give up halfway through than with other types of survey. This is especially true if, as with many surveys, the respondent is not advised how many questions there are to answer or given an indication of progress through the survey; and
- There is little checking of the sense and quality of the responses compared with interviewer-led surveys (face-to-face and telephone).

Other things to bear in mind are that:

- you will need staff with skills in programming so your web team or another professional must be involved in designing the survey;
- depending on the survey design and programming, it may not be possible to go back to amend a response if respondents realise they've answered a question incorrectly; and
- you will need to make sure that people can take part only once, especially if an incentive is offered.

4.8.8 I've decided on my survey method – should I commission it out or do it myself?

The next decision you will need to make is whether to commission someone to carry out your survey or whether you will do it yourself. Commissioning is normally preferable as surveys require expert input and are time-consuming to devise and oversee, but budgetary issues don't always allow it.

A wide range of organisations are capable of carrying out high-quality and accurate surveys including market research companies, social research companies, specialist waste management consultancies and universities. There is also a choice between large organisations that operate across the UK and more local organisations.

"Be very clear about what you want to get out of the project, but let the researchers come back with suggestions about how to add value."

For commercial companies, you may wish to check that they are members of the Market Research Society and/or the Social Research Association. This will provide you with reassurance that the work will be carried out ethically and professionally –although of course it is not a guarantee of quality in itself.

The Social Research Association (SRA) has produced a useful guide for those wanting to commission research. *Commissioning social research: a good practice guide* can be downloaded from the SRA website (www.the-sra.org.uk/documents/pdfs/commissioning.pdf).

Key good practice pointers are:

- exchange notes with other buyers, particularly neighbouring authorities that have carried out similar work;
- issue a written brief for the work regardless of whether you are asking for competitive bids or a quote from a preferred supplier;
- don't automatically think that a formal tendering process will produce the best results or the best value-for-money proposals;
- if you do go for a formal tendering process, make it as supplier-friendly as possible while abiding by the need for transparency and fairness – encourage alternative proposals and enable pre-submission discussions (e.g. to get best value from the bids);
- limit the number of competitors to between two and five organisations and make sure you do your homework to identify which these might be;
- consider a range of commissioning models including framework contracts, call-off contracts and staged commissions as well as standard one-off projects;
- if your project is high value, you may have to advertise it in the Official Journal of the European Union (OJEU) – check with your legal or procurement department;
- be very clear about what you want to get out of the project, but let the researchers come back with suggestions about how to add value;
- be very transparent with the organisations that you ask for a proposal about how many other organisations you are asking, the rules and the timescale;
- provide general yardsticks of project scale and/or budgetary constraints;

- clarify intellectual property rights at the start; and
- be clear about what kind of report or presentation of results will be required and, if possible, how many meetings the researchers will be required to attend.

One important issue is time planning. You should be reasonable in your commissioning timescales. The SRA recommends that research organisations are given a minimum of three weeks to provide a proposal and as much as six weeks for a complex project. In practice you may need to speed this up, but one week should be regarded as the bare minimum. It is unreasonable, though, to ask for organisations to produce their bids in one week and then take several weeks yourself to assess them. Be realistic about what is achievable both by them and by you.

"It is unreasonable to ask for organisations to produce their bids in one week and then take several weeks yourself to assess them. Be realistic about what is achievable both by them and by you."

- If you decide to commission someone, refer to Annex 5, which gives general advice and provides a template for a tender specification. Read the remainder of this section as well so you know what kinds of things to look for in the bids you receive and the kinds of questions you should be asking; and
- If you decide to do it yourself, read very carefully the section of this chapter on how to go about your survey.

4.8.9 Making a plan

Whichever approach you decide to take, spend some time setting out a plan for your survey. Read the whole of this section to see what's involved before you make your plan.

Table 4.5 gives a list of tasks, with the approximate timescales required for each element. The tasks apply to all types of surveys unless otherwise stated. Remember also to allow time for consultation on, and sign-off of, documents such as the tender brief and the questionnaire.

Table 4.5 Tasks and timescales for surveys

Task	Time you should allow
Decide who will do the survey (e.g. in-house or contracted out).	Half day – but depends on knowledge of skills needed and determining what exists in-house.
Set aims, objectives, KPIs.	Half day – assuming reasonable skills.
Set research questions.	Half day – assuming reasonable skills.
Decide sample size and scope.	Half a day – but you may need statistical advice.
Tendering process (if contracting out) or:	One month – allowing for writing and advertising the tender, and the selection process but depends also on time taken to consult with relevant staff. The staff time in this month is probably around three days.
Write monitoring plan (if in-house).	One week – more if you have to consult with a committee or lead member.
Get data for profiling (e.g. MOSAIC or ACORN).	One day – but depends on how difficult it is to obtain.

Task	Time you should allow
Get contact details for telephone or postal survey.	One week – more if you are using other council records that you need to pull together.
Sampling (including designing quotas if appropriate).	Half a day – but you may need statistical advice.
Design and test questionnaire.	One week – more if you have to get it approved by a committee or lead member.
Obtain all resources needed.	One day – but depends on whether you can access these in-house, e.g. clipboards, mobile phones, extra phones, headsets, etc.
Print questionnaires or:	One week – but this does depends on your printing arrangements and the number of copies being made. The staff time in this period will be minimal.
Prepare PDAs (hand-held computers) or:	One day to download and test the questions from the questionnaire.
Prepare telephone record system	One day. This is very much more efficient than using printed questionnaires even if you only enter it directly into Microsoft® Excel.
Recruit interviewers (face-to-face or telephone surveys).	Three to four weeks – but once recruited you can't leave them hanging about waiting for work. The staff time for this task is probably around two days.
Train interviewers (face-to-face or telephone surveys).	One day for training preparation. One day for training delivery – depending on size and experience of the team.
Interviewing (face-to-face or telephone surveys).	This depends on the number of interviewers, the length of the questionnaire, the complexity of the quotas, the location of the survey and the number of surveys to be completed. An average is one completed survey per interviewer for every 20 minutes they spend interviewing for face-to-face surveys, or one for every 15 minutes for telephone surveys.
Overseeing interviewers on day-to-day basis (face-to-face or telephone surveys).	This depends on the number of interviewers and their experience, and whether you have a team leader.
First mailing (postal surveys).	Allow one day per person per 1000 questionnaires to stuff the envelopes. Allow three weeks for responses to come back.
Check returns from first mailing for gaps (postal surveys).	Half a day – checking against a unique numbers list and preparing a list for the second mailing.
First reminder mailing (postal surveys).	Allow one day per person per 1000 questionnaires to stuff the envelopes (assume a 20% response rate at this stage). Allow two weeks for responses to come back.
Check returns from reminder mailing for gaps (postal surveys).	Half a day – checking against a unique numbers list and previous returns, and preparing a list for the third mailing.
Second reminder mailing (postal surveys).	Allow one day per person per 1000 questionnaires to stuff the envelopes (assume a 30% response rate at this stage). Allow two weeks for responses to come back.

Task	Time you should allow
Coding of open questions.	This depends on the number of questions to be coded but allow one day per question per 200 questionnaires.
Set up database.	Two days – assuming reasonable skills.
Quality checking and data input.	One week – but depends on complexity of survey and number of people. Will not be needed if data are inputted as interviews are carried out – by using a portable digital assistant (PDA) or a telephone record system.
Analyse data.	One week.
Write up results.	One week.

Some of these resource needs are dependent on the number of surveys and length of the questionnaire. The most notable is data collection, but it also applies to data entry. When working out how many people you need, you should assume that data entry takes half the length of time that the survey itself took.

Many of these tasks and processes can run concurrently. Timelines or activity tables (sometimes also called Gantt charts) are a useful way of presenting this information visually. You will need to make decisions such as:

- when will you finalise the questions;
- when will the survey be ready;
- when will the interviewers need to be recruited; and
- when will the fieldwork be finished.

An outline time plan will help an external agency bid but be open to them suggesting amendments based on their experience.

A table or chart such as this will help you to know how much staff resource is required to complete the work. Based on this plan you can work out how many people will be needed to complete the work and whether you have the necessary resources. This will need dedicated time and, if you don't have that time, you should again consider commissioning someone to do it for you – or otherwise significantly extend the timescales.

This does not include all the activities required to carry out the work but indicates the main tasks that are required to plan the timing and ensure deadlines are met.

The length of the fieldwork phase will depend upon how many interviewers you have, the contact rate and the length of the questionnaire. If your telephone survey data is being entered as it is collected you will not need a data entry stage.

The example time plans show that a postal survey (Figure 4.5) can take much longer than a face-to-face or telephone survey (Figure 4.4), though this does depend on the number of reminder mailings that you send.

Figure 4.4 Example time plan for a face-to-face or telephone survey before and after a communications campaign

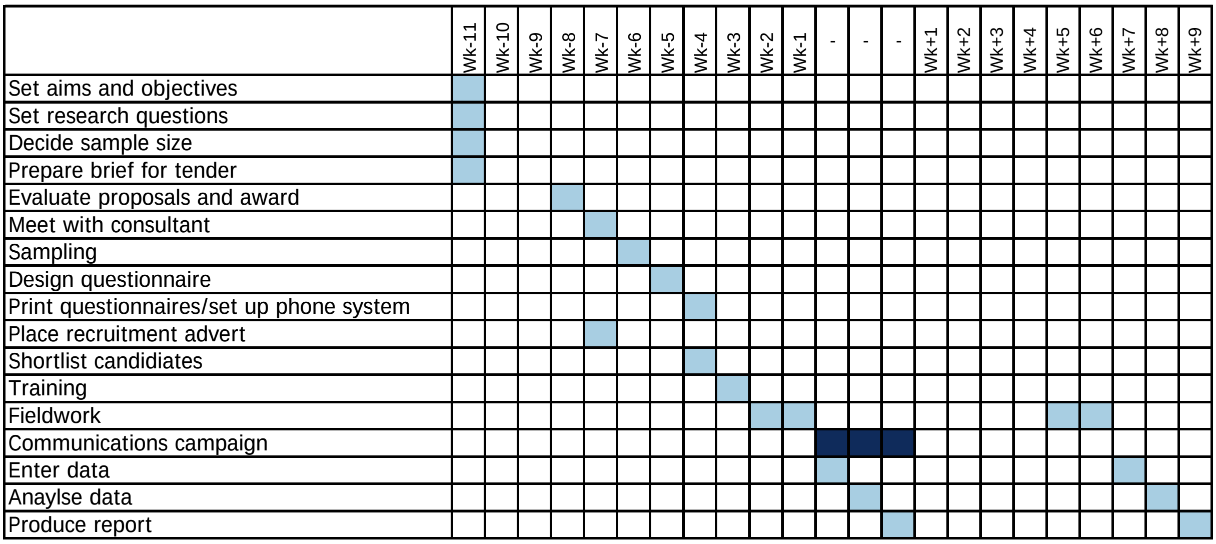
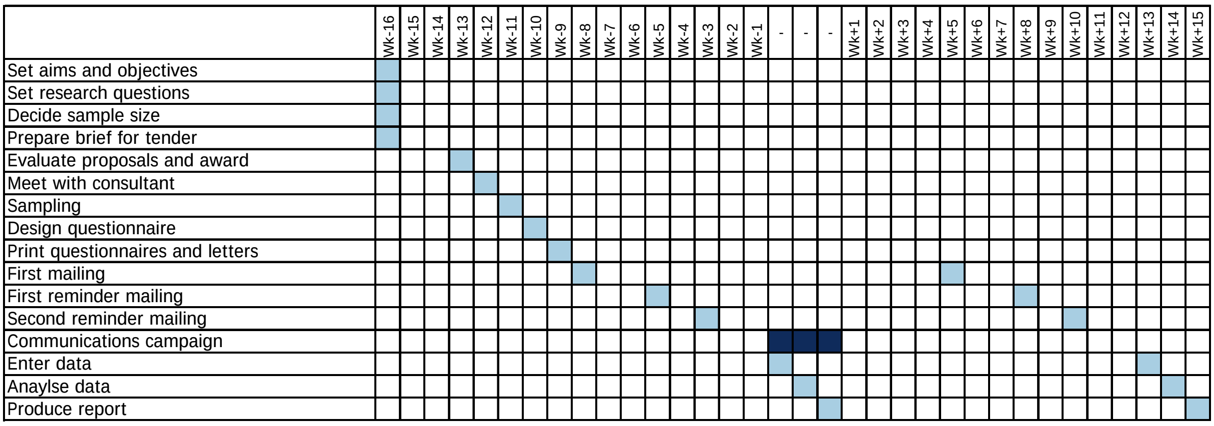


Figure 4.5 Example time plan for a postal survey before and after a communications campaign



4.9 I've chosen a face-to-face survey – how do I go about it?

4.9.1 Am I allowed to survey face-to-face?

You should first check whether your local authority has policies against sending people representing them door-to-door, although this should not restrict genuine research. If your authority has such a policy, you will need to think carefully about whether a face-to-face survey is possible and particularly whether on-street interviewing (e.g. in a shopping centre) is also ruled out by the policy.

4.9.2 Should I commission it out or do it myself?

The next decision you will need to make is whether to commission someone to carry out your survey or whether you will do it yourself. See Section 4.8.8 for more guidance on making this decision. If you decide to do it yourself, read the remainder of this section very carefully.

4.9.3 Make a plan

Whichever approach you decide to take, spend some time setting out a plan for your survey. Section 4.8.9 discusses this in detail.

4.9.4 How do I get a quality team of interviewers?

A skilled and motivated interviewing team is difficult to come by. One option is to recruit local students or new graduates, perhaps those working towards or having a relevant degree, who are likely to be motivated by the subject. They will not be skilled interviewers, though, so will need lots of training. Another option is to advertise locally for people with interviewing skills but this can be a 'hit and miss' affair. Advertising within your local authority is a further option, as is going through recruitment agencies for temporary staff. Some authorities have used people recruited to carry out door-to-door canvassing to do interview work as well, but see Section 4.9.13 on the issues associated with this.

4.9.5 How do I decide the sample size and make sure it's representative?

Chapter 3 discusses this in detail. The recommended sampling approaches for face-to-face surveys are cluster sampling and quota sampling.

In carrying out a doorstep survey you are likely to achieve a response rate of around 30%. You will therefore need a sampling frame of around 3667 households to achieve the recommended target of 1100 completed questionnaires. It would be sensible to round this up to 4000 households – large enough to accommodate the eventuality of a lower contact rate and response bias (see Section 3.8 in the sampling chapter).

You will need to check your sample for response bias as you proceed with the fieldwork. If, for example, if you are working with ACORN categories, you might find you are short of ACORN 2s as you near the end of the survey, and need to send the interviewers to streets where these can be found. It is therefore best to allow for this at the start by having a large enough sampling frame.

4.9.6 How do I design quotas?

If you are doing a face-to-face survey in a public place you should use a quota sampling system (also discussed in Chapter 3). Quotas help make sure the sample accurately represents the kinds of people in your target population (see Chapter 3, Sections 3.2 to 3.3) for a definition and details of 'target population'. You need to decide which factors are likely to be important for the kinds of questions you are asking. For example, are there likely to be differences by age, by gender or by ethnic group? If you believe there will be, you should set a fixed quota for people of each type in proportion to their prevalence in your target population. Beware though – the more complex your quotas become, the more likely your interviewers will struggle to meet them. This will increase expense and delay the survey.

As a general rule you should try to restrict quotas to factors that can be visually assessed by an interviewer such as gender and approximate age band. Other quota characteristics are valuable, such as whether the respondent recycles or not, but respondents have to be asked about these in a set of screening questions and this can put people off. Ethnicity should not be visually assessed, as it is easy to get this wrong. No more than three quota characteristics should be used if you are doing this yourself. Professional agencies can and do use more.

Each interviewer should be set their own quota targets to meet. If they fail to meet them the ‘leftovers’ can be passed on to other interviewers until all the surveys have been done – so it is important that records are kept. A log-sheet might look something like the example shown in Figure 4.6, with space in each cell of the table to record the number achieved, perhaps using the five-bar gate approach:

Figure 4.6 Example log sheet for quota sampling

Housing	**Detached**		**Semi-detached**		**Terraced**	
Age	**<40**	**40+**	**<40**	**40+**	**<40**	**40+**
Male	30	~~20~~	~~10~~	~~5~~	30	~~50~~
Female	~~20~~	10	~~20~~	10	~~50~~	80

4.9.7 How do I design the questionnaire?

Sections 4.15 to 4.17 explain this in some depth as it is relevant to all the survey methods. However, in designing a questionnaire for doorstep or street interviews, you should bear in mind that there is a limit to the amount of time people can be expected to give to the process. Fifteen minutes should be the absolute maximum (about 30 questions), and less in the winter when people cannot be expected to stand at an open door for so long. A good length of time to aim is 5–8 minutes. The timing should always be checked as part of the questionnaire design and testing work.

An average questionnaire for doorstep surveys will include about 20 questions. Bear in mind that:

> A **question** is a sentence that asks for just **one piece of information**. For instance, the following is actually two questions in one:
>
> Q1 How do you find information on recycling services, and which do you use most often?

This might be better written as:

> Q1 How do you find information on recycling services?
>
> Q2 Which of these do you use most often?

Each of the above is an individual question and each will analysed separately.

CASE STUDY

Interviewing multi-ethnic communities in Luton

Luton is a multi-ethnic area where a significant minority of households do not have a good grasp of English. As part of its doorstepping activity, Luton employed a team of interviewers who could speak community languages as well as fluent English.

The interviewers’ ability to engage with householders in their first language improved the quality of the information gathered, as well as enabling key recycling messages to be passed on in a way that householders could understand.

Kully Birring, Head of Waste Management at Luton Borough Council, commented, “We have found the use of multi-lingual personnel to be very effective in communicating with hard-to-reach groups because this increased the contact rate and ensured a more honest appraisal.”

For more information contact Kelly Birring at birringk@luton.gov.uk

4.9.8 Where should the interviews be carried out?

Your choice is:

- on a busy street;
- in a busy area such as near shops or amenities;
- at people's houses by knocking on their doors and interviewing them at the doorstep; or
- at a local venue where your target population is likely to go (e.g. a nursery if you are looking for young mothers, a youth club if you are looking for teenagers or a bring site if you are looking for recyclers).

If the survey is to be carried out on-street as opposed to door-to-door, you should choose a busy area but one that is likely to attract a wide range of people within your target population. A shopping centre may be a good choice, for example; but be aware that large shopping malls may attract visitors from out of the area, which can complicate selection for interview. Also, a lot of the possible venues are privately owned and you will need to get the permission of the owner to interview there or risk your interviewers being ejected. Examples include front-of-store areas at major supermarkets chains, shopping malls and arcades.

TOP TIP

Don't ask two or more questions in the same sentence. Keep them separate, to make analysis easier and allow clear conclusions to be drawn.

If carrying out your survey door-to-door, make sure you provide the interviewers with addresses for three times the number of questionnaires they need to complete. This will enable them to move swiftly on if there is nobody home at an address. If you require interviewers to return to addresses where nobody is in on the first visit, the cost of the survey and the length of time taken to complete it will increase significantly. The rate of successful contacts will depend on the type of area and the skill of your interviewers, but you should not expect a rate of more than one in three.

Interviewers should never enter somebody's house, even if invited to do so; all interviews should be done at the front door. This is to protect their personal safety and also to avoid them being exposed to accusations from householders, for example, of theft. Some research organisations carry out interviews in people's homes as this enables longer interviews to be carried out. However, for the purposes of this guide we are concerned with interviews at the doorstep.

Household waste recycling centres (HWRCs) and bring sites are just like any other location you might choose to conduct your survey and the same considerations apply. There will be additional health and safety considerations, e.g. vehicle movements are likely to be an issue at HWRCs. You should check with the site manager what is required of your interviewers.

You should be careful not to discourage people from using the site simply by virtue of your presence. Elderly people in particular may be reluctant to approach if they see a stranger apparently 'hanging around'. The interviewer should choose their spot carefully, far enough away not to be menacing but close enough to be able to ask for an interview.

You should not interview people aged younger than 18. This is because they are considered to be children and as such may not be able to give 'informed consent', something that is a key ethical requirement in surveys.

4.9.9 Do I have to use printed questionnaires or can I make use of computers?

You may want to consider using hand-held computers rather than paper copies of questionnaires. They have the advantage of being quick to use (provided the survey is well designed) and they avoid the need for data to be entered manually onto a database. They also reduce paper use and subsequent wastage. It is possible to transfer data electronically over wireless connections. However there are significant drawbacks to their use including:

- data can be lost;
- the batteries do not last long enough;
- they make your interviewers more vulnerable to muggings; or
- your interviewers walk off with them.

If you want to take this route, then make sure the system is well tested and that the interviewers have some incentive to return devices.

4.9.10 Can I record responses without using one copy of the questionnaire per interview?

For questionnaires of up to about 15 questions you may want to consider using a response sheet. These are sheets onto which you can keep a record of responses against each question number, without actually completing a separate paper questionnaire for each respondent. The sheet will normally be a grid in landscape format, with a unique identifier for each interview (often known as the case number) down the side and each of the question numbers across the top. The interviewers then carry one copy of the questionnaire, to which they refer.

Each question has a number of possible options for the answers and these are coded. During an interview, for each respondent (or case) the codes for the answers to each question are entered on one line of this form. Some question only allow a single answer (e.g. Figure 4.7, Question 1) but other question can have multiple responses (e.g. Figure 4.7, Question 5) and these will require more than one column for the answers. Where 'other' responses are allowed for questions, the response sheet must allow for the recording of the additional information. The actual content of this 'other' response should be entered in a space provided at the bottom of the sheet, and referenced to the interviewee (case).

Figure 4.7 Example response sheet

Case No.	Q1	Q2	Q3	Q4			Q5					Q6					Q7
1	1	1	2	2	6		1	2	8			1	2	4			2
2	3	2	1	1			3	8	11			4					3
3	1	2	1	1	6		2	3	8			1	2	3	10		1
4	1	2	3	2	5	8	1	3	8			2	4				1
5	1	3	1	3	6		8					5	8				2
6	3	2	2	1			1	2	8			1	2	4			3
7	2	1	1	2	5		1	8	10			4	6	7	10		1

Response sheets have the advantages of helping to:

- save printing costs;
- save paper;
- faster data entry; and
- reduce the weight of paper that survey staff have to carry.

CASE STUDY

Using technology to gather views in Leicestershire

Leicestershire County Council canvassed the views of members of the public about all its recycling and household waste sites. This involved using interviewers to ask questions and recording the information on a survey sheet. Each completed survey sheet was scanned into analysis software.

In future, hand-held computers known as PDAs will be used to record information directly into electronic form. These have been provided by the Council's own research group. This approach should reduce errors from the scanning process, reduce costs and speed up the process. It will also minimise paper use.

For more information contact the Waste Management Section at WManagement@leics.gov.uk.

4.9.11 If I'm interviewing door-to-door, how do I decide where to go?

Consult Chapter 3 for guidance on sampling. Your sample needs to be representative of your target population. In order to be practicable in terms of distances covered, cluster sampling is usually used. Your sampling process should produce a list of properties to be visited that can be given to the interviewers.

4.9.12 How do I manage the interviewing process?

Training
All interviewers will require training regardless of their experience. You should run through the questionnaire so they understand the questions they will be asking and the possible answer options (especially where question skips are to be used). Explain the quota system (if one is being used), how they should record their progress against each quota, and the basic rules of interviewing – see the Market Research Society (MRS) website for useful information – www.mrs.org.uk). Set up role-play sessions so that interviewers can practise.

It may be possible to commission an external agency to train your interviewers for you; check with local research organisations to see if they provide this service.

Show cards
One of the benefits of face-to-face interviews is that you can use show cards (sometimes referred to as flashcards) to prompt visually or to provide a list of possible answers. In order to remove some of the bias from this technique it is a good idea to have several show cards for each question, with the possible answers in a different order on each. Ensure that you alternate the show cards as you conduct the survey.

Motivation
Interviewing can be a difficult and de-motivating job. Many interviewers who start with good intentions of completing lots of questionnaires give up halfway through. It is important to monitor staff morale and engender team spirit. A bonus payment for staying the course of the project, dependent on quality, can help a lot. Alternatively, setting up teams of interviewers who can draw on each other for support can help. Keeping in daily contact with interviewers is essential if the survey is to run to time and produce high quality outputs. In many surveys, new interviewers have to be recruited and trained throughout the fieldwork process.

Quality control
Most interviewers are trustworthy but you should set up a monitoring system that assumes the worst. This might include observing them in action, arranging for colleagues to be interviewed so that standards can be checked, and following up with a telephone call to a selection of respondents to check that the interview did really take place, and that the interviewer was polite, courteous and complied with rules such as showing ID badges.

If you are going to use telephone calls to conduct spot checks, rather than a face-to-face revisit, you will need to include in the questionnaire a section that asks for telephone numbers. You should explain in the questionnaire that this would be used for quality control purposes only. Although respondents are quite within their rights to withhold their number, be suspicious of an interviewer who consistently fails to get telephone numbers. And don't assume that just because there is a number written down it is a real one. There have been instances of interviewers who have simply been through the phone book writing out numbers in order to fake questionnaires.

Spot checks need to be carried out to a schedule. Responses need to be recorded and kept with the rest of the survey data. There should be a minimum of one check per interviewer per week but much more frequently in the first days of the survey. Interviewers should always be made aware that these checks could happen at any time.

You should regularly check questionnaires received for quality and completeness and address any under-performance as you progress. This can be done when the team hand in the day's work to the team leader at the end of the shift. Where response sheets are used it is a good idea to include a box for the team leader to initial, confirming work has been quality-checked.

Code of conduct

If you are interviewing people at the doorstep you should follow the MRS Code of Conduct, which states that no visits should be made before 9am on weekdays and Saturdays, before 10am on Sundays or after 9pm on any day. The Code of Conduct can be downloaded from the MRS website (www.mrs.org.uk).

Returning completed surveys

You should make arrangements for interviewers to hand in completed questionnaires, pick up new copies and update quotas. You should make yourself available to them to discuss any problems they have encountered. The best way may be to set up a regular time each day or each week when interviewers can drop in, or set a time and place where you will go to meet them. An opportunity to meet face-to-face can also be good for morale. Allow some time for discussion of how the job is going and listening to any feedback your interviewers may have on how they feel the work is going.

Health and safety

Safety considerations are important for interviewers working alone. You may wish to deploy your interviewers in pairs working in the same street or area. If this isn't practical, you should refer to your lone working policy and abide by it. The Social Research Association (SRA) has produced a useful code of practice that can be found at: www.the-sra.org.uk/documents/word/safety_code_of_practice.doc

Key points include:

- make sure you budget for safety – this may mean pairing up interviewers which can be more costly;
- carry out a simple risk assessment of the area to be surveyed. Is transport available? Is the area lit? Are there local community tensions that may cause difficulties? Is the area safe to walk around?
- ensure interviewers are trained in handling abusive or aggressive respondents;
- ensure interviewers do not wear conspicuous jewellery;
- the wearing of high visibility vests will depend on your health and safety policy, and on the working environment;
- keep valuable items out of sight;
- ensure that somebody always knows where interviewers are at any point in time – and ensure they stick to their schedule;
- have a support structure in place should interviewers need it; and
- do not under any circumstances enter people's homes, even if invited.

Identification

All interviewers should carry photo ID cards and, if necessary, a letter of authority from the council that can be shown to the respondent. Respondents should always be given information about who to call for reassurance that the survey is genuine and should be allowed to make that call prior to the survey being carried out. You should think carefully about wearing a council badge, however, as this may encourage respondents to talk to you about other council services, normally because they are unhappy with them, and this can significantly extend the length of the interview.

Informing the authorities

The local police should also be informed that a survey is taking place and be provided with the names of the interviewers. This will ensure that reports of suspicious behaviour that do sometimes come from members of the public with respect to interviewers can be dealt with quickly and without the need to take interviewers off the job. Neighbourhood Watch co-ordinators, resident associations and key community groups should also be kept informed as this can minimise residents' concerns and interruptions to your interviewers.

4.9.13 I'm planning to do some door-to-door canvassing – can I conduct a survey at the same time?

Door-to-door canvassing is a social marketing approach using face-to-face contact with householders on their doorstep. It is normally used to persuade residents to behave differently, e.g. by using the kerbside scheme, buying a home composter or signing up for washable nappies. Canvassing is acknowledged as a highly effective method for improving participation in recycling collections from households as it provides targeted information with a personal approach. (See WRAP's *Step by Step Guide to Door-to-Door Canvassing* for advice on conducting a successful canvassing campaign at: http://www.wrap.org.uk/local_authorities_old/toolkits_good_practice/guide_to.html).

The aims of canvassing can be broad and usually involve some of the following:

- raising awareness of recycling and encouraging action;
- providing details about recycling collections from home;
- increasing capture rates by broadening the range of materials a householder recycles;
- decreasing contamination from materials that should not be put in the kerbside container;
- improving the frequency with which a householder recycles;
- enabling action by taking requests for new or additional containers; and
- recruiting new households to recycling.

At first glance, door-to-door canvassing provides an ideal opportunity for survey data to be collected on attitudes, claimed behaviour and satisfaction levels. There is one big problem with this, though, which is that the interviewer is there to promote recycling. If someone turned up on your doorstep wearing a baseball cap, bag and jacket branded with 'Recycle Now!' how awkward would you feel about admitting that you don't actually recycle and, to be honest, you think it's all a complete waste of time? If people don't tell the truth in a survey the data recorded will be biased and misleading. This means that everything in your power must be done to avoid influencing the respondent including avoiding leading questions, providing information only after the survey questions have been asked and not inadvertently implying through behaviour, uniform or tone of voice that there are 'preferred' answers. If you are going to combine door-to-door canvassing with survey work, the interviewer should be plainly dressed and the survey should always be completed before any discussion or persuasion takes place. Otherwise the results of the survey will be biased and will not represent the actual views of the respondents.

Provided that these conditions are achieved, doorstepping and surveys can be combined. You will need to decide whether you will survey everyone contacted or just a small proportion of them.

4.9.14 What do I do with the questionnaires?

Section 4.19 covers this in detail.

4.9.15 How do I code the data?

Section 4.20 covers this in detail.

4.9.16 How do I analyse the data?

Section 4.21 covers this in detail.

4.9.17 How do I write up what's been found?

Section 4.23 covers this in detail.

4.9.18 What resources will I need for all this if I commission it out?

The costs of commissioning a survey are dependent on a range of factors. For a face-to-face survey you should expect to pay more if:

- you want your results very quickly;
- you want to survey more than 1100 people;
- your questionnaire is long;
- you have a lot of open-ended questions;
- you require quota sampling;
- your survey is to be carried out in an area where rates of pay are high (e.g. London and the South East);
- your survey is door-to-door in a rural area;
- your survey is in an unsafe area where interviewers need to travel in pairs or have other protection;
- you require multi-lingual interviewers;
- you require interviewers to call back on the people who are out;
- you require data analysis (e.g. hypothesis testing) as well as simple data tabulation; and/or
- you require a full report as well as a simple summary or presentation of the results.

Because there are so many variables, it is impossible to quote a typical price for a survey. Two costed examples are given below to act as a guide.

> A face-to-face survey of 1100 people carried out on-street in Birmingham city centre using a short questionnaire of about 15 questions. Quotas based on age and housing type were required. Data tables only were required plus one meeting and a presentation of the results.
> Cost = £10,000–15,000 plus VAT.

A site-based survey of 2000 users at a busy site in Guildford (approx. 600 users per day) using a medium length questionnaire (20+ questions) with three open-ended questions. One week allowed for fieldwork. Data tables only were required with one meeting and a presentation of results.
Cost = £15,000–25,000 plus VAT.

4.9.19 What resources will I need for all this if I want to do it myself?

The staff resource you will need to run a survey yourself is highly dependent on the number of people you want to survey and the length of the questionnaire. It is also dependent of the type of survey and the target area. If households are very spread out or few people answer the door, it will take longer to complete. For a short questionnaire of 10 simple questions, one of which is open-ended, you should allow the timescales shown in Table 4.6 for each completed interview. These timescales allow for the time taken to:

- knock doors where there is no response;
- move from house to house; and
- move around the target area.

Table 4.6 Interview timescales

Location of interview	Time to allow
On-street in a busy area	8 minutes
On-street in a quiet area	10 minutes
Door-to-door in an urban area	10 minutes
Door-to-door in a rural area	15 minutes
At a busy site	5 minutes
At a quiet site	10 minutes

Once you know how many completed questionnaires you want, the required number of person-days can be calculated. Combine this with your timescale for completion and you can work out how many interviewers you will need. An example is given below.

I want to interview 1100 people at a busy site. Based on a five-minute questionnaire, I hope to achieve 96 questionnaires a day (60 per hour/5 minutes per questionnaire x 8 hours in a day). This means I need 16.7 interviewer-days. I only want to interview on Fridays and Saturdays so that would take one interviewer just over eight weeks. Since I only have two weeks to complete the survey I need four interviewers.

You should revisit these estimates when you have designed your questionnaire to ensure you haven't over- or under-estimated how long it will take to complete. A small pilot survey should help you determine this (see Section 4.18).

4.10 I've chosen to conduct a telephone survey – how do I go about it?

4.10.1 Should I commission it out or do it myself?

The first decision you will need to make is whether to commission someone to carry out your survey or whether you will do it yourself. See Section 4.8.8 for more guidance on making this decision. If you decide to do it yourself read the remainder of this section very carefully.

In making your decision you should take into account the disruption that telephoning can cause. Dedicated telephones will be needed and the noise generated from interviewers can be considerable. Professional agencies often have Computer Aided Telephone Interviewing (CATI) systems. These allow data to be entered straight into a database and also enable 'listening in' by supervisors for monitoring purposes, which helps ensure good quality results.

4.10.2 Make a plan

Whichever approach you decide to take, spend some time setting out a plan for your survey. Section 4.8.9 discusses this in detail.

4.10.3 How do I get a quality team of interviewers?

Telephone interviewing is not an easy job. The interviewers may have to deal with abusive residents and constant rebuffs, so will require ongoing motivation. People with a telesales background are ideal for this work. Even though no product selling is involved they need to persuade people to take part, which is a sales job in itself.

If you can't get people with a telesales background, one option is to recruit local students – perhaps those working towards a relevant degree who are likely to be motivated by the subject. Another option is to advertise locally but this can be a 'hit and miss' affair. Advertising within your local authority is a further option, as is going through recruitment agencies for temporary staff.

4.10.4 How do I decide the sample size and make sure it's representative?

Chapter 3 discusses this in detail. The sampling strategies recommended for telephone surveys are stratified random sampling or quota sampling. This will depend on whether you know the characteristics of the respondent before you select them to be in the sample frame.

For example, if you have telephone numbers linked to ACORN data for the household, and you randomly select telephone numbers within each ACORN band then you would be using stratified random sampling. If however you have decided that an important characteristic is the sex of your respondent, which you would not find out until you know to whom you are talking, then you would be using quota sampling.

One particular issue for telephone surveys is that people who are at home during the day to answer their phones tend to be parents of young families, retired people, shift workers or home workers; because of this you need to actively manage the responses to make sure these groups are not over-represented.

Surveying in the evening can help in this respect but will not solve the problem on its own.

Telephone surveys are more intrusive and can be very unpopular, so response rates are generally very low. Telephone surveys are therefore prone to response bias.

You will need to construct a sampling frame based on your anticipated response rate (see Section 3.6 in Chapter 3) and monitor your sample for response bias as you collect the data.

4.10.5 How do I design quotas?

Quotas in general are discussed in Chapter 3, with some detailed advice on how to go about quota sampling in Section 3.7.3. Using quotas in telephone interviewing is often a sensible option but is more difficult than with face-to-face surveys. This is because, in face-to-face interviewing, many of the quota characteristics are visual and so do not involve asking additional questions. In telephone interviewing, you should ask quota-screening questions after the introduction and before the main part of the questionnaire.

The more complex your quotas become the more likely your interviewers will to struggle to meet them and to annoy potential respondents who don't meet the quota requirements. This will increase expense and slow the survey.

4.10.6 How do I design the questionnaire?

Sections 4.15 to 4.17 explain this in some depth as it is relevant to all the survey methods.

4.10.7 How do I get details of people to contact?

There are two options:

- use internal council records; and/or
- purchase a list of numbers.move around the target area.

You should start by enquiring whether there are lists available within your local authority. Some authorities make council tax records available, for example, or have access to local census data. Electoral Register information should also be available but people are allowed to opt out of being contacted so the lists won't be complete; the same applies to many other potential sources. The Research and Intelligence Department is a good place to start if your authority has one, otherwise try the Chief Executive's Department. Be aware that many of these possible sources won't include telephone numbers but they are worth checking.

If you don't have access to a suitable source of information within your authority you will need to consider purchasing a list. This is known as 'renting' as you can only use the data for one purpose. If you commission an external agency they will do this on your behalf as part of the price of the work. These lists tend to be compiled from publicly available information, from responses to direct marketing, to competition entries, questionnaires, or records of visitors to events.

A good introduction to renting consumer lists is available from the Direct Marketing Association (DMA) at:
www.dma.org.uk/_Attachments/Resources/223_S4.pdf

The DMA also produces lists of its members. Using DMA members ensures that your provider abides by the organisation's code of conduct and the List Warranty Register. If a list appears on the List Warranty Register it is guaranteed to have been fairly obtained under data protection legislation and the period of updating has been made clear. Key points of the DMA's guidance are as follows:

- Information about the list is available from the list owners, managers or brokers – ask to see the 'datacard'. This will tell you:
    - the source of the information;
    - the number of names overall and by key criteria;
    - the price per 1000 or per selection;
    - the minimum order; and
    - delivery times and formats;
- Most lists are single use. Lists include dummy names which go to the list owner so they can tell if you are using them more than once;
- You should check on the methods used to update the lists and how frequently this is done;
- You will be required to submit a sample of your questionnaire to the list owner for approval; and
- Details of respondents to your survey become your property and can be used again by you; non-respondents belong with the list owner.

One key issue to bear in mind is that lists should be requested **unscreened** against the Telephone Preference Service (TPS). The TPS allows householders to register to have their number withheld from marketing lists to avoid unsolicited calls. Genuine research is exempt from the provisions of the TPS, hence there is no need to screen householders out of lists based on this consideration.

Before purchasing your list, you need to think carefully about how your request relates to your sampling strategy. For example, you need to be certain that all those interviewed live in your sample area. You should discuss this in detail with the list provider.

You should not interview people aged younger than 18. This is because they are considered to be children and as such may not be able to give 'informed consent', something that is a key ethical requirement in surveys.

4.10.8 Do I have to use printed questionnaires or can I make use of computers?

If you are doing the work yourself, interviewers can enter data directly into a database. However, you must be aware of the risk of data entry mistakes being made, and the fact that they are not possible to rectify if you do not record the conversations and check for accuracy. The CATI systems that professional market research companies use are specially set up to make this process easy and to ensure that no data are lost. The risks are almost certainly higher if you are using your own IT systems and software.

4.10.9 How do I manage the interviewing process?

Training
All interviewers will require training regardless of whether they are experienced or not. You should run through the questionnaire so they understand the questions they will be asking and the possible answer options. Explain the quota system, how they should record their progress against each quota (if used) and the basic rules of interviewing (see the MRS website for useful information – www.mrs.org.uk). Set up role-play sessions so that interviewers can practise.

It may be possible to commission an external agency to train your interviewers for you; check with local research organisations to see if they provide this service.

Motivation
Telephone interviewing is a difficult and de-motivating job to which only certain types of people are suited. Good supervision helps – make sure your interviewers are not taking abuse or rejection personally and reassure them that they are doing good work and achieving good response rates. Encourage them to try to make their interviews more personal by connecting with the interviewee; this increases response rates. Also consider the use of bonus payments based on interviews achieved. Remember that telephone interviewing is akin to a sales environment and appropriate motivational techniques should be used.

Quality control
Most interviewers are trustworthy, but you should set up a monitoring system that assumes the worst. This might include observing them in action, arranging for colleagues to be interviewed so that standards can be checked, and following up with a telephone call to a selection of respondents to check that the interview really did take place and that the interviewer was polite and courteous.

Spot checks need to be carried out to a schedule. Responses need to be recorded and kept with the rest of the survey data. There should be a minimum of one check per interviewer per week but much more frequently in the first days of the survey. Interviewers should always be made aware that these checks could happen at any time. You should regularly check questionnaires received for quality and completeness, and address any issues with the interviewers as you progress.

Code of conduct
If you are telephoning people at their homes you should follow the Market Research Society's code of conduct which states that no calls should be made before 9am on weekdays and Saturdays, before 10am on Sundays or after 9pm on any day (see www.mrs.org.uk). It will be important to make arrangements for calling to take place over the weekend, so negotiate access to your building early in the process of planning the survey.

Health and safety
In relation to telephone interviewing, health is more of an issue than safety. You should check that workstations are suitable and supply interviewers with hands-free headsets. Before using headsets in a survey situation, check that the interviewer can be heard clearly and adjust the headsets if necessary. Make sure that you follow good office health and safety practices, conducting workstation assessments and being mindful of the risks to staff of eye strain and RSI (repetitive strain injury).

Queries
Check whether your telephone number is given when a recipient who has missed or screened your call dials 1471 or has a caller display phone. If it is, you need to cater for the small minority of people who will call back to find out who has called them.

You should also ensure that the first point of contact within your organisation is briefed about the survey should there be any enquiries from members of the public, and that a named contact is given who can provide more information.

4.10.10 What do I do with the questionnaires?

Section 4.19 covers this in detail.

4.10.11 How do I code the data?

Section 4.20 covers this in detail.

4.10.12 How do I analyse the data?

Section 4.21 covers this in detail.

4.10.13 How do I write up what's been found?

Section 4.23 covers this in detail.

4.10.14 What resources will I need for all this if I commission it out?

The costs of commissioning a survey are dependent on a range of factors. For a telephone survey you should expect to pay more if:

- you want your results very quickly;
- you want to survey more people than 1100;
- your questionnaire is long;
- you have a lot of open-ended questions;
- you require quota sampling;
- you require multi-lingual interviewers;
- you require interviewers to call back on the people who are out;
- you require data analysis (e.g. hypothesis testing) as well as simple data tabulation; and/or
- you require a full report as well as a simple summary or presentation of the results.

Because there are so many variables, it is impossible to quote a typical price for a survey. A costed example is given below to act as a guide.

> A telephone survey of 1100 residents (i.e. 1100 completed surveys required) using a medium length questionnaire (approx. 20 questions) but only one open-ended question. Quotas based on housing type and social grade are required. Results are needed within four weeks. Only a data table is required – no meetings or presentations are needed.
> Cost = £15,000–25,000 plus VAT.

4.10.15 What resources will I need for all this if I want to do it myself?

The staff resource you will need to run a telephone survey yourself is highly dependent on the number of people you want to survey and the length of the questionnaire. For a short questionnaire of 10 simple questions, one of which is open-ended, you should allow 10 minutes per completed questionnaire.

Once you know how many completed questionnaires you want, the required number of person-days can be calculated. Combine this with your timescale for completion and you can work out how many interviewers you will need. An example is given below:

> I want to interview 1100 people. Based on a ten-minute questionnaire, I hope to achieve 48 questionnaires a day (60 minutes per hour/10 minutes per questionnaire x 8 hours in a day). This means I need 22.9 interviewer-days. I only want to interview on Saturdays and Sundays so that would take one interviewer just over 11 weeks. Since I only have two weeks to complete the survey I need six interviewers.

You should revisit these estimates once you have designed your questionnaire to ensure you haven't over- or under-estimated how long it will take to complete. A small pilot survey should help you determine this (see Section 4.18).

4.11 I've chosen to do a paper-based self-completion survey – how do I go about it?

4.11.1 Should I use a postal survey or a 'pick-it-up' survey?

Although it is tempting to carry out your survey simply by leaving questionnaires in central locations such as libraries, leisure centres and council offices, this approach should be avoided. The reason for this is that you can't control who will send back the survey and are likely to end up with an unrepresentative sample both in terms of socio-demographics (you'll only get the people who use the buildings where you've left the surveys) and in terms of their attitudes towards the council, waste and surveys generally. If you want to carry out a survey in which residents complete answers themselves, then a postal survey is recommended.

4.11.2 Should I commission it out or do it myself?

The next decision you will need to make is whether to commission someone to carry out your survey or whether you will do it yourself. See Section 4.8.8 for more guidance on making this decision. If you decide to do it yourself read the remainder of this section very carefully.

In making your decision you should take into account the disruption that a postal survey can cause. You will need to carry out at least two mass mailings and also have facilities available for opening up and logging responses.

4.11.3 Make a plan

Whichever approaches you decide to take, spend some time setting out a plan for your survey. Section 4.8.9 discusses this in detail.

4.11.4 How do I decide the sample size and structure?

Chapter 3 discusses this in detail. The sampling strategy recommended for postal surveys is stratified random, or simple random.

One crucial thing to remember for postal surveys is that not everyone who you send a questionnaire to will respond, and so you should construct a representative sampling frame based on your anticipated response rate. Always round up the size of the sampling frame to allow for a lower response rate and response bias skewing the final sample. Section 3.6 in Chapter 3 describes how to calculate sampling frame sizes.

Postal surveys can have response rates anywhere between 10% and 50%, depending on many factors including the following:

- who it is from;
- who it is sent to;
- the design of the outgoing envelope;
- the information provided on the questionnaire or covering letter;
- the image and design of the questionnaire and covering letter;
- provision of a return envelope;
- reminder mailings (a response rate of between 30% and 50% should be expected if two reminder mailings are sent);
- the purpose of the survey;
- the ease of fulfilment of the questionnaire, including length and interest; and
- any incentives offered.

In order to be able to check for response bias in postal surveys, there has to be a method of identifying responses against your sampling criteria. Some criteria such as age or gender can form part of the questionnaire and so can be checked as part of the analysis. However, if your sample is based on a socio-demographic profile such as MOSAIC or ACORN, you will need to relate each response to the profile of the household from which it comes. This can be done by the following process:

- Create the sampling frame with profile information;
- Give each address a unique reference number;
- Match the reference numbers with the addresses in the mailing;
- Enter up the returned data with the reference numbers; and
- Match the returned data with the profile data using the reference numbers.

The last process can be done in a relational database or by using the VLOOKUP function in Microsoft® Excel. This performs the added function of enabling you to filter out the addresses that responded so that the reminder mailing(s) goes only to those who did not respond.

An alternative approach is to print the profile information on each questionnaire, and match the questionnaires with outward envelopes addressed to households with the corresponding profile. However, this will not enable you to select addresses for a reminder mailing.

4.11.5 How do I design the questionnaire and letter?

Sections 4.15 to 4.17 explain this in some depth as it is relevant to all the survey methods.

Postal surveys need to look attractive, appealing and be easy to complete. For this reason you should aim to have professional design input if possible.

The letter that accompanies the questionnaire should explain:

- who is carrying it out;
- the purpose of the survey;
- how the information will be used;
- how the householder has been selected; and
- who to contact in case of queries.

You should bear in mind that data protection rules specify that once you declare the purpose to which responses will be put, you cannot then use the information for another purpose (see Section 4.22 for more on data protection). You should take great care not to use the letter as an opportunity to promote your services, as this will bias the results; the letter should be factual and impartial.

4.11.6 How do I get details of people to contact?

There are two options:

- using internal council records; and/or
- purchasing a list of addresses.

You should start by enquiring whether there are lists available within your local authority. Some authorities make council tax records available, for example, or have access to local census data. Electoral Register information should also be available but people are allowed to opt out of being contacted so the list won't be complete; the same applies to many other potential sources. The Research and Intelligence Department is a good place to start if your authority has one, otherwise try the Chief Executive's Department. Be aware that many of these possible sources won't include addresses but they are worth checking.

If you don't have access to a suitable source of information within your authority, you will need to consider purchasing a list. See Section 4.10.7 in telephone surveys for more detail.

One key issue to bear in mind is that lists should be requested *unscreened* against the Mailing Preference Service (MPS). The MPS allows householders to register to have their address withheld from marketing lists to avoid unsolicited mail. Genuine research is exempt from the provisions of the MPS, hence there is no need to screen householders out of lists based on this consideration.

Before purchasing your list you need to think carefully about how you relate your request to your sampling strategy. For example, you need to be certain that everyone listed lives in your sample area. You should discuss this in detail with the list provider.

4.11.7 How do I set up the unique numbering system?

Each potential respondent needs to be assigned a unique number. This number needs to appear on the questionnaire and on the mailing address, whether that is on the letter or on a mailing label. It also needs to appear in the database against that individual. This is needed so that you can track which people have responded and only send reminders to the non-respondents. Any numbering system is acceptable.

The easiest way to assign the numbers is using the list of people to be surveyed. Ideally this will be available electronically. You should import the list into Microsoft® Excel or a similar spreadsheet package and assign the numbers. You should also use this electronic list to generate the address labels, either by a mail merge into a letter or by generating labels.

4.11.8 How do I set up a Freepost address?

Considerably higher response rates from surveys are obtained if respondents can send back their questionnaire without the need for a stamp. Although you can stick stamps onto self-addressed envelopes, for a large survey it is more professional and more efficient to get a Freepost address.

Freepost addresses are available from the Royal Mail and there is a high likelihood that your local authority already has at least one. They enable people to send you items through the post without paying for them. Instead the Royal Mail bills your authority on a regular basis for each item posted. Freepost can be set up for first or second-class mail. To get a Freepost address, you normally have to provide Royal Mail with a mocked-up envelope for approval.

To set up a new Freepost service takes some time, especially if you include your own procurement processes, so you need to think about this well in advance.

You should ensure that you have budgeted for the costs of both printing these envelopes and paying the postage costs of those that are returned.

4.11.9 How do I manage the first mailing?

You need to arrange for someone to be available to answer queries and their contact details should be printed on the letter. A **free** helpline will help encourage responses.

The most important thing to ensure is that you have enough questionnaires, letters, Freepost return envelopes and mailing envelopes. Assuming a fairly optimistic response rate of 20% after the first mailing and a total response rate of just over 30% after two reminder mailings, you will need to print many more than just the initial sample. Follow the example shown in Table 4.7 to work out this number.

Table 4.7 Calculating the number of survey items required

Mailing	**Number to send out**	**Expected response rate to each mailing**	**Number expected back**
Initial	1100/expected response of 30% overall = 3667	20%	733
First reminder	3667 – 733 = 2934	10%	293 (total 733 + 293 = 1026)
Second reminder	3667 – 1026 = 2641	5%	132 (total 1026 + 132 = 1158)
Total	3667 + 2934 + 2641 = **9242**	31.6%	1158

This example shows that you will need a total of 9242 questionnaires, letters and Freepost envelopes to achieve the 1100 required responses. (Remember that you need to re-mail the questionnaire and the Freepost envelopes as well as a letter because the originals are likely to have been thrown away by the householder.) However, it may be better to wait until you see what level of response you are getting before printing the additional questionnaires and Freepost envelopes. Sometimes, though, you can get much better print deals for larger quantities. Also timescales may be so tight that you can't wait for printing once you know how many you'll need. The choice in this respect is yours.

To physically manage the mailing you will need a large area and several people helping out. It is essential that the unique numbers do not get mixed up – match every questionnaire number with every mailing address number.

Postal surveys are cheaper if you sort envelopes into postal rounds; depending on the level of separation done, the two Royal Mail services are called Mailsort® and Walksort®. This may sound like a good idea, and indeed it does save money, but you should be aware of the extra effort it takes to sort envelopes in this way and the considerable space required to store them prior to posting. Check with other parts of your authority if large scale postal surveys are already carried out; they will have useful advice for you and may even offer to help.

4.11.10 How do I manage the reminder mailings?

When the time comes to do the reminder mailings, you will need to print new address labels for the letters to the non-respondents. To do this you will need to record who has responded. The easiest way to do this is in the database. You should then be able to run a query that extracts only those that have not responded and from this list you can generate your mailing addresses.

You should develop a new letter for the reminder mailings that starts by reminding the recipient that a questionnaire was sent recently but you don't seem to have received their response.

You should mail out a replacement questionnaire and Freepost envelope as well as a reminder letter because the original ones will almost certainly have been thrown away.

4.11.11 What do I do with the questionnaires?

Section 4.19 covers this in detail.

4.11.12 How do I code the data?

Section 4.20 covers this in detail.

4.11.13 How do I analyse the data?

Section 4.21 covers this in detail.

4.11.14 How do I write up what's been found?

Section 4.23 covers this in detail.

4.11.15 What resources will I need for all this if I commission it out?

The costs of commissioning a survey are dependent on a range of factors. For a postal survey you should expect to pay more if:

- you want your results very quickly as this will mean first class postage;
- you want to survey more than 1100 people;
- you want a higher response rate;

- your questionnaire is long;
- you have a lot of open-ended questions;
- you require data analysis (e.g. hypothesis testing) as well as simple data tabulation; and/or
- you require a full report as well as a simple summary or presentation of the results.

Because there are so many variables it is impossible to quote a typical price for a survey. A costed example is given below to act as a guide.

> A postal survey of 5000 residents (expected response rate of 40% = 2000) with two reminder mailings using a four-page questionnaire. Results are urgent so first class post is to be used. Full report is needed including hypothesis testing plus two meetings and a presentation of results.
> Cost = £20,000–30,000 plus VAT.

4.11.16 What resources will I need for all this if I want to do it myself?

The staff resource you will need to run a postal survey yourself is highly dependent on the number of questionnaires you want completed. In contrast to face-to-face and telephone surveys, most of the costs for postal surveys are materials rather than interviewers. You should cost for:

- printing of the questionnaire including unique numbering;
- printing of Freepost envelopes;
- printing letters;
- purchasing envelopes in which to send out the questionnaires;
- postage of the original questionnaire plus letter and Freepost envelope; and
- postage to be paid on the Freepost account for each one returned.

4.12 I've chosen to conduct a panel survey – how do I go about it?

Follow these steps:

Step 1 Investigate the panel process in depth and make your decisions as to whether the results are likely to be valuable (see Section 4.8.6).
Step 2 Find out whether the panel survey is postal, telephone or face-to-face – this will help you design your questions.
Step 3 Find out how many questions you can have.
Step 4 Write your questions and ask for feedback on them.
Step 5 Submit your final questions and wait for the results.

Panel surveys are normally inexpensive to your department but you should check with your local authority.

4.13 I've chosen to conduct a web-based survey – how do I go about it?

Web-based surveys are generally very self-selecting and so are unlikely to be representative of a larger population. However, they can produce useful information, such as feedback from an event or campaign. For instance, if you have been holding events and collected a lot of email addresses from people who have agreed to further contact, you might want to send them a questionnaire to find out what they thought of the events. It will not tell you what people generally thought but it could give you some good tips for designing future events.

Web-based surveys need to be led by web designers, as they will need to identify an area on the Internet to host your survey. Your in-house web team should be able to point you in the direction of a suitable survey organisation if they are unable to do this work themselves. There are also tools available online, or as part of software packages, that can make this task a lot easier.

You will need to design your own questions. They can be much the same as for other survey approaches, but should not be too long and all have simple tick box answers. If you want to do something more complex you have chosen the wrong type of survey. Check that the questions appear correctly on the survey once designed. Include some socio-demographic questions so you can check the extent to which survey respondents are representative of the population at large.

Take the advice of your survey organisation about how long to allow for responses. This partly depends on where on the Internet the survey is located and whether any other work to promote the survey to potential respondents is planned.

4.14 Can I use incentives to encourage people to take part in surveys?

There are no laws restricting the use of incentives provided that no payment is required on the part of the respondent to take part in the survey.

There is Market Research Society (MRS) guidance on the use of incentives and free prize draws to encourage people to respond to questionnaires. We recommend that if prize draws or incentives are to be used, then these should be in accordance with the MRS guidance. Key points relating to incentives are:

- respondents shouldn't be required to do anything other than take part in the survey;
- respondents shouldn't be required to spend money to receive the incentive; and
- offering incentives shouldn't be used as a surreptitious way of obtaining personal contact details and, if contact details are obtained, these should be kept confidential.

Prize draws are a special type of incentive. Key factors to take into account if running a prize draw include:

- failing to complete a survey in full shouldn't disqualify someone from the draw;
- respondents must be informed of the closing date, the prizes, the cash alternatives if there are any, how and when winners will be notified, and how and when the results will be announced;
- the closing date should not be changed;
- the draw must ensure fair application of the laws of chance and there should be an independent observer; and
- there should not be unreasonable conditions placed on winning a prize.

If you are using incentives you should state very clearly on the questionnaire what the procedure is for entering. If your survey is face-to-face or telephone, you should prepare something for the interviewer to read out.

4.15 Designing a questionnaire

4.15.1 Introduction

Designing a questionnaire is not simply a case of writing several questions with possible answers in a list. It is a skilled job that requires training and experience to be done well. It should also be done paying very careful attention to the objectives of the survey and your research questions. Advice may be available from within your authority; good places to start are the Research and Intelligence Department, the Consultation Officer, the Housing Department and the Chief Executive's Department.

Careful questionnaire design is especially important if you are using a postal survey where the design and layout has an influence on response rates. If you don't have these skills and there is no-one in your authority with appropriate skills that you can access, you should seriously consider commissioning a professional research organisation to do this for you. Even if you do have the requisite skills, you may find that it is a more effective use of resources to ask specialists to do it for you.

"Questionnaires should ask questions in terms that ordinary people will understand."

You should avoid 'design by committee' where possible. If too many people are involved, each will want their own questions included and, given the limited number of questions possible, this will result in a less than ideal questionnaire. It also means that no one person has ownership of the content.

4.15.2 How do I link to my research questions?

If you have followed this guidance you should have a set of objectives linked to a set of research questions (see Section 4.4 and Chapter 2). The task now is to translate those research questions into questions that you can include in the questionnaire.

Think first about the people who will be answering your questions. Put yourself in their shoes and think about how much you would understand if you had never worked in waste management and only thought about it once a week when you put the rubbish out for the bin men. That is the starting point for developing your questions.

Make sure that the questions you include in your questionnaire are sufficient to answer your research questions. This may not be as simple as including one question for each research question – you may need two, three or four for it to make sense to the respondent. Rather than asking a complex question, break it down into several questions and be specific. For example, don't ask 'What do you think of the kerbside service?' – this needs people to think too hard and cover a whole range of issues and will probably result in a vague response like "It's OK". Instead ask 'Your box is collected every other week. How satisfied are you with the frequency of collection?' **and** 'Is the box too big, too small or about right?'

"... the questions for the questionnaire are not produced by you sitting down and trying to think of some interesting things to ask ... The survey questions should be designed to help achieve the goals of the research ..."

Real World Research by Colin Robson, p. 241

When you have finished this exercise for all your research questions, you'll probably find that you have created far too many questions. As a general rule, no questionnaire should contain more than 25–30 and preferably much fewer; aim for between 15 and 25 substantive questions plus allow for five socio-demographic ones where you ask people about themselves (e.g. their age, type of house, number of people in their household). Remember that a question seeks just one piece of information that can be analysed independently – known as a variable.

You now have to undertake the difficult job of deciding which questions you'll keep. The need to produce a questionnaire of a sensible length may even mean that there will be some research questions you won't be able to answer.

4.15.3 General rules for writing questions

These rules are taken in part from the Market Research Society, which has very useful guidance on this topic (www.mrs.org.uk).

"It is good practice to refer to 'rubbish' rather than 'waste' because this is how most people think about it."

1. Phrase questions in language appropriate to the respondent
Questionnaires should ask questions in terms that ordinary people will understand. If household waste recycling centres (HWRCs) are commonly referred to as 'dumpit sites,' as they have traditionally been in South Yorkshire, that is the wording you should use in the questionnaire. This is despite the fact that you may be trying to change perceptions. A compromise might be, 'How often do you take recycling to the household waste recycling centre? *Prompt:* This used to be known as the dumpit site.'

2. Avoid industry jargon
It is good practice to refer to 'rubbish' rather than 'waste' because this is how most people think about it. Industry terms such as 'kerbside scheme', 'bring site' or 'bulky waste service' should be explained or preferably avoided.

3. Concepts should be clear, understandable and unambiguous
Avoid, for example, talking about 'recycling' without being clear what you mean. Respondents may or may not include composting as recycling. They may think of reusing glass jars in the home as recycling or they may not realise that the waste they put out week on week isn't recycled. Don't assume anything. The easiest way to deal with this is to include explanations before you start each section such as: 'I'm now going to ask you some questions about the council's recycling service. By the recycling service I mean the red box that you can use for paper and cans that's collected every other week.' Other key concepts in waste management that people don't always understand include 'waste', 'reuse', 'minimisation', 'reduction', 'kerbside recycling', 'bring recycling', 'composting' and 'bulky waste'.

4. Avoid leading the respondent
Leading questions are those that subliminally encourage the respondent to say one thing rather than another. An example would be: 'The new green bin provides you with more space to get rid of waste and it is easier to move around. Do you agree that the new green bin is a good idea?'

Similarly, when people tell you whether they recycle and how much or how often they do it, a good proportion of them will be overstating their actual behaviour because simply asking about recycling is 'leading'. Research by the University of Paisley has shown this can be by as much as 30 percentage points. This means that, although a survey might find that 90% of people say they recycle, in practice this figure could be as low as 60% for people who do so on anything like a regular basis. It's important to remember that surveys measure **claimed** behaviour not **actual** behaviour. For this reason, it is good practice not to rely on surveys alone to measure behaviour but to carry out participation monitoring and gather tonnage data.

If the aim of your survey is to ask about levels of satisfaction in your schemes, you should be aware that certain types of people are more likely to say that they are satisfied than others. These tend to be the groups such as the elderly with lower expectations of services in general. For this reason it is good practice to ask specific questions about how people experience your services rather than general questions about how satisfied they are; for example, 'How easy do you find it to put your recycling box out at the kerbside?' rather than 'Are you satisfied with the box the council gives you?'

5. Questions should be capable of interpretation in one way only.
It is often surprising when you find out that a question you thought was self-explanatory is interpreted by someone else completely differently to how you intended. Always test your questions on colleagues and people who have no knowledge of the subject.

6. Ask one question at a time
This seems obvious but you can quite easily ask two questions in one quite inadvertently. For example, avoid asking 'Do you like the size and shape of your container?' as the respondent may like the size but hate the shape.

7. Avoid confusing two concepts in one question
Avoid asking questions like 'If the council were to provide you with a bigger box, would you agree that the recycling service is a good idea?' The respondent may think the service is a good idea regardless of whether a bigger box is supplied so would be unable to answer this question. This is most likely to occur where you think you know the issues people have and anticipate the answers in the question. In surveys never assume anything!

8. Phrase questions in a way that they can be answered using pre-set answers
Instead of asking 'What do you think of ...?' type questions, break them down and ask 'To what extent ...?' or 'How likely would you be ...?' or 'How satisfied are you ...? type questions. These can be answered through ticking boxes using a scale. The scale used should reflect the question asked.

For example, if you have asked 'How likely would you be ...?' the answer options should be:

Very likely
Quite likely
Not very likely
Not at all likely
Not sure/don't know

If you have asked 'How satisfied are you with ...?' the answer options should be:

Very satisfied
Quite satisfied
Not very satisfied
Not at all satisfied
Not sure/don't know

9. In pre-set answers, always allow for 'don't know' or 'not sure' and refusals for socio-demographic questions such as ethnicity. When reading out or using show cards, never include the 'don't know' option.
You should obey this rule even when it seems quite clear that only the set options apply – people are quite unpredictable.

10. Always include a final open-ended question
Always include an open-ended section for 'any other comments'; it makes the respondent feel that you are genuinely interested in their views and can pick up aspects that you have overlooked.

11. Structure the questionnaire logically
The structure of the questionnaire should be carefully designed so that it is logical and makes sense to both the interviewer and the respondent. New lines of questioning should be introduced with an explanatory sentence, e.g. 'Now I am going to ask some questions about ....' This applies to face-to-face, telephone and self-completion surveys.

"It's important to remember that surveys measure *claimed* behaviour not *actual* behaviour. For this reason it is good practice not to rely on surveys alone to measure behaviour but to carry out participation monitoring and gather tonnage data."

12. Include clear instructions

There should be clear instructions to the interviewer in the case of face-to-face and telephone surveys, and to the respondent in the case of postal surveys. Clarity of the instructions is more important than how visually pleasing the questionnaire is, especially for interviewer-administered surveys. Four aspects are important:

1. Who should answer the question?
   e.g. for a face-to-face/telephone survey [ASK ALL] or [ASK THOSE WHO SAID THEY RECYCLE AT QUESTION X] and for a postal survey [EVERYONE PLEASE ANSWER THE NEXT QUESTION] or [ANSWER THIS QUESTION ONLY IF YOU HAVE SAID YOU RECYCLE AT QUESTION X].
2. Are the options to be read out or should the respondent answer unprompted?
   e.g. [READ OUT] or [DO NOT READ OUT].
3. Are they allowed to give more than one answer?
   e.g. [TICK ONLY ONE] or [TICK AS MANY AS APPLY].
4. Where should they go next?
   e.g. [NON-RECYCLERS SKIP TO QUESTION X] or [ASK NEXT QUESTION].

Avoid complicated routing in a postal survey because respondents will have to follow the routing themselves and this could be off-putting or result in uncompleted questionnaires. In practice respondents often ignore routing instructions, so the fewer the better.

13. Always be wary when asking about attitudes

Most questionnaires you will be developing will ask about people's attitudes (e.g. to recycling or waste prevention) and asking questions such as 'How important do you think it is that everyone recycles?' and 'Do you agree or disagree that recycling is always a good thing to do?' While the answers to questions such as these may be interesting there are three important things to remember:

- People tend not to be very honest with themselves about their attitudes, especially if it is on a subject that they don't really think about, and say they have a certain attitude even if this is not very strongly held;
- People know what are perceived to be 'good things' and 'bad things' and, if they don't feel strongly either way, will tend to agree with 'good things'. Recycling and reducing waste are perceived to be 'good things'; and
- It is quite possible to say, with some conviction, that you agree recycling is a good thing which everyone should do and still not do it yourself; attitudes do not result automatically in behaviours and people can be quite inconsistent.

"People tend not be very honest with themselves about their attitudes. It is possible to say with conviction that recycling is a good thing, which everyone should do, and still not do it yourself ... people can be quite inconsistent."

For these reasons, attitudinal questions should be very carefully worded and should not be relied on as the sole basis for changing schemes. It is particularly important that you don't rely on the answers to questions such as 'How likely would you be to use the new recycling scheme?' to plan for likely levels of participation.

4.15.4 Open questions

Open questions are those without suggested answers. Where the survey is not for self-completion, it is a good idea with open questions to anticipate the range of responses as far as possible. A pilot or focus groups held in advance can help to find out the range of likely responses to questions. The interviewers can then ask the question without the respondent knowing the anticipated responses, and fit the responses to the codes where this is possible without altering the meaning of the response to obtain the fit. This can save a lot of coding time at the end.

In the final survey you will still need an option for 'other' and space to write in some text for those answers that do not fit one of the pre-coded answers.

See Section 4.20 for more detail on coding open questions.

4.16 WRAP's standard metrics for use in surveys

To overcome the problems mentioned above concerning attitudes, WRAP has developed sets of questions that, when taken together, can give insight into attitudes about recycling and waste prevention. These are more robust measures as they use a combination of answers to questions to test commitment. These metrics, as they are known, include the following, and can be found in Annex 3:

- committed recycler;
- committed food waste reducer;
- committed home composter; and
- committed peat-free compost buyer.

The committed recycler questions have been used to measure the impact of the national 'Recycle Now' campaign and should be used in any survey about recycling. Similarly, the committed food waste reducer questions have been developed for use in measuring the success of the 'Love Food Hate Waste' campaign.

Identifying those people who are committed or conscientious cannot be done simply by asking whether a respondent feels they 'must or should' recycle, prevent food waste, home compost or buy peat-free compost, because previous studies have shown that about 95% of respondents will agree with such a statement. What we are trying to measure is their underlying attitude and commitment to the topic.

You can also determine the impact of changes to schemes and the impact of communications campaigns by taking 'before' and 'after' snapshots.

When using the metrics questions, it is important that the questions and the answer options are used word for word. In general, metric questions should be asked first before any other questions in that section, and in the order given. In a survey where more than one metric question is asked, we suggest that you should ask the metric least likely to be agreed with first to avoid getting into a chain of positive answers.

Each metric requires a series of questions to be asked. Only certain combinations of answers result in a respondent being classified as committed or conscientious.

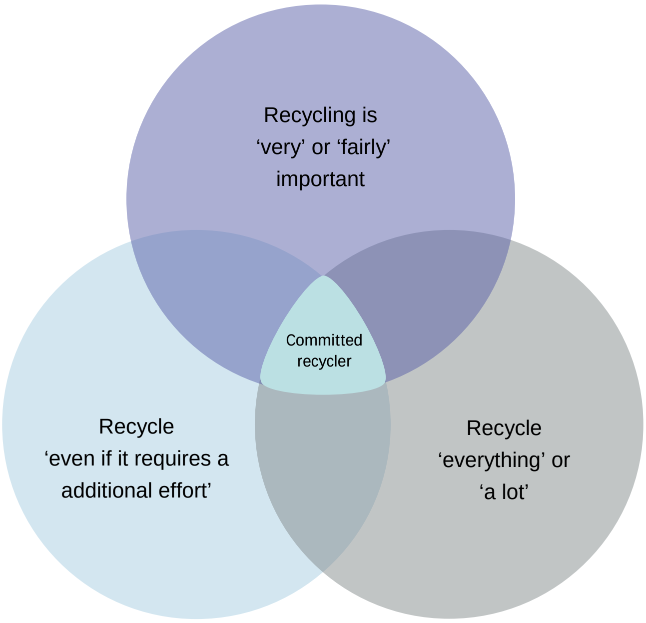
4.16.1 The committed recycler metric

A respondent is classified as a 'committed recycler' if:

- they regard recycling as 'very important' or 'fairly important'; and
- they say they recycle 'even if it requires additional effort'; and
- they say they recycle 'a lot' or 'everything that they can'.

It can be seen in the Venn diagram shown in Figure 4.8 that the committed recyclers are those who fall into all three of the fields.

Figure 4.8 Identifying a committed recycler



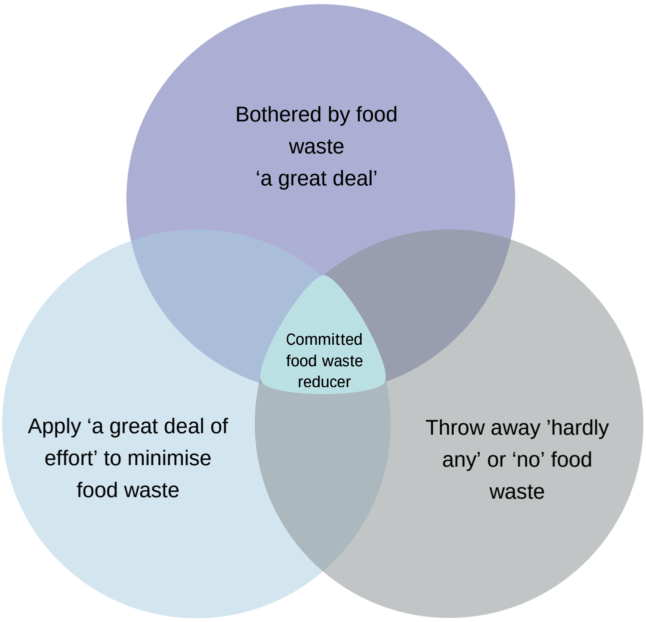
4.16.2 The committed food waste reducer metric

A respondent is classified as a 'committed food waste reducer' if:

- they say they are bothered by food waste 'a great deal'; and
- they say they apply 'a great deal of effort' to minimise food waste; and
- they say they throw away 'hardly any' or 'no' food waste.

It can be seen in the Venn diagram shown in Figure 4.9 that the committed food waste reducers are those who fall into all three of the fields.

Figure 4.9 Identifying a committed food waste reducer



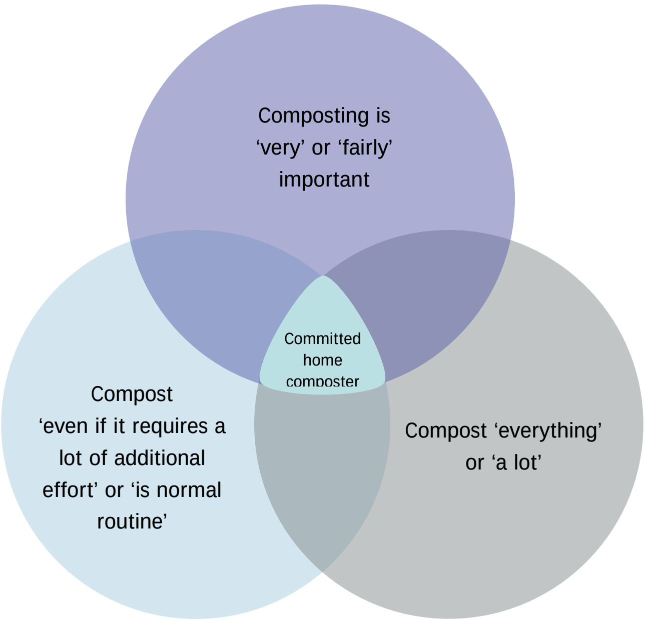
4.16.3 The committed home composter metric

A respondent is classified as a 'committed home composter' if:

- they regard composting as 'very important' or 'fairly important'; and
- they say they compost 'even if it requires a lot of additional effort' or 'is part of their normal routine'; and
- they say they compost 'a lot' or 'everything that they can'.

It can be seen in the Venn diagram shown in Figure 4.10 that the committed home composters are those who fall into all three of the fields.

Figure 4.10 Identifying a committed home composter



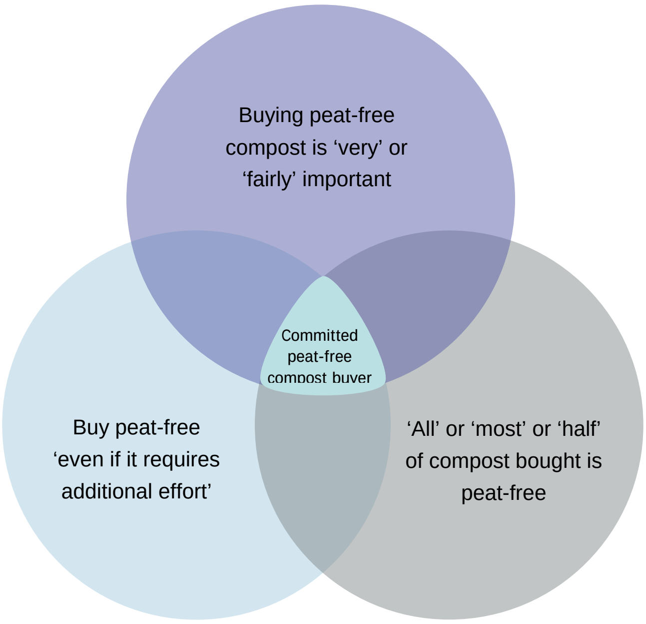
4.16.4 The Committed peat-free compost buyer metric

A respondent is classified as a 'committed peat-free compost buyer' if:

- they regard buying peat-free compost as 'very important' or 'fairly important'; and
- they say they buy peat-free compost 'even if it requires additional effort'; and
- they say that 'half', 'most' or 'all' of the compost they buy is peat-free.

It can be seen in the Venn diagram shown in Figure 4.11 that the committed peat-free compost buyers are those who fall into all three of the fields.

Figure 4.11 Identifying a committed peat-free compost buyer



4.16.5 Calculating proportions of 'committed' respondents

When it comes to calculating the proportion of 'committed' respondents in your sample, you need to do the following:

1. Exclude any respondents who have not answered **all three** metric questions.
2. Count how many respondents you have. This is your **base**.
3. Count how many respondents are committed, and express these as a proportion of your base.

The way in which the various attitudinal metrics are formulated is subject to change. This is because infrastructure changes and other developments mean that measures such as these can become outdated. Although WRAP will try to keep everyone informed when changes are made, you should check before using it that the measure is current. See Annex 3 (library of survey questions) for copies of all the current WRAP metrics.

Note: Your metrics results may not necessarily increase after a successful campaign. If your levels of commitment are found to be generally low pre-campaign, then it is likely that they will increase. If your metrics are already high, or you have a particular message in your campaign, then the post-campaign result might go down. This has been observed for the committed recycler metric for the 'Recycle Now' campaign where monitoring has been conducted for several local authorities. The main cause of this was a decrease in the proportion of people saying that they recycle even if it takes additional effort. We attribute this to the campaign message that recycling really isn't more effort than your daily routine.

4.17 Introducing and ending the survey

The questionnaire should include an introductory section that explains:

- the purpose of the survey;
- who is responsible for it; and
- what will be done with the results.

If the survey is to be carried out by post, this should also be on the letter because the questionnaire often becomes separated from the letter. Respondents should also be told truthfully how long the interview is likely to take.

The MRS code of conduct lists the following key factors:

- Respondents must be honestly and openly informed about the research they are taking part in;
- Respondents must be openly asked for their consent to take part; and
- Anything that you promise to respondents, such as confidentiality of answers, must be abided by.

Respondents must be told if any recording of the interview is to take place. Refer also to the section on data protection (Section 4.22).

At the end of the survey, thank the respondent for their time.

If the survey is postal, give instructions on how to send it back. If the survey is being done by telephone or face-to-face, remind the respondent of who is responsible for the survey. You may wish to give out a contact name or phone number at this stage in case the respondent has any queries that answering the questions has raised in their own minds. Market research companies may provide a telephone number for the Market Research Society in case the respondent has any complaints.

4.18 Testing your survey

By this stage you should have:

- written some questions linked to your research objectives;
- reduced these in number to make a suitable length of survey;
- revised these so they follow the general rules for writing survey questions;
- tested them informally on colleagues;
- devised a suitable introduction and closing procedure for your survey; and
- double-checked that the questions in the questionnaire will answer your research questions.

Now is the time to test them on ‘real people’. This stage is sometimes known as a pilot survey and is simply a test of the questionnaire and the survey approach to make sure that it works. This can be informal (e.g. surveying friends and colleagues) or a more formal run-through of the intended survey method. The results of the pilot survey should not be used as part of the main survey unless no changes are made, the timing differences are unimportant and the respondents are appropriate (i.e. they meet the criteria of your sample from the population).

4.19 What do I do with all the questionnaires when they have been completed?

The data gathered from the questionnaires needs to be entered into a database. Database design is important and should be considered at the planning stage of the survey; it is a specialist activity that could be done in-house if the specialist expertise is available but may be best done by a contractor. Expertise on databases may exist anywhere within a local authority but a good place to start is wherever the data required for reporting on Best Value or National Indicators are collected and managed. If your authority has a Research and Intelligence Department this often has staff with expertise in survey design and data management.

If you are designing your own database some issues to think about are:

- Is it possible to state more than one answer to a question? If it is then you need separate fields (columns) for each possible answer;
- You may want to code the answers to all open-ended questions to avoid entering text into the database (see Section 4.20);
- If you have lots of questionnaires to enter, think carefully about the design of the data entry form. For example, lots of mouse movements slow things down; and
- Although drop-down lists might appear easier to use than empty fields, in practice they can take more time than entering code numbers and self-completing drop-downs can cause problems if they self-complete incorrectly.

The physical questionnaires should be stored for a minimum period to enable quality checks to be carried out. This should be done in such a way that the respondent can't be identified and thus you don't fall under the requirements of the Data Protection Act; you should check with your Data Protection Officer if you are not sure. Every local authority will have a Data Protection Officer because it will need to be registered under the Data Protection Act. Start in the Chief Executive's Department if you aren't sure where to find them or, if your authority has one, the Research and Intelligence Department. For more information on data protection see Section 4.22.

4.20 How do I code my open-ended answers?

There are two approaches to open-ended questions.

First, they can simply be looked through to get a general picture of response. This approach is suitable for questions that ask, for instance, for any other comments on an issue. You can then take quotes from them to illustrate particular points you wish to make in a report of the survey.

Secondly, the responses can be coded to turn them into defined answers. This approach will be required if you want to carry out quantitative analysis and is recommended where respondents have written in an answer where they have ticked a box marked 'other'. Coding involves looking through the answers and devising suitable categories. These categories should be added to the database to enable the data to be entered. Ideally a coder should carry out this task prior to data entry.

Coding should start when a quarter of the expected questionnaires have been received/completed. This will be a large enough selection for the most common answers to come through but will still be manageable. Once the codes have been determined, avoid adding new ones as this will mean additional work for you.

Coding is a skilled job that needs an intelligent and systematic thinker, and shouldn't be delegated to whoever happens to be around on a particular day.

An example of open-ended responses given to the question 'Why don't you use the blue box for recyclables?' together with the codes devised for them is given in Table 4.8.

Table 4.8 Example of coding open-ended responses to the question 'Why don't you use the blue box for recyclables?'

Respondent	Open-ended question response	Code
2	Don't have a box.	1 No box
60	Box was stolen.	
54	Box broke and wasn't replaced.	
332	No box.	
456	Box stolen.	
21	Threw box away by mistake.	
36	Can't lift it.	2 Physical difficulties
89	I'm too old to move it.	
345	Bed-bound.	
876	Can't bend to lift it.	
23	Can't carry it.	
4	Has to be moved to the kerb and I can't do it.	

4.21 How do I analyse the data?

Data analysis is a specialised task which should be carried out by someone with relevant training and/or experience. Your local authority may well have someone who is able to help you – start looking in the Research and Intelligence Department if you have one, or the Chief Executive's Department if you don't.

If you are planning to carry out your own analysis, you should draw on the objectives set out at the start of the survey to determine the kind of analysis that should be carried out on the data.

The first type of analysis to carry out is **frequency counts**. These will tell you how many and what proportion of respondents gave particular answers. It is good practice to exclude from most analyses those that said 'don't know' or 'not sure' or who failed to answer the question, but this does depend on the context of the question.

You may wish to carry out frequency counts that split the responses according to certain factors, e.g. different neighbourhoods or different ethnic groups. These cross-tabulations ('cross-tabs') will tell you whether responses differ for different parts of the population, e.g. by the age of the respondent. However, it is important to have a theory or hypothesis before you begin the data analysis as to why you expect responses to be different for different groups of the population.

For instance, you might think that the amount of waste produced is likely to vary by socio-economic group and wish to test that idea. Cross-tabulations should be done in statistical software such as SPSS, SAS or SNAP as this enables a measure of **significance** to be calculated. Significance testing gives you information that you can use to decide whether a result could have occurred by chance or if the differences are likely to be 'real'.

4.22 Are there any data protection issues I should be aware of?

The law on the protection of data is strict and you should ensure that you know what is required of you before carrying out a survey.

Every local authority will be registered under the Data Protection Act. There are eight principles of data protection that, by law, data controllers have to keep to. These state that data must be:

- fairly and lawfully processed;
- processed for limited purposes;
- adequate, relevant and not excessive;
- accurate;
- not kept for longer than necessary;
- processed in line with your rights;
- secure; and
- not transferred to other countries without adequate protection.

Further information on data protection is available from the Information Commissioner's Office. Specific guidance on social research and data protection produced jointly by MRS and SRA is available at:
www.mrs.org.uk/standards/downloads/revised/legal/data_protection_social.pdf

Key points include:

- The law only applies to data that identifies a living individual – as soon as those personal identifiers are removed from the data the law does not apply;
- Respondents must give 'informed consent' and be given the opportunity to opt out, and that must be respected;
- The research must be explained in a transparent way;
- Data collected for one purpose cannot be subsequently used for a different purpose;
- Personal data collected by a research organisation can only be given to the client if each respondent gives specific permission, otherwise anonymous data only can be provided; and
- The 'data controller's' responsibilities should be clearly identified.

One important point to remember is that even if you commission another organisation to carry out the research for you, you could still be liable for breaches in data protection. For this reason you should ensure that:

- Your contractor offers sufficient assurances that safeguards are in place, demonstrating for example that the premises on which data are stored are secure, that access to the data by the organisation's staff is restricted, and that there is an auditable data retention and destruction policy; and
- Any agreement to give data to your contractor must be set down in writing including how it will be handled and kept secure.

4.23 How do I tell other people about the results?

The results of the survey will have a longer-lasting impact if they are written up in some form. How this is done depends on what you intend them to be used for. Examples include:

- for reporting to your manager;
- for reporting to elected members; or
- as a published document to go on the authority's website.

First decide the purpose of your document.

Next go back and look at your objectives and research questions. The chances are you can use these to structure your report. As a minimum you must make sure that there are sections dealing with all of them.

If you are a council officer you are probably very aware that different types of results will be of interest to different audiences. For instance, elected members will be very interested in the success of different types of schemes and so analysis at the individual scheme level showing the costs involved and the change in recycling rates will be of importance. If new infrastructure has been introduced, elected members will want to see that this has been worthwhile in terms of both the cost of the infrastructure and the changes in behaviour that have occurred since. By contrast, members of the public will not want to know the results in the same level of detail. They will be interested in the overall results and their local ones in particular.

"Be neutral in the way you present information ... which should be factual and clear ... Therefore report that '90% were not in favour of incineration', rather than that they were 'outraged by the suggestion ...'"

Tips for reporting information include:

- state how many people were sent questionnaires and what proportion of them replied;
- state when the survey was conducted;
- state how the survey was conducted;
- be neutral in the way you present the information, e.g. '90% of respondents said they were not in favour of incineration' rather than '90% of respondents were outraged by the suggestion that an incinerator might be used to treat their waste';
- make sure all findings are quoted in context; and
- ensure that charts and other graphical information are accurate, simple to understand and not open to misinterpretation.

You may want to comment on the findings from a 'political' point of view or draw conclusions from them about how to improve schemes and campaigns. Keep these separate from the reporting of findings, which should be factual.

4.24 Summary of chapter

This chapter has:

- provided a flow chart to guide you in deciding what kind of research you should carry out (Section 4.1)
- explained why you would not normally be able to rely on administrative information to meet the aims of a survey (Section 4.2);
- described how to decide on research questions (Section 4.3) and considered approaches to answer research questions (Section 4.4), selecting the target population (Section 4.5) and the timing of survey conducted (Section 4.6);
- outlined in some detail how to carry out focus groups (Section 4.7);

- explained what kinds of things a survey can measure (Section 4.8), the pros and cons of the various approaches (Sections 4.8.3 to 4.8.7), and what to think about when planning a survey (Sections 4.8.8 and 4.8.9);
- given guidance on how to carry out each type of survey (Sections 4.9 to 4.14);
- given advice on designing a questionnaire (Section 4.15);
- explained the various standardised metrics developed by WRAP for use in surveys (Section 4.16);
- described how to introduce and end a questionnaire (Section 4.17) and the importance of testing (Section 4.18);
- looked at what to do when the questionnaires come back, including database design (Section 4.19);
- reviewed how to go about coding open-ended answers and analysing data (Sections 4.20 and 4.21);
- explained some of the data protection issues you need to be aware of (Section 4.22); and
- provided information on how to report the results (Section 4.23).

4.25 Where do you want to go next?

Chapter 1 provides an **introduction** and helps you decide which chapters you need to look at.

Chapter 2 explains how to set **monitoring aims, objectives and KPIs.** It then explains how to use the results of monitoring to **improve a service or scheme or to measure the effects of a communications campaign**.

Chapter 3 gives details for consideration when **sampling and profiling.**

Chapter 5 deals with monitoring **service / scheme usage and participation.**

Chapter 6 looks at the use of **tonnage data**.

Chapter 7 explains how to measure **capture rates.**

Chapter 8 considers monitoring of **contamination levels.**

Chapter 9 looks at approaches to measuring **waste reduction.**

Chapter 10 deals with monitoring **communications campaigns.**

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