

COMMUNITY PLANNING SURVEYS: TECHNICAL APPENDIX

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The main body of the *Community Planning Surveys* factsheet provides an overview of community planning-related issues to consider when conducting a survey. This appendix gives a more technical, step-by-step explanation of the survey process. Anyone seriously interested in conducting a community planning survey is urged to explore the services provided by various consultants in the state. For more information, see the “Resources for Citizen Planners” on page 4 of the *Community Planning Surveys* factsheet or consult the references provided in that factsheet. This appendix is only meant to introduce aspects of planning surveys, and further exploration will be required for many issues.

1. Research and Questions

The *Community Planning Surveys* factsheet emphasizes the importance of past surveys during the research process. Ideally there are five questions that your planning commission should ask when exploring what questions to ask in the survey:

1. What does your planning commission want to know?
2. What questions were asked on past surveys?
3. What are your best guesses at current issues in the community?
4. What have surveys in other communities contained?
5. What insight does general research into community planning provide?

2. Design

The research process should conclude with a list of *what* questions will be asked in the survey. Next, your planning commission must consider *how* those questions should be asked. See the box at right for an explanation of four principles for forming survey questions.

Demographic questions

No matter what your planning commission wants to learn from the survey, demographic questions must be added to the mix. Survey demographics serve at least two purposes:

Principles for forming survey questions

Consistency: Make sure questions will produce consistent answers from people who feel the same way. This is easiest to achieve by forming multiple choice questions and then testing for the comprehensiveness of the options given.

Clarity: Use precise terms—e.g., “2001” instead of “last year.” Avoid questions that make assumptions or that ask about more than one subject or quality at a time.

Simplicity: Use questions that are specific to one topic, short, and logically based in the subject matter.

Fairness: Avoid leading questions that make any particular response appear more correct or obvious. This is easiest to achieve by giving an equal number of positive and negative options in ways that mirror each other—e.g., “strongly agree / agree / neutral / disagree / strongly disagree.”

(Source: Miller 1999, p.12-13.)

Other tips:

- While the use of some open-ended questions is recommended in order to encourage respondent empowerment and satisfaction, include a good share of multiple choice questions. These will make the coding and data entry tasks much easier.
- Pay attention to question order and sequencing. In any give topic area, the first survey question should have broad implications. This helps sets the stage for respondents and prompts them to begin thinking about the planning issues at hand. Then follow up broad question with more specific inquiries that touch upon the specific details that your commission would like insight on.

1. They allow the planning commission to cross-tabulate data by subgroups.
2. When compared to overall community demographic data, they can be used to comment on the representative nature of the survey.

Common demographic questions address attributes believed to affect citizen perceptions, including gender, age, residence, race, household size, number of years lived in the community, marital status, income, home ownership, and place of work.

Once your planning commission has decided what questions it wants to ask in the survey, there are a few more decisions to make. Survey length is one of the most rigid of factors concerning questions. Surveys, especially by phone, that contain too many questions will result in unfinished questions or a higher rate of non-responses altogether. In addition, demographic questions can be viewed as an intrusion upon individual privacy and should be included prudently. The testing phase (see section 3 at right on “Testing”) will provide more insight on an effective length for your survey.

Choosing a survey method

Many different survey methods are available to your planning commission. Three main choices are mail surveys, phone surveys, and face-to-face interviews. Mail surveys are the most common type used for community planning, but each method has its strengths and weaknesses. (Source: Green and Korb.) The interactive aspects of each method are touched upon in the main portion of this factsheet, and the table in the box below provides further comparison. The options open to your planning commission will most likely be limited by the re-

sources and time available.

The choice of a survey method is also related to the choice of sampling frame. For instance, a phone book may be the most appropriate frame for a phone survey, while the mailing information in the voter checklist is more applicable to a mail survey. Your planning commission may find that the contact information sources available will play a large part in the decision of a survey method. The importance of recognizing the weaknesses inherent in a sampling frame is covered in section 4 below on “Sampling.”

3. Testing

An often-overlooked step in community surveying is the test phase. If the survey is implemented without testing, your planning commission will not know the following until it is too late:

- Do questions not make sense to respondents?
- Is the survey logic, in the case of computers, faulty?
- Should some open-ended questions have been offered as multiple choice and vice versa?
- Is the survey is just too long?

Your commission should test the survey at least 20 times. (Source: Miller, 1999.) Although planning commissioners and other municipal staff can be used to run through the survey, it is suggested that the survey be tested on some subjects within the actual sample.

4. Sampling

Luckily, when conducting a survey, your planning commission does not need to pursue a 100% response rate. Neither do you need to make contact with 100% of the community in the first place, although both are admirable goals. In the case of a mail-out survey, the commission may find it more economical—yet still statistically sound—to mail the survey out to a fraction of the population. This is because contact with a small percentage of the total population can represent the opinions of the community at large. There is not nearly enough room in this appendix to cover the intricacies of statistical significance in sampling. Your planning commission should contact your Regional Planning Commission and/or a consultant if you are interested in the subjects of confidence intervals, standard error, and how very few responses can still be useful. However, the basics on choosing and drawing a survey sample follow.

Survey methods compared by cost, time needed, anticipated response, and ability to support indepth questioning

<i>Method</i>	<i>Cost</i>	<i>Time</i>	<i>Response</i>	<i>Indepth</i>
Mail survey	least	—	worst	least
Phone survey	—	least	—	—
Face-to-face	most	most	best	most

(Source: Green & Korb, unpublished.)

Sample size and target population(s)

In the most general sense, planner Thomas Miller states that once a sample size reaches 400 or 500, any increases would have little effect upon the statistical validity of the survey, no matter the size of the community. (Source: Miller, 1999.) As a more specific strategy, Floyd Fowler suggests that the identification of community subgroups should determine the target sample size. He asserts that a good subgroup sample size is 150 to 200; any increases in size provide only minimal increases to confidence. (Source: Fowler, 2002.) Using these numbers, a planning commission can decide which community subgroups they would like valid estimates for, and determine the total sample size by adding up the groups. A consultant may have additional suggestions for deciding on a sample size.

Draw the sample

Once your planning commission has chosen the target population(s) and sample size for the survey, you must choose the source from which the sample contact information will be taken. The telephone book is an example of a common sampling source, as is your municipality's voter registration list. However, every sampling source has limitations, especially by excluding certain subgroups. Your planning commission may determine that the opinions of those who vote matter the most, so the voter registration list is an adequate source. However, that choice will automatically leave anyone under 18 years of age out of your sample, as well as anyone who simply has not registered to vote. There is little keeping those who are not registered to vote from registering the day after the survey. Are you sure you do not want to incorporate their opinions as well? Furthermore the phone excludes households that are unlisted or that do not possess telephones. When choosing a sampling source, your planning commission should be aware of any subgroups that may be left out of the sample. Using many different contact information resources may be a good idea. (See the box at right for information on drawing the sample once you have chosen the sources.)

5. Implementation and Collection

When respondents are contacted, they should be informed immediately—but briefly—of the important part that their answers will play in community planning. This may take the form of a cover letter endorsed with a mail survey or an introductory narra-

tive to begin a phone survey or a face-to-face interview. Other information accompanying the survey should include an explanation of how to complete and return the survey (if needed), contact information for questions about the survey, and where and when respondents can view the compiled data from the survey.

The main section of the *Community Planning Surveys* factsheet addresses how a sense of respondent empowerment can encourage a good survey return rate. Your planning commission may also want to consider the use of a raffle, contest, or some other community event in order to encourage responses. See the box on page 4 for tips that are particularly applicable to mail surveys.

6. Data Entry

Depending on the survey method chosen, your planning commission may assume that data entry is not necessary until the final survey deadline. In fact, there are advantages to coding, entering, and analyzing survey data during the implementation. Knowing the response rates of important subgroups will allow your planning commission to decide if it is necessary to conduct more

Sampling Methods

Simple Random Sample is the most common. Members of a population are selected one at a time, independent of one another, and without replacement. Example: Each subject in a population or subgroup is numbered and then chosen with a random number method.

Systematic Sample is like a simple random sample but used for lists too large to number each subject. Once a starting point is chosen at random, subjects are chosen—one-by-one—in increments that equal the total population divided by the desired sample size.

Stratified Sample requires more work but ensures the most representative sample based upon desired subgroups. Subjects are chosen at random from each subgroup until the percentage of subgroups within the sample equals the known percentage within the total population. Samples can also be drawn so that the percentage of each subgroup within the population is equal to the others.

(Source: Fowler 2002, p.14-16.)

surveys during the initial collection period, rather than waiting until the deadline and then lengthening the entire process. Continuous data entry also allows tracking, which will determine whether sample subjects are included in subsequent survey rounds before the collection period is over. This is a service that a consultant should be able to provide.

Data entry in itself can be a laborious process that is made easier by consistent coding. Some coding suggestions:

- Use 1 for “yes” answers and 2 for “no.”
- Use -9, not 0, to signify a question that was not answered at all. Some questions may list 0 as a valid answer.
- For questions that require dates, such as age, use an impossible date like 1700 to signify a non-response.

7. Data Analysis

When the collection period is over, and the data entry is finished, it is time to analyze the data. Your

Tips for conducting a mail survey

- Include a separate, one-sided cover letter that explains who is sending the survey, how the respondent was selected, how the answers will be used, and when the respondents can have access to the final report. The letter should be signed by a non-partisan, respected, and credible signatory, whose endorsement alone will solicit cooperation.
- Include an addressed, stamped envelope for ease of return. Some survey designs include the return address and postage included on them so they can be folded up and returned without an envelope.
- Track the survey returns and mail it out in phases. A full mail-out, a reminder postcard, and another mail-out to all who have not returned the survey will help boost the response rate.

Note: For primary information sources for this technical appendix, see “Reference Information” in the *Community Planning Surveys* factsheet.

planning commission may find that a simple frequency of results—with a few statistical means, medians, and cross-tabulations thrown in—may suffice. If subgroups are being summarized, a statistical analysis may be required to assess the effects of non-response. If the response rate of a low-income group is much lower than the demographic share of that group in your community, then your planning commission may want to weight the responses of that subgroup—e.g., increase their worth—so they reflect the numbers of the overall group in the final report.

8. Reporting

Your community planning survey’s final report should contain frequencies of the responses to each question with percentages calculated against the following:

- the total number of survey respondents, and/or
- the total number minus any respondents who refrained from answering that question.

The latter is often called the “valid percentage.”

A section of your report should elaborate upon the demographic results and compare them to U.S. Census data or other demographic information on your community. Your commission should also be sure to make note of the survey methodology. Contrasts with summaries from past surveys will also help fill out the final report, provide context, and further illuminate community sentiment. (See the main body of the *Community Planning Surveys* factsheet for more information on how to effectively utilize the final report once it has been created.)

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