

Survey Validity

The question of survey validity has two parts: 1) how can a community be confident that the results from those who completed the questionnaire are representative of the results that would have been obtained had the survey been administered to the entire population? and 2) how closely do the perspectives recorded on the survey reflect what residents really believe or do?

To answer the first question, the best survey research practices were used for the resources spent to ensure that the results from the survey respondents reflect the opinions of residents in the entire community. These practices include:

- Using a mail-out/mail-back methodology, which typically gets a higher response rate than phone for the same dollars spent. A higher response rate lessens the worry that those who did not respond are different than those who did respond.
- Selecting households at random within the community to receive the survey to ensure that the households selected to receive the survey are representative of the larger community.
- Over-sampling multi-family housing units to improve response from hard-to-reach, lower income or younger apartment dwellers.
- Selecting the respondent within the household using an unbiased sampling procedure; in this case, the “birthday method.” The cover letter included an instruction requesting that the respondent in the household be the adult (18 years old or older) who most recently had a birthday, irrespective of year of birth.
- Contacting potential respondents three times to encourage response from people who may have different opinions or habits than those who would respond with only a single prompt.
- Inviting response in a compelling manner (using appropriate letterhead/logos and a signature of a visible leader) to appeal to recipients’ sense of civic responsibility.
- Providing a pre-addressed, postage-paid return envelope.
- Offering the survey in Spanish or other language when requested by a given community.
- Weighting the results to reflect the demographics of the population.

The answer to the second question about how closely the perspectives recorded on the survey reflect what residents really believe or do is more complex. Resident responses to surveys are influenced by a variety of factors. For questions about service quality, residents’ expectations for service quality play a role as well as the “objective” quality of the service provided, the way the resident perceives the entire community (that is, the context in which the service is provided), the scale on which the resident is asked to record his or her opinion and, of course, the opinion, itself, that a resident holds about the service. Similarly a resident’s report of certain behaviors is colored by what he or she believes is the socially desirable response (e.g., reporting tolerant behaviors toward “oppressed groups,” likelihood of voting for a tax increase for services to poor people, use of alternative modes of travel to work besides the single occupancy vehicle), his or her memory of the actual behavior (if it is not a question speculating about future actions, like a vote), his or her confidence that he or she can be honest without suffering any negative consequences (thus the need for anonymity) as well as the actual behavior itself.

How closely survey results come to recording the way a person really feels or behaves often is measured by the coincidence of reported behavior with observed current behavior (e.g., driving habits), reported intentions to behave with observed future behavior (e.g., voting choices) or reported opinions about current community quality with objective characteristics of the community (e.g., feelings of safety correlated with rates of crime). There is a body of scientific literature that has investigated the relationship between reported behaviors and actual behaviors. Well-conducted surveys, by and large, do capture true respondent behaviors or intentions to act with great accuracy. Predictions of voting outcomes tend to be quite accurate using survey research, as do reported behaviors that are not about highly sensitive issues (e.g., family abuse or other illegal or morally sanctioned activities). For self-reports about highly sensitive issues, statistical adjustments can be made to correct for the respondents’ tendency to report what they think the “correct” response should be.

Research on the correlation of resident opinion about service quality and “objective” ratings of service quality vary, with some showing stronger relationships than others. NRC’s own research has demonstrated that residents who report the lowest ratings of street repair live in communities with objectively worse street conditions than those who report high ratings of street repair (based on road quality, delay in street repair, number of road repair employees). Similarly, the lowest rated fire services appear to be “objectively” worse than the highest rated fire services (expenditures per capita, response time, “professional” status of firefighters, breadth of services and training provided). Resident opinion commonly reflects objective performance data but is an important measure on its own. NRC principals have written, “If you collect trash three times a day but residents think that your trash haul is lousy, you still have a problem.”

Confidence Intervals

It is customary to describe the precision of estimates made from surveys by a “level of confidence” and accompanying “confidence interval” (or margin of error). A traditional level of confidence, and the one used here, is 95%. The 95% confidence interval can be any size and quantifies the sampling error or imprecision of the survey results because some residents’ opinions are relied on to estimate all residents’ opinions.¹

The margin of error for a sample of 300 is no greater than plus or minus six percentage points around any given percent reported for the entire sample (350 is five percentage points and 500 is four percentage points).

For subgroups of responses, the margin of error increases because the sample size for the subgroup is smaller. For subgroups of approximately 100 respondents, the margin of error is plus or minus 10 percentage points.

¹ A 95% confidence interval indicates that for every 100 random samples of this many residents, 95 of the confidence intervals created will include the “true” population response. This theory is applied in practice to mean that the “true” perspective of the target population lies within the confidence interval created for a single survey. For example, if 75% of residents rate a service as “excellent” or “good,” then the 4% margin of error (for the 95% confidence interval) indicates that the range of likely responses for the entire community is between 71% and 79%. This source of uncertainty is called sampling error. In addition to sampling error, other sources of error may affect any survey, including the non-response of residents with opinions different from survey responders. Though standardized on The NCS, on other surveys, differences in question wording, order, translation and data entry, as examples, can lead to somewhat varying results.