

TRENDS IN ATTITUDES TOWARD PRIVACY, CONFIDENTIALITY, AND DATA SHARING, 1995-2000¹

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Methods

This paper reports on trends in attitudes toward privacy, confidentiality, and data sharing as measured by four cross-sectional surveys of the U. S. telephone population done between 1995 and 2000. The first was developed in consultation with the Census Bureau as part of the University of Maryland's 1995 Joint Program in Survey Methodology practicum. The second, which used a questionnaire virtually identical to that in 1995, was carried out by Westat in 1996 under contract to the Census Bureau. The third and fourth, done in July through October 1999, just before the start of the public relations campaign and nationwide field recruiting for Census 2000, and from April to July of 2000, after delivery of census forms to U.S. households, were done by the University of Michigan under contract with the Census Bureau, with data collected by The Gallup Organization.

The response rates were 61%, 60%, 62%, and 61% and sample sizes were 1443, 1215, 1677, and 1978, for 1995, 1996, 1999, and 2000, respectively.

¹ This paper is based in part on work done under Contract 50YABC-7-66019, Task Order 46-YABC-9-00002, entitled "Study of Privacy Attitudes in 2000," between the U.S. Census Bureau and the University of Michigan, as well as on a 1996 survey of the public carried out by Westat for the Census Bureau and on a 1995 survey carried out in collaboration with Stanley Presser at the University of Maryland with consultation by the Census Bureau. We would like to acknowledge the help of our colleagues at the Census Bureau, in particular Randall J. Neugebauer, who managed the most recent study for the Bureau, as well as our colleagues at The Gallup Organization who were responsible for carrying it out, in particular, Roger Tourangeau (now at the University of Michigan) and Darby Miller Steiger. We would also like to express our appreciation to Jeff Kerwin of Westat, who conducted the 1996 survey, in which Singer participated as a co-investigator. Stanley Presser's collaboration and advice throughout this entire period have been invaluable. We would also like to thank Stanley Presser and anonymous reviewers at the Census Bureau for comments on an earlier draft. Final responsibility for the content is, of course, our own.

All analyses are weighted to correct for unequal probabilities of selection (due to households containing different numbers of adults and phone lines) and post stratified to Current Population Survey distributions on region, sex, race, age, and education.

Trends in Beliefs about Confidentiality

Trends in beliefs about the Census Bureau's treatment of personal information were measured in several different ways. Early in the interview, respondents were asked for their beliefs about Census Bureau practices. Later questions probed their knowledge of the laws governing confidentiality practices, and then those who were knowledgeable about the relevant laws were asked whether they trusted the Census Bureau to obey them. Finally, at the very end of the interview, respondents were asked several questions about potential misuses of census data involving breaches of confidentiality. Most questions were asked in all four years.

The first question designed to probe beliefs about actual practices asked, "Do you believe other agencies, outside the Census Bureau, can or cannot get people's names and addresses along with their answers to the census, or are you not sure?" The introduction to the question referred back to the demographic questions asked on the short form and informed people that "the person in the household who fills out the form must list the full name of everyone who lives there along with each person's age, sex, race [and in 1995, marital status]". The second question, asked for the first time in 1996 to assess whether use of the term "confidentiality" would change the pattern of responses, was, "Do you think the Census Bureau does or does not protect the confidentiality of this information, or are you not sure?" with an introduction identical to that already quoted. Respondents in 1996 were randomly assigned to one question or the other.

For both questions, there was a significant increase between 1996 and 2000 in the proportion giving the correct response (that other agencies cannot get the

data, and that the Census Bureau protects confidentiality)--from 6.1% to 17.3% in the case of "can get," and from 12.9% to 25.1% in the case of confidentiality. Unlike later questions discussed in this section, these questions offered an explicit Not Sure category to respondents. The very large proportion of Not Sure answers, which is perhaps the most striking feature of response to both questions, is, therefore, a function both of the public's lack of information and of the response options offered by the question. In 1996, for example, when the questions were asked both with an explicit Not Sure option and, in split-ballot form, without such an option, the Not Sure rate dropped from 46.8% to 7.7%; however, the ratio of correct to incorrect responses did not change.

Near the end of the 1996 interview, respondents were asked for the first time whether the Census Bureau was forbidden by law from sharing identified data with other agencies, or (in a split-ballot version) whether the Bureau was required by law to keep the data confidential. These questions were repeated in 1999 and 2000. Trends in responses to the "forbidden by law" question show a large increase in the proportion giving the correct response between 1996 and 1999, and a further proportional increase between 1999 and 2000, although even in 2000 the correct response was given by less than half the sample. Incorrect responses also increased between 1996 and 1999, but this trend was dramatically reversed in 2000, perhaps as a result of the Census Bureau's public relations campaign in connection with the decennial census. Responses to the "required to keep confidential" question show a similar trend, although in every year the proportion believing that there is a law requiring confidentiality is much larger than the proportion believing that there is a law forbidding data sharing with other agencies, rising to 76% in 2000.

In all three years, respondents who indicated that there were laws forbidding data sharing or requiring confidentiality were asked whether they trusted the Census Bureau to obey these laws. Table 1 shows trends in responses to this question (because responses did not differ depending on which version of the preceding question respondents received, they have been combined in this table). The small fluctuations over time in the percentage saying they would trust the Census Bureau are not statistically significant. But, coupled with the increased awareness of the relevant laws, this means that a

larger number of people trusted the Census Bureau in 2000 than did so in 1996.

Table 1
Trust Census Bureau to Keep Information Confidential
(Those Who Know the Law Only): By Year

	1996	1999	2000
	%	%	%
Yes	66.7	69.3	67.8
No	33.3	30.7	32.2
N (weighted)	464	957	1197

Source: 1996, Question 22a1; 1999-2000, Question 24a1.

Almost at the end of the questionnaire, respondents were asked three questions designed to measure the prevalence of suspicions sometimes voiced about the misuse of census data for law enforcement purposes. The first of these asked (in 1995, 1999, and 2000), "Do you believe the police and the FBI use the census to keep track of troublemakers?" The percentage of those giving the correct response (i.e., that it is not used for that purpose) increased slightly, from 49.0% to 52.1%, between 1995 and 1999, and then substantially, to 63.5%, between 1999 and 2000. The second question, asked only in 1999 and 2000, asked, "How about to locate illegal aliens? Do you believe the census is used for that?" The percentage voicing this belief declined significantly, from 50.3% in 1999 to 42.1% in 2000. Finally, respondents in 1999 and 2000 were asked, "Do you agree or disagree that people's answers to the census can be used against them?" The change in the percentage agreeing was not statistically significant.

Trends in Attitudes toward Privacy

So far, we have considered trends in beliefs about confidentiality. We also, however, asked questions about privacy, as distinct from confidentiality. One question asked specifically whether the respondent regarded the Census Bureau's asking about age, race, and sex, along with name and address, as an invasion of privacy; others were more general questions.²

² For the wording of the questions and the way they were scored, see the Appendix. Question numbers refer to the 1999 and 2000 surveys; questions were asked in the same relative order in 1995.

Some of these questions were asked in all four years; most were asked only in 1995, and then again in 1999 and 2000.

There was a small but significant decline between 1995 and 2000 in the percentage of the sample regarding the questions asked on the census short form as an invasion of privacy; 23.5% regarded it as an invasion in 1995, and 20.9% did so in 2000.

Scores on the Privacy Index, consisting of answers to the five more general privacy questions, are shown in Table 2 for each of the three years in which they were asked. The overall change is significant ($F=4.75$, $df=5097$, $p<0.01$), as is the change from 1999 to 2000. Thus, general concerns about privacy declined slightly but significantly between 1995 and 2000.

Table 2
Scores on Privacy Index^a in 1995, 1999, and 2000

	Privacy Index		
	Mean	Standard Deviation	N
1995	15.202	2.722	1443
1999	15.129	2.819	1677
2000	14.918	2.944	1978

^aFor question wording and scoring, see Appendix. Imputed data were used in calculating the Index.

Trends in Attitudes toward Data Sharing

Trends in attitudes toward three different issues were explored in the series of surveys under discussion here: The use of administrative records to reduce the undercount; the use of such records to replace the conventional census; and the use of administrative records to provide the information currently collected by means of the census long form.³

Questions about data sharing in order to reduce the undercount were asked in terms of data sharing by the Social Security Administration, the Internal Revenue Service, and one additional agency, which varied from year to year; the order in which agencies were asked about was randomly rotated

Questions about a records-only census did not specify any particular agency, and questions about the long form were asked only about the IRS and a second agency, which varied from year to year. In each case, the question about administrative records was preceded

by a short description of the problem their use was designed to address. Thus, respondents were first informed about the existence of the undercount, and then asked how they felt about specific federal agencies sharing data with the Census Bureau in order to “identify people who are missed in the census.” To motivate the use of administrative records to replace the conventional count, respondents were told, “No one would be asked to fill out a [census] form. Instead, the Census Bureau would count the entire population by getting information from other government agencies.” The question about replacing the long form was preceded by a question probing awareness of the existence of the long form, and the question itself contained a fairly lengthy rationale: “Other government agencies . . . already have some of the information asked on the long form. It has been proposed that they give this information to the Census Bureau. Combining information from agencies would mean that everyone could fill out the short form instead of some people having to fill out the longer form. To make this possible, would you favor or oppose . . .”

Table 3 shows responses to the question about the IRS sharing information with the Census Bureau to reduce the undercount. The largest drop in approval occurred between 1996 and 1999 for all three questions. In every year, those strongly opposed outnumber those strongly in favor by almost two to one (data not shown).

Table 3
Opinions Toward the IRS Sharing Short Form Information with the Census Bureau: By Year

	1995	1996	1999	2000
	%	%	%	%
<i>Favor</i>	70.5	69.3	54.0	55.2
<i>Oppose</i>	29.5	30.7	46.0	44.8
N (weighted)	1366	1167	1619	1925

Source: 1995, Question 12a, b, or c, depending on order; 1996-2000, Question 10, 12, or 13, depending on order.

³ The findings of earlier studies are reviewed in Blair (1994).

Willingness to Provide Social Security Number

One question of particular interest to the Census Bureau was the extent to which people would be willing to provide their Social Security number (SSN) to the Census Bureau in order to permit more precise matching of administrative and census records. Evidence from earlier Census Bureau research is conflicting in this regard. On the one hand, respondents in four out of five focus groups overwhelmingly opposed this practice when they were asked about it in 1992 (Singer and Miller, 1992). On the other hand, individuals in a field experiment in 1992 were only 3.4 percentage points less likely to return a census form when it requested their SSN than when it did not; an additional 13.9 % returned the form but did not provide a SSN (Singer, Bates, and Miller, 1992). An experiment carried out by the Census Bureau during Census 2000 indicates that a request for SSN decreased mail returns as well as the number of forms returned with some missing data; but the effect was not nearly as strong as is suggested by the survey data reported below (Guarino, Hill, and Woltman, 2001).

A question about SSN was included for the first time on the 1996 survey. The question read as follows:

"The Census Bureau is considering ways to combine information from federal, state, and local agencies to reduce the costs of trying to count every person in this country. Access to Social Security numbers makes it easier to do this. If the census form asked for your Social Security number, would you be willing to provide it?"

Responses to this question parallels responses to the data sharing questions, with willingness to provide the SSN declining significantly from 68% in 1996, the first time the question was asked, to 55% in 1999. There was no further change between 1999 and 2000.

Analyses not shown indicate that two kinds of reasons are associated with expressed reluctance to provide one's SSN to the Census Bureau. First, there are reasons related to beliefs about the census: People who were less aware of the census, who considered it less important, and who were less favorable toward the idea of data sharing were significantly less willing to provide their SSN. Low levels of education are also associated with these characteristics. Second is a set of beliefs and attitudes concerning privacy, confidentiality, and trust: People who were more concerned about privacy, who had less trust in the Census Bureau's maintenance of confidentiality, and who were less

trusting of government in general were much less likely to say they would provide their SSN to the Census Bureau. Women are in general more concerned about privacy than men, and they were also less willing to say they would provide their SSN.

Summary and Conclusions

Questions tapping knowledge specifically about Census Bureau confidentiality practices--questions that inquire into knowledge of laws, or beliefs about practices in all showed small but significant trends in the direction of greater accuracy between 1995 and 2000. With two exceptions, most of these are rather evenly spread over the five years and do not appear to be attributable to the Census Bureau public relations campaign. The exceptions are correct responses to the question whether other agencies can get identified census data, which increased from 12.2% to 17.3% between 1999 and 2000, and a significant decline in incorrect responses to the question whether the Census Bureau is required by law to keep information confidential, which also occurred during those years.

Paralleling this pattern of an increase over time in knowledge about confidentiality, however, is a significant decline in approval of data sharing for all three of the purposes asked about Expressed willingness to provide one's Social Security number also declined between 1996 and 1999, with no further change in 2000.

Interestingly enough, these changes are *not* paralleled either by increasing distrust of the uses to which census data might be put, or by increasing concerns about privacy in general, or by declining trust in government. The three questions about possible misuse of census data all show a decline in distrust between 1999 and 2000, with two of the three statistically significant. The question asking whether people trust the Census Bureau to keep data confidential (if they correctly perceived that there were laws governing confidentiality) showed no significant change. Agreement with the question asking whether the census short form is an invasion of privacy showed a small but significant decline between 1995 and 2000, and an index of general privacy concern also showed a small but significant decline between 1995 and 2000. Finally, people's trust in "the government in Washington" increased between 1996 and 2000 after declining from 1995 to 1996.

References

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Appendix

The Privacy Index consists of the sum of Q. 26: "In general, how worried would you say you are about your personal privacy: very worried, somewhat worried, not very worried, or not worried at all"; Q. 29c: "Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. People's rights to privacy are well protected"; Q. 29d: "Please tell me if you strongly agree . . . People have lost all control over how personal information about them is used"; Q. 29e: "Please tell me if you strongly agree . . . If privacy is to be preserved, the use of computers must be strictly regulated"; and Q. 29f: "The government knows more about me than it needs to." Scores were reversed for Q. 29c. High scores indicate high concern about privacy.