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Final Report on the 1999-2000 Surveys of Privacy Attitudes

FINAL REPORT

This research paper reports the results of research and analysis undertaken by the U.S. Census Bureau. It is part of a broad program, the Census 2000 Testing, Experimentation, and Evaluation (TXE) Program, designed to assess Census 2000 and to inform 2010 Census planning. Findings from the Census 2000 TXE Program reports are integrated into topic reports that provide context and background for broader interpretation of results.

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EXECUTIVE SUMMARY

The Census Bureau has commissioned four studies of public attitudes toward the census, toward data sharing by government agencies to improve the accuracy of the enumeration or reduce burden, and toward issues of confidentiality and privacy. A fifth study--actually the first in the series--was proposed by the Census Bureau but conducted by the Joint Program in Survey Methodology at the University of Maryland in consultation with the Census Bureau, with funding from the National Science Foundation. An important motivation for these surveys was to gauge public support for data sharing in Census 2000.

Two of the five studies surveyed the telephone population over 18 in the 48 contiguous states and the District of Columbia; two surveyed the telephone population in all 50 states and the District of Columbia; and the fifth surveyed the telephone population of Puerto Rico.

The first study was carried out by students at the University of Maryland and the University of Maryland Survey Research Center. The second study, which largely replicated the 1995 study, was carried out by Westat in 1996, primarily in order to determine how public opinion on these matters had changed in the space of a year (Kerwin and Edwards, 1996).

The third and fourth surveys were carried out by The Gallup Organization as a subcontractor to the University of Michigan. The surveys were carried out between July and October of 1999 and between April and July of 2000. The time periods were chosen to coincide, first, with the period just before the launching of an intensive publicity campaign about the 2000 census, and second, with the period immediately following the delivery of census forms in March 2000. Several weeks later, in a search for information that might shed light on the low census return rate from Puerto Rico, the Census Bureau commissioned a separate small survey of Puerto Rican telephone households, using the Spanish-language questionnaire that had been prepared for the 1999 and 2000 studies. The first four surveys used list-assisted random digit dialing and surveyed the noninstitutionalized population 18 and over residing in telephone households; the Puerto Rico survey was likewise done using random digit dialing but without list-assistance. The response rate to the 1999 and 2000 mainland surveys were 61.9 percent and 61.1 percent, respectively; the response rate for Puerto Rico was 57.9 percent.

Below, we summarize the findings under four main headings: Trends in Responses, 1995-2000; Change in Attitudes, 1999-2000; Attitudes and Behavior; and Attitudes toward the Census in Puerto Rico.

Trends in Responses, 1995-2000

- One distinct pattern of attitude change is apparent with respect to knowledge and awareness of the census, measured by questions that asked how important it was to count the population, whether people had heard of the undercount, whether they were aware of the uses of the census and of the census long form, and how important it was to cooperate with the census. These questions show small fluctuations between 1995 and 1999, and then large changes between 1999 and 2000, all in the direction of greater knowledge and awareness. Undoubtedly, this pattern is attributable to what has been referred to as the "census climate"--the huge amount of media attention generated by the census in the decennial year. Other things being equal, these responses are likely to return to "normal" by the middle of the decade.
- Another pattern of responses characterizes questions tapping knowledge specifically about Census Bureau confidentiality practices--questions that inquire into knowledge of laws, or beliefs about practices. All of these questions showed small but significant trends in the direction of greater accuracy. 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's public relations campaign. The exceptions are correct responses to the question whether other agencies can get identified census data, which increased from 12.2 percent to 17.3 percent between 1999 and 2000, and a decline in incorrect responses to the question whether the Census Bureau is required by law to keep information confidential.
- Paralleling this pattern of an increase over time in knowledge about the Census Bureau's confidentiality practices is a significant increase over time in the percentage saying they would be bothered "a lot" if their census data were shared with anyone outside the Census Bureau, as well as a decline in approval of data sharing for all three of the purposes asked about (to reduce the undercount, to eliminate the census, and to replace the long form).
- Expressed willingness to provide one's Social Security number declined between 1996 and 1999, with no further change in 2000.
- Increased disapproval of data sharing was 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. Two of three questions about possible misuse of census data showed a significant decline in distrust between 1999 and 2000. 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. The question asking whether the census short form is an invasion of privacy showed a small significant decline between 1995 and 2000, and an index of general concerns about privacy also declined slightly but significantly between 1995 and 2000. Finally, people's trust in "the government in Washington" showed a small, significant increase between 1996 and 2000 after declining from 1995 to 1996.

- A number of significant changes in attitudes occurred during the ten months separating the two surveys. People's awareness of the uses to which the census is put increased, as did the importance they attached to it. Although there was no change between 1999 and 2000 in the percentage--a fifth of the population--who considered the census an invasion of privacy, there was a significant decline in the belief that census data were likely to be misused, and a significant increase in the percentage of those perceiving, correctly, that other government agencies could not get census data identified by name and address. The percentage of those who knew that the Census Bureau is required by law to protect the confidentiality of the data it collects (or forbidden by law to disclose it) also increased significantly. These changes are, in all likelihood, attributable to publicity about the census commissioned or stimulated by the Census Bureau, since in most cases they reverse or dramatically accelerate trends apparent from 1995 to 1999.
- At the same time, a number of related questions showed no significant change between 1999 and 2000, even though the messages disseminated by Census Bureau might have been expected to have an impact on responses to at least some of them. First, and perhaps most important, there was no significant increase in the percentage of those who said they think the government protects the confidentiality of the data. (Given the other findings cited here, we are inclined to interpret the absence of change in responses to this question as signifying that it tapped an element of trust rather than awareness or knowledge about the law.) Nor was there a significant increase in the percentage of those saying they trust the Census Bureau to keep data confidential. This question was asked only of those who answered, correctly, that the Census Bureau is required by law to protect the confidentiality of the data it collects (or prevented by law from disclosing it), percentages that did show a significant increase between the two years. Nor was there any change in the generalized trust which people expressed in the federal government. *In general, that is, people's feelings proved to be much more impervious to change than their knowledge or beliefs*.
- A series of questions pertaining directly to willingness to have the Census Bureau use data from other agencies to fix the undercount, eliminate the need for a census altogether, or eliminate the need for answering questions on the long form either showed no change between 1999 and 2000 or, in the case of willingness to have agencies share data to eliminate the census, showed a significant decline. Similarly, willingness to provide one's Social Security number in order to facilitate such sharing showed no significant change between these two years. It is hard to know how to interpret these findings. A significant decline in willingness to have agencies share data, and to provide one's Social Security number, had been apparent since 1995 or 1996. The fact that this trend appears to have been halted, if not reversed, between 1999 and 2000 is perhaps attributable indirectly to the impact of the Census Bureau's outreach campaign.
- Finally, there does not appear to have been an increase between 1999 and 2000 in concern about either privacy in general or census-related information. An indicator of

generalized privacy concerns actually showed a small but significant decline between 1999 and 2000.

- Better educated respondents in 1999 and 2000 were more knowledgeable about the census and considered it more important than those with less education; they expressed fewer privacy concerns and were less likely to see the census as an invasion of privacy or to believe census information will be misused. They were significantly more likely to believe that other agencies cannot get identified census data and that the Census Bureau protects data confidentiality; they were more willing to have agencies provide data to the Census Bureau to eliminate the long form and to provide their Social Security number to make this possible.
- Nonwhites were significantly more concerned about privacy than whites, less likely to believe the Census Bureau protects confidentiality; less likely to be willing to have agencies share data to reduce the undercount, and less willing to provide their Social Security number. At the same time, they were more likely to see the census as important than whites.
- Self-identification as Hispanic had nonsignificant relationships to many variables, but those that were significant tended to resemble those of the better-educated.
- Gender had inconsistent effects on the attitudes measured. Women were less knowledgeable about the census but considered it more important than men do. They were more concerned about privacy in general but less likely to believe that answers to the census would be misused. And though they were significantly more likely than men to favor data sharing under certain circumstances, they were less willing to provide their Social Security number to facilitate this.
- The effects of age were also somewhat inconsistent. Older people were significantly more knowledgeable about census uses. They had significantly higher scores than younger people on the general privacy index (i.e., they were more concerned about privacy), but were significantly more likely to believe that other agencies cannot get identified data and less likely to consider the census an invasion of privacy. Nevertheless, they were significantly less likely to trust the Census Bureau to uphold confidentiality laws (and less likely to trust government in general). They were significantly less likely than younger people to approve of any form of data sharing, yet they were significantly more willing to provide their Social Security number to facilitate such sharing.
- Like older people, those with higher incomes had significantly greater concerns about privacy and were significantly less likely than those with lower incomes to trust the Census Bureau to uphold confidentiality laws. Yet they were also significantly less likely than those with lower incomes to think responses to the census would be used against people. Their answers to the data sharing questions are inconsistent.
- Those reporting exposure to both positive and negative publicity were more knowledgeable about the census and considered the census more important than those

reporting no exposure; they were also more likely to believe that the Census Bureau protects confidentiality and to think that everyone has an obligation to cooperate with the census. But they also had significantly more concerns about privacy.

- Those reporting only negative exposure differed very little from those reporting both positive and negative exposure, but they were less likely to believe the Census Bureau's confidentiality assurances and to endorse the obligation to cooperate with the census.
- In contrast, those reporting exposure to positive publicity only differed significantly on most variables from those reporting exposure to both positive and negative publicity, in all likelihood because they received their information from Census Bureau sources rather than the mass media. They considered the census more important and were more trusting of the Census Bureau's confidentiality assurances, as well as more likely to provide their Social Security number.

Attitudes and Behavior

- 2906 of 3676 respondents to the 1999 and 2000 surveys provided a potentially matchable address to the Census Bureau. Of these, the Census Bureau matched 2182, or 75 percent, at the household level. The analysis of attitudes and behavior is based on these 2182 respondents, who constitute 59.7 percent of the original sample.
- Return rates among those whose addresses could be matched to census files were 85.6 percent in 1999 and 86.2 percent in 2000, which is higher than for the population as a whole (final return rates are not yet available from the Census Bureau).
- Among the demographic characteristics, age and education were significant in predicting return of the census form in both the 1999 and 2000 surveys, with older respondents and better educated respondents more likely to return the census form. Form type was also highly significant; those receiving the long form were only about half as likely to return the census form as those receiving the short form. In addition, in the 2000 sample, nonwhites were significantly less likely to return their census form, as were respondents from the Northeast; and in the 1999 sample, women were significantly more likely to do so.
- Among respondents interviewed in 2000, the belief that the census may be misused by law enforcement agencies, and concerns about privacy, significantly predicted the return of the census form. Among respondents interviewed in 1999, willingness to provide one's Social Security number, and the need to impute income, were significant predictors.
- Self-reported exposure to positive publicity about the census positively affected change in knowledge, beliefs, and attitudes toward the census and the Census Bureau, but we found no direct effect on census returns.
- Because of the large number of unmatched respondents, we also examined predictors of "matchability"--the likelihood that a respondent's address would be matched in Census

Bureau files. The predictors varied somewhat from year to year. Among the demographic predictors, age was predictive in 1999; Hispanic ethnicity and income were significant in 2000. Region also had significant effects.

- In both 1999 and 2000, those who considered the census an invasion of privacy were less likely to be matched, whereas those who were willing to provide their Social Security number and who approved of using administrative records to reduce the undercount were significantly more likely to be matched. Thus, the findings in this section probably understate the extent to which concerns about privacy and confidentiality negatively affect cooperation with the census.
- Clearly, there is no one-for-one relationship between attitudes and behavior.

 Nevertheless, privacy attitudes do significantly affect behavior, not only in returning the census form but also in providing addresses to a survey organization.

Attitudes toward the Census in Puerto Rico

- Residents of Puerto Rico considered the census more important; believed it was more important to ask the demographic questions; were less likely to see asking about demographic characteristics as an invasion of privacy; and expressed a stronger obligation to cooperate with the census than the rest of the United States population. Not unexpectedly, they were less aware of census uses, of the 1990 undercount, and of the existence of a long census form.
- Respondents in Puerto Rico were less likely to believe that the Census Bureau shares identified data with other government agencies and far more likely to believe that it protects data confidentiality.
- Respondents in Puerto Rico were more likely than other United States respondents to favor data sharing for all three of the uses asked about: reducing the undercount, eliminating the census, and eliminating the need for the long form. They were also more willing to provide their Social Security number.
- In general, respondents in Puerto Rico expressed less concern about privacy and more trust in government.
- In sum, attitudes toward the census, and toward privacy and confidentiality, expressed by the Puerto Rico sample do not appear to account for the lower than expected response rate to the 2000 census in Puerto Rico. It is possible that the attitudes expressed do not truly reflect the attitudes held. It is also possible that nonrespondents to the survey--the 43 percent of the sample who did not answer the survey, and those (roughly one third of the population) who do not own a telephone--may hold attitudes quite different from those reported here.

Conclusions and Recommendations for Future Research

- Except in the period surrounding the decennial census, when publicity about the census is at its height, knowledge and beliefs about the Census Bureau and attitudes toward privacy and confidentiality show only small year-to-year changes.
- Knowledge, beliefs, and attitudes are all responsive to self-reported exposure to both positive and negative publicity about the census.
- Approval of data sharing among federal agencies, as well as willingness to provide one's Social Security number to facilitate such sharing, have declined consistently since 1995 to an extent greater than would be expected from the trend in privacy-related attitudes.
- Beliefs about Census Bureau confidentiality practices and concerns about privacy are reliable predictors of behavior, predicting both census returns and the ability to match respondents' survey answers to their census form.

Given these general conclusions, we recommend the following research by the Census Bureau:

- Continue to monitor trends in knowledge, beliefs, and attitudes, but less frequently.
- Between 2001 and 2005, design, conduct, and analyze small-scale research that develops and then tests more effective ways of communicating the Census Bureau's confidentiality practices to the general public.
- Conduct qualitative research on impediments to trust in the Census Bureau and in the government more generally, and on ways in which feelings of trust might be enhanced.
- Conduct methodological research that attempts to quantify the impact of nonresponse on the substantive findings reported in the surveys of privacy attitudes.
- Because attitudes toward privacy and confidentiality account for only a small part of the variance in census mail returns, design and conduct research to identify and reduce other response barriers.

BACKGROUND

The Census Bureau has commissioned four studies of public attitudes toward the census, toward data sharing by government agencies to improve the accuracy of the enumeration or reduce burden, and toward issues of confidentiality and privacy. A fifth study--actually the first in the series--was conducted independently by the University of Maryland with Census Bureau input. An important motivation for these surveys was to gauge public support for data sharing in the 2000 census.

Two of the five studies surveyed the telephone population over 18 in the contiguous United States; two surveyed the telephone population in the fifty states and the District of Columbia; the fifth surveyed the telephone population of Puerto Rico.

The first study was conducted in 1995 by the University of Maryland's Joint Program in Survey Methodology in consultation with the Census Bureau (Presser and Singer, 1995; Singer and Presser, 1996). The second study, which largely replicated the 1995 study, was carried out by Westat in 1996, primarily in order to determine how public opinion on these matters had changed in the space of a year (Kerwin and Edwards 1996; Singer, Presser, and Van Hoewyk, 1997; Singer and Presser 1997; Presser, Singer and Van Hoewyk, 2000).

The third and fourth surveys were carried out by The Gallup Organization as a subcontractor to the University of Michigan. The surveys were carried out between July and October of 1999 and between April and July of 2000. The time periods were chosen to coincide, first, with the period just before the launching of an intensive publicity campaign about Census 2000, and second, with the period immediately following the delivery of census forms in March 2000. Several weeks later, in a search for information that might shed light on the low census return rate from Puerto Rico, the Census Bureau commissioned a separate small survey of Puerto Rico telephone households, using the Spanish-language questionnaire that had been prepared for the 1999 and 2000 studies.

This report consists of five chapters. The first describes the methods used in the 1999-2000 studies, pointing out changes from those used in the two earlier studies. The second analyzes trends in key responses over the four studies. The third examines changes in attitudes between 1999 and 2000, when the Census Bureau launched an extensive and expensive public relations campaign designed to provide reasons for responding to the census and to address the public's confidentiality concerns. This analysis controls for a variety of demographic characteristics. It also examines the effects of exposure to negative publicity about the census which erupted during the first week after the census forms had been delivered to households. The fourth chapter examines predictors of returning the census form, using the results of a matching procedure carried out by the Census Bureau and controlling for respondents' demographic characteristics. Finally, Chapter 5 presents the results of the Puerto Rico survey, as well as key comparisons with results for the continental U.S.

1. METHODS

This chapter describes the methods used to conduct the 1999 and 2000 surveys, including the survey of Puerto Rico. It describes the development of the survey instrument, the sampling design, the data collection process, the response rate, and weighting activities.

1.1 Survey Instrument

The survey questionnaire used in 1999 and 2000 was essentially the same as that used in 1996, with a few exceptions. Because so many people in the earlier surveys had indicated they did not know whether the Census Bureau shared identified responses with other agencies, and those who did profess to know overwhelmingly chose the wrong answer, several experimental variations were introduced into the 1999 questionnaire to probe this issue further. Also, because some of the privacy-related questions first asked in 1995 were dropped from the 1996 survey to save time, these questions were added back in 1999 and 2000 in order to provide measures of change in these attitudes. Finally, some of the experiments with question wording and order which were shown not to affect responses in 1996 were dropped from the 1999 and 2000 instruments.

In an effort to increase the response rate beyond that obtained in 1996, the instrument was translated into Spanish to permit interviewing Spanish-speaking respondents in their native language. The translation was checked for accuracy at the University of Michigan, and bilingual interviewers were assigned to respondents who preferred to be interviewed in Spanish.

The instrument was then programmed into Gallup's computer-assisted telephone interviewing (CATI) system, which includes standard software for managing random digit dial (RDD) samples, household enumeration and respondent selection, and questionnaire management. The survey called for several wording experiments. In all of these, respondents were randomly assigned to experimental conditions.

1.2 Sample Design

Both the 1999 and the 2000 surveys were conducted with samples of individuals aged 18 or older in U.S. households. These samples were drawn using a list-assisted RDD method.

Gallup used a list-assisted probability design that gave equal probabilities of selection to all telephone numbers in eligible blocks of telephone numbers. Blocks are sets of 100 consecutive telephone numbers that share their first eight digits. The eligible blocks were ones that serve areas within the fifty states and the District of Columbia and that contain at least one listed residential number. This technique provides coverage of virtually all of the residential telephone households in the continental United States (approximately 94 percent).

The sample is created by first selecting 100-banks systematically from the frame of eligible banks. The number of banks selected was equal to the sample size. (The use of systematic sampling ensures that no more than one number is selected for the sample from any given bank.) The last two numbers are then randomly generated to create a full ten-digit

telephone number. This method ensures that every possible telephone number within all eligible banks has an equal probability of selection. For the 1999 survey, a sample of 4,830 numbers was selected from the frame. Because that sample yielded only 1,681 completed interviews instead of the anticipated 2,000 interviews, a larger sample 5,936 numbers was drawn for the 2000 survey.

For the Puerto Rico sample, the target population comprised adults aged 18 or older living in Puerto Rico. Since information on the number of directory-listed residential telephone numbers is not available at the exchange or at the 100-bank level in Puerto Rico, it was not possible to use a "list-assisted" sampling procedure. Instead, the sample of telephone numbers was drawn using a pure RDD method. For the purpose of RDD sampling, the sampling frame was constructed by including all active exchanges in Puerto Rico. Survey Sampling, Inc. (SSI) identifies the active exchanges based on information received from Telcordia and each telephone exchange is assigned to the county or municipality it services. All individual telephone numbers in the sample were then created using a 4-digit randomization process by adding a randomly generated 4-digit combination to a valid (or active) area-code/exchange combination (6-digits). No stratification (by Urban/Rural or by any other characteristics) within Puerto Rico was used for sampling telephone numbers.

Sampling with a 4-digit randomization process does not yield the same high working telephone number rates that SSI's other list-assisted sampling methods used in United States yield. To help increase the dialing efficiency of Puerto Rico sample, the selected sample was screened using SSI's sample screening service. This appears to have caused some minor variation in the percentage of the sample chosen from different Federal Information Processing Standards codes relative to the general population. The overall telephone coverage rate of households in Puerto Rico is about 63.5 percent. For Puerto Rico, a sample of 3,375 numbers (after screening) was drawn to yield 500 completed interviews. The working number rate on the sample was 37 percent.

For all three surveys, all eligible respondents (adults age 18 or older) were enumerated by gender, from oldest adult to youngest adult, with a random respondent selected from those listed.

1.3 Training and Data Collection

Immediately prior to data collection for the 1999 survey, a four-hour training session was conducted to prepare twenty interviewers for the administration of the survey. Gallup project staff prepared training materials to familiarize interviewers with all aspects of the task. These materials included an interviewer's manual which described the background and purpose of the project, provided answers to commonly asked questions, and presented question-by-question specifications.

The training session was split into several components. First, Gallup project staff and University of Michigan project staff reviewed the background of the project and described the methods to be used to collect the information, including special methods that were being

implemented to achieve high response rates (see section on Response Enhancement for a discussion of these methods). Because the respondent selection procedure was somewhat complex, the interviewers then engaged in a role-playing activity to practice respondent selection procedures. Next the interviewers read through the questionnaire as a group, with Gallup project staff highlighting specific questions that might require the interviewer to have extra knowledge. Gallup project staff then reviewed the importance of achieving high response rates and asked interviewers to react to several scenarios in which potential respondents might express reluctance to participate in the survey.

Finally, interviewers split into dyads to practice administering the questionnaire. Within each dyad, one trainee performed the role of the interviewer while the other acted as the respondent. Interviewers were monitored by the trainers, and problems related to administering the questionnaire were discussed at the end of the session.

Several weeks into the data collection, the interviewing team was reconvened for a special training session on how to respond to reluctance. The training session followed the format of a focus group, with Gallup project staff asking the interviewers to provide feedback on the types of reluctance they had heard so far. Once a complete list was generated, the interviewers were asked to brainstorm the best methods for responding to each type of reluctance. Data collection began for the 1999 survey on July 14, 1999 and lasted approximately 12 weeks.

While most of the interviewers who worked on the 1999 survey also returned to work on the 2000 survey, some additional interviewers needed to be trained for that survey. All interviewers, regardless of whether they had worked on the earlier survey or not, were asked to attend a two-hour training session. In addition to the methods described above, interviewers who had worked on the 1999 survey were asked to lend their experiences to help train those who had not. Data collection for the 2000 survey began on April 7, 2000 and lasted approximately thirteen weeks.

For the parallel study of Puerto Rico, a team of seven Spanish-speaking interviewers was trained by Gallup project staff prior to beginning data collection. The team was taken through the same training procedures as the English-speaking team for the 1999 survey. Puerto Rico data collection began on May 16, 2000 and lasted approximately eight weeks.

1.4 Response Rate Enhancements

In order to maximize the response rate achieved on these surveys several techniques were implemented that the survey literature suggests can increase response rates (Brick et al; 1997).

Prenotification by first class letter: A reverse directory look-up was performed on all sample telephone numbers in the U.S. to try to locate an address for the household. Addresses were located for roughly 33 percent of the sample in 1999 and 42 percent in 2000, when a manual look-up was used to supplement the automated search. If an address was found, a prenotification letter signed by the director of the Census Bureau was mailed out on

July 12, 1999 and on March 31, 2000. Both letters informed the household that a Gallup interviewer would be calling. Because of interviewer workload issues, portions of the 2000 sample were not worked immediately following the mailing of the prenotification letter. To counter the possible effects of a respondent not recalling the letter that was mailed, a second advance letter was sent on May 15, 2000 to sample numbers that had not been contacted as of that date. Because no reliable reverse directories exist in Puerto Rico, address look-ups could not be performed there, and no advance letter could be sent.

- Answering machine message at first attempt: Leaving a message at the first contact only has been found to be effective, relative to not leaving any message at all. Leaving a message seems to serve the purpose of separating the call from telemarketers. Leaving longer messages may even substitute for the prenotification letter. Interviewers were asked to leave an answering machine message on the first attempt on a number. Interviewers left the following message: "Hello, this is (FIRST NAME) calling from The Gallup Organization. We are conducting a study for the U.S. Census Bureau to find out your opinions on whether government agencies keep information about people private. I will call back again so we can get your help in this important research. Thank you."
- *Modify introduction*: Since most reluctant respondents refuse within the first 2-3 sentences of the introduction, it is important to mention in those sentences anything that is helping to get the respondent to stay on the line. This is generally believed to be: 1) the sponsor of the study, 2) the organization conducting the interviews, 3) the topic of the survey, and 4) why the survey is important. The initial survey introduction on this study mentioned 1,2, and 3. More details about the importance of the survey were given if the respondent had not received the prenotification letter.
- *Transition between introduction and enumeration:* Asking respondents to report about the composition of the household, especially at the beginning when rapport is just being developed, can be seen as intrusive. It is useful therefore to place some "buffer" items before the enumeration that are relatively neutral and may be of some interest to the respondent. Questions about participation in government surveys were added before the enumeration to engage the respondent.
- Lengthen the field period: There are several advantages to a longer field period. The main benefit is that it allows for more time to conduct refusal conversion and finalize noncontacts. The 1996 Survey of Privacy Attitudes extended the original six week field period to eleven weeks, increasing the response rate from 58 percent to 64 percent. The 1999 survey had a field period of approximately twelve weeks to allow ample time to work the sample. The 2000 survey lasted approximately thirteen weeks, and the Puerto Rico study lasted approximately eight weeks.
- **Targeted priority mailing for refusals**: Since most refusals fall into two or three categories (e.g., "no time," "not interested"), a special letter was developed that emphasized

particular arguments why the respondent should cooperate and sent to respondents via priority mail. Interviewers on this study were asked to record reasons for reluctance, and then a targeted letter was mailed out via priority mail to any case for which an address was available. For the 1999 survey, the letter was mailed on August 18, 1999 and on September 20, 1999. For the 2000 survey, the letter was mailed on May 15, 2000 and June 14, 2000. Letters were not mailed to the Puerto Rico sample, as addresses were not available for that sample.

We were able to convert 62 percent of reluctant respondents who received a letter, compared with 42 percent of those who did not. (Since these respondents differed in other ways, we cannot attribute the difference in conversion only to the letters; nor can we be certain that sending them by priority mail was more effective than an ordinary letter would have been.)

Specialized interviewer training for reluctant respondents: Intense training on how to handle reluctant respondents can result in significant improvement in cooperation rates. Several weeks into data collection in 1999, the interviewers were reconvened for a special training session to focus on dealing with reluctant respondents. The training included both lecture and a set of role-playing activities that emphasized quickly answering respondents' concerns. Only the best interviewers within the team were allowed to recontact refusals for refusal conversion.

1.5 Response Rates

The final outcomes of call attempts to the sampled telephone numbers for the three surveys are listed below. The response rates are calculated by dividing the number of completed interviews by the sum total of interviews, refusals, other nonresponse, and the estimated number of eligibles among the noncontacts.

	1999	2000	Puerto Rico
Sampled numbers Ineligible	4,830	5,936	3,375

Nonresidential	896	1,101	487
Nonworking	983	1,262	1,465
Noncontacts			
No answer	415	502	311
Answering machine	24	6	9
Eligible numbers			
Language problem	50	184	24
Refusal	288	67	114
Other nonresponse	493	836	286
Completes	1681	1978	679
Response rate	61.9%	61.1%	57.9%

1.6 Development of Base Weights

The two fifty-state studies were weighted using slightly different methods. Each is described below.

1.6.1 1999 Survey

Procedure 1

The first weight was simply the number of adults in the household:

$$w_i^1 = S_h$$
.

Procedure 2

To compensate for unreachable households (those with no telephone number) and to adjust for nonresponse, weight one was then adjusted to a set of control totals using raking (Iterative Proportional Fitting.) The adjustment was done using four classification variables derived from interviews, sex, race, education, and age, and one from the sample frame, census region. The control totals were derived from the *Current Population Survey (CPS) March 1999 (Total U.S. Noninstitutionalized Civilians 18+.)* All missing values of these variables were imputed for weighting purposes.

The second weight is therefore the base weight multiplied by the adjustment factor obtained from the raking procedure:

$$w_i^2 = F_i^{PS} w_i^1$$

Procedure 3

The third weight is a normalized version of the second weight, where each weight was divided by the mean of all the weights, that is:

$$w_{i}^{3} = \frac{w_{i}^{2}}{\sum_{i=1}^{n} \frac{w_{i}^{2}}{n}},$$

where n is the sample size.

1.6.2 2000 Survey

The weights for the 2000 study were calculated in a very similar fashion to the 1999 weights. However, in 2000, respondents were also asked how many residential telephone numbers their household had. The first weight was adjusted to account for the number of residential telephone numbers in the household, yielding:

$$w_i^1 = \frac{S_h}{T_h},$$

where T_h is the number of residential telephone numbers in the household. Households with more than one telephone number have a greater probability of selection into the sample and were adjusted accordingly. For cases where the number of residential telephone numbers was not determined, it was assumed that $T_h = 1$.

1.6.3 Puerto Rico

For the Puerto Rico study the weights were constructed very similarly to the weights for the 2000 study.

• Procedure 1

For the first weight, the base weight was simply the number of residential telephone numbers in the household, divided by the number of adults:

$$w_i^1 = \frac{S_h}{T_h},$$

where T_h is the number of residential telephone numbers for the household, and S_h is the number of adults. For cases where the number of residential telephone numbers was not determined, it was assumed that $T_h = 1$.

Procedure 2

For the second weight, the base weight was w^I . This base weight was then adjusted for nonresponse by raking it to a set of control totals. There were two variables used, the Metropolitan Statistical Area (MSA) code, which had seven possible values, and a combined sex by age variable, which had 2 x 14 = 28 possible values. The control totals were taken from two sources. The MSA telephone population was estimated by multiplying MSA telephone household figures from SSI by the ratio of total Puerto Rico population to telephone households. Total Puerto Rico population and the sex by age control totals were taken from the 2000 U.S. Bureau of the Census International Data Base, Table 094 (Midyear Population, by Age and Sex.)

The second weight is the base weight multiplied by the adjustment factor calculated from the raking procedure:

$$w_i^2 = F_i^{PS} w_i^1$$

Procedure 3

The third weight is a normalized version of the second weight, where each weight was divided by the mean of all the weights, that is:

$$w_{i}^{3} = \frac{w_{i}^{2}}{\sum_{i=1}^{n} \frac{w_{i}^{2}}{n}},$$

where n is the sample size.

1.7 Analysis of Random vs. Nonrandom Portions of the 1999 Sample

After completion of the field period for the 1999 survey, it was discovered that 239 households, all of whom had refused initially, had been interviewed without a proper screening

procedure having been implemented because of a programming error which simply brought up the first interviewing screen. As a result, these 239 were essentially a "convenience" sample, with the interviewer talking to anyone who happened to answer the telephone and was willing to do the interview. Gallup interviewers subsequently called the household back and retrieved household size for all but 29 of the 239 interviews, but because the specified field period had elapsed, they did not attempt to interview a randomly selected respondent.

The nonrandom portion of the sample was grossly unrepresentative with respect to gender; even after poststratification to CPS distributions, it consisted of 57 percent women and 43 percent men. However, none of the demographic characteristics we measured differed significantly between the two portions of the sample once they were adjusted by poststratification.

A variety of exploratory analyses were performed to see whether the two parts of the sample differed from each other in their responses to key questions. Responses to 31 questions were examined--Q. 7a1, 7c1, 7a2, 7c2, 7a3, 7f3, 7a4, 7f4, 9a, 9b, 10, 12, 13, 19, 20, 21, 22a, and 26-34; some of these contain subquestions. Of these, eight--7a1, 9a-b, 21, 26, 29a, 29f, 30, and 33--showed significant differences. With one exception, the same questions differed significantly between the two portions of the sample whether we looked at unweighted or weighted proportions.¹

In general, there was a tendency for the nonrandom portion of the sample to profess greater ignorance in response to some of the questions asked (e.g., fewer had heard about the undercount, and more answered "Don't know" in response to the question about whether other government agencies can get access to census data). At the same time, they also tended to express greater concerns about privacy: they were more likely to say they were "very worried" about privacy, more likely to agree that the government knows "too much" about them, more likely to say they never or almost never trust the government in Washington, and less likely to say they would be willing to give their social security number (SSN) to the Census Bureau to facilitate data sharing.

The problem of how to handle the nonrandom portion of the sample with respect to the time series comparisons created a difficult challenge, since both excluding and including these respondents risked introducing error. We therefore considered whether, although the two portions of the sample differed from each other, the total sample, excluding the nonrandom respondents, would differ from the total sample that included them. For this purpose, we

¹ We also tried shifting nonrandomly selected persons from one-person households to the random portion of the sample, since by definition they could not differ from a respondent selected randomly. The questions showing significant differences did not change, however.

adopted a procedure proposed by Curtin and used in Curtin, Presser, and Singer (2000). The sample, including the nonrandom respondents, was randomly split into two halves in such a way that they would be of equal size after the nonrandomly selected respondents were dropped from one half, and the nonrandom respondents would constitute 14.3 percent of the half-sample, which is their proportion in the sample as a whole.

This exercise revealed that the two independent half samples--that containing the nonrandom respondents, and that excluding them--did not differ significantly on any of the 31 variables. Accordingly, these 239 respondents have been included in the analyses in this report.

2. TRENDS IN RESPONSES, 1995-2000

In contrast to 1995-96, when very few of the measured attitudes showed significant change, such change was apparent in virtually all of the attitudes when the period from 1995-2000 was considered. In part, the statistical significance is due to the doubling of sample size with the addition of two surveys. There are substantive reasons as well, however. First, many questions showed greater changes from 1996 to 1999, when the elapsed time period was three times as long, than between 1995 and 1996. Second, other responses showed dramatic changes between 1999 and 2000, when the "census climate" (a multi-million dollar publicity campaign designed to encourage people to cooperate with the census) came into play. Whether the latter changes will persist in subsequent years is an interesting question that cannot be addressed by the data at hand.

2.1 Knowledge about and Attitudes toward the Decennial Census

Respondents to all the surveys were asked several questions about their attitudes toward the decennial census and the undercount. The first question asked, "How important do you think it is to count the people in the United States?" The distributions for all four years of the survey are shown in Table 2.1. The question clearly shows the effect of the "census climate," with the percentage responding "extremely important" increasing from 34.4 percent to 45.5 percent between 1999 and 2000.²

Table 2.1
Perceived Importance of the Census: By Year

How important do you think it is to count the people in the United States?					
	1995 1996 1999 2000				
	%	%	%	%	
Extremely Important	32.0	30.8	34.4	45.5	
Very Important	40.0	43.6	46.3	40.6	
Somewhat Important	19.8	19.3	15.8	10.5	
Not Too Important	8.2	6.4	3.4	3.4	
N (weighted)	1415	1207	1663	1962	

Source: Question 1.

² All percentages and N's in this report are based on weighted data. When changes between pairs of cells are noted, the statement is based on a test of significance between the two cells. Although most such changes are significant at the 0.05 level, some (notably for cells with small numbers of respondents) are significant at 0.10.

Respondents were also asked how important it was for the Census Bureau to ask the demographic questions included on the short form (i.e., gender, race, Hispanic origin, age, and marital status in 1995-96, and all except marital status in 1999-2000). There is no clear pattern to the changes shown in Table 2.2, with 77.8 percent regarding these questions as important in 1995, and 77.4 percent doing so in 2000.

Table 2.2
Perceived Importance of Items on the Short Form: By Year

How important do you think it is for the Census Bureau to ask about age, race, sex, Hispanic origin, and marital status?					
	1995	995 1996	1999	2000	
	%	%	%	%	
Very Important	40.2	42.7	42.4	45.1	
Somewhat Important	37.6	36.7	36.5	32.3	
Not Too Important	12.6	12.3	12.6	11.9	
Not Important at All	9.6	8.3	8.5	10.7	
N (weighted)	1407	1197	1659	1953	

Source: 1995, Question 16a and 16b (combined); 1996, Questions 17a and 17b (combined); 1999/2000, Questions 17a and 17b (combined). In 1999/2000, Hispanic origin and marital status were not asked about.

Several questions were designed to measure awareness of the census. One question informed respondents that the census was "used to decide how many representatives each state has in Congress" as well as "how much money communities get from the government," and then asked whether they had heard of either of these uses. The results, shown in Table 2.3, show a small significant increase from 1995 to 1996 and then a very large increase, from 51.7 percent to 70.6 percent, between 1999 and 2000.

Table 2.3
Awareness of Census Uses: By Year

[The census] is used to decide how many representatives each state has in Congress... [and] how much money communities get from the government. Have you heard about either of these uses of the census?

	1995	1996	1999	2000
	%	%	%	%
Yes	46.7	51.0	51.7	70.6
No	53.3	49.1	48.3	29.4
N (weighted)	1434	1207	1672	1967

Source: 1995, Question 10; 1996-2000, Question 8.

Respondents were also told about the census undercount, and their awareness of this issue was assessed by means of two versions of the question. One version asked whether they had heard about "some communities" being undercounted; the other asked whether they had heard about "big cities and cities with large minority populations" being undercounted. Table 2.4a, which shows the results for "some communities," shows a significant increase from 1995 to 1999, and another significant increase in 2000; Table 2.4b, which shows the results for big cities with minority populations, shows no change for the first three years but a dramatic increase, from 43.8 percent to 56.7 percent, between 1999 and 2000.

Table 2.4a
Awareness of Undercount in "Some Communities": By Year

Have you heard about some communities getting fewer representatives or less money because they were under-counted?						
1995 1996 1999 2000						
	%	%	%	%		
Yes	36.2	37.9	41.2	48.7		
No	63.8	62.1	58.8	51.3		
N (weighted)	765	601	799	967		

Source: 1995, Question 11a; 1996-2000, Question 9a.

Table 2.4b
Awareness of Undercount in "Big Cities": By Year

Have you heard about big cities and cities with large minority populations getting fewer representatives or less money because they were under-counted?

	1995	1996	1999	2000
	%	%	%	%
Yes	44.6	42.5	43.8	56.7
No	55.4	57.5	56.2	43.3
N (weighted)	652	603	869	982

Source: 1995, Question 11b; 1996-2000, Question 9b.

In 1995, and again in 1999 and 2000, respondents were asked about their level of agreement with the statement, "Everyone has an obligation to cooperate with the census." The trend in responses, shown in Table 2.5, clearly shows the influence of Census Bureau publicity between 1999 and 2000, with the percentage of those strongly agreeing with the statement increasing from 50.4 percent to 66.4 percent between 1999 and 2000. In spite of the publicity, however, some eight percent of the population disagree that citizens have an obligation to cooperate with the census.

Table 2.5
Obligation to Cooperate with Census: By Year

Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Everyone has a responsibility to cooperate with the Census?

	1995	1999	2000
	%	%	%
Strongly Agree	53.9	50.4	66.4
Somewhat Agree	37.1	36.5	26.0
Somewhat Disagree	5.5	8.1	4.6
Strongly Disagree	3.4	4.5	3.0
N (weighted)	1426	1666	1969

Source: 1995, Question 27h; 1999-2000, Question 29g.

Finally, Table 2.6 shows the results of asking whether respondents consider the demographic questions asked on the census short form an invasion of privacy. We return to this question in chapter 3, where we examine attitude change specifically between 1999 and 2000, and also consider the impact of exposure to varying kinds of publicity about the census.

Table 2.6
Opinions Toward the Census as an Invasion of Privacy: By Year

Do you feel it is an invasion of your privacy for the Census Bureau to ask your age, race, sex, Hispanic origin, and marital status along with your name and address?						
	1995	1995 1996 1999 2000				
	%	%	%	%		
Yes	23.5	19.0	23.0	20.9		
No	76.5	81.1	77.0	79.1		
N (weighted)	1429	1201	1660	1966		

Source: 1995, Question 15; 1996, Question 16; 1999/2000, Question 16. In 1999/2000, Hispanic origin and marital status were not asked about.

2.2 Beliefs and Attitudes about Confidentiality

It was hypothesized that one important reason for opposing data sharing by other agencies might be the belief that the Census Bureau in turn shared its confidential files with other agencies. The early surveys in this series clearly showed a great deal of both uncertainty and misinformation on the part of the public concerning the Census Bureau's practices with regard to sharing identified information. Accordingly, in both the 1999 and 2000 surveys, we tried to probe the public's understanding by adding several questions to the series.

Two major changes were made. First, if people answered "Don't know" to the question, "Do you think 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?" they were asked, in a follow-up question, to guess. The same was true if they answered "Don't know" to the question asking whether the Census Bureau protects the confidentiality of the information it collects about age, sex and race.³

³ The question about confidentiality was asked for the first time in 1996; hence, trends are shown for three years only.

Second, one third of the sample was asked **both** the question about whether other agencies "can get" identified data, **and** whether the Census Bureau protects the confidentiality of the information it collects. (One third was asked only about confidentiality; the other third, only about other agencies.) In order to balance order effects if they existed, one half of this subsample was asked first about confidentiality and then whether other agencies can get the data, and half the respondents were asked the questions in the reverse order. Then, everyone in this randomly designated third of the sample was asked what "protecting confidentiality" meant to them. Responses to this question were open-ended.

In order to examine trends in answers to the two questions about Census Bureau practices—the one asking whether other agencies can get data identified by name and address, the other asking whether the Census Bureau protects confidentiality—we examined three versions of the 1999-2000 questions. We first looked at those respondents who were asked **only** one question or the other. Second, we looked at those respondents **plus** those who were asked the question **first** in the sequence. Finally, we looked at all respondents who answered the question, regardless of the order in which it was asked. In every case, however, we looked only at respondents who answered the question without being asked to guess at the correct response, since this question was only added in 1999.

Regardless of order, the results were essentially the same as those shown in Tables 2.7 and 2.8, which combine the responses of those who answered only one question and those who answered the question first.⁴ For both questions, there is an increase between 1996 and 2000 in the proportion giving the correct response--from 6.1 percent to 17.3 percent in the case of "can get," and from 12.9 percent to 25.1 percent in the case of confidentiality. For both questions, there is a decline in the percentage responding "Not Sure" between 1996 and 2000, but only in the case of "can get" is there a corresponding decline in the percentage giving the incorrect response (that other agencies can get the data, or that the Census Bureau does not protect the confidentiality of the data it collects).

⁴ The order in which the two questions are asked does affect the percentages giving the correct response to each question, as well as the proportion responding Don't Know. For details, see Tourangeau, Singer, and Presser, 2001.

Table 2.7
Beliefs Regarding Sharing of Census Responses: By Year

Do you think other government 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?

	1995	1996	1999	2000
	%	%	%	%
Other Agencies Can Get Names	50.1	47.1	43.9	42.0
Other Agencies Cannot Get Names	9.2	6.1	12.2	17.3
Not Sure	40.7	46.8	44.0	40.7
N (weighted)	1443	317	830	989

Source: 1995, Question 7; 1996, Question 7 1; 1999-2000, Question 7a1 or 7a3.

Table 2.8
Beliefs Regarding Protection of Confidentiality: By Year

Do you think the Census Bureau does or does not protect the confidentiality of this information, or are you not sure?				
1996 1999 2000				
	%	%	%	
Protects Confidentiality	12.9	22.8	25.1	
Does Not Protect Confidentiality	9.6	11.5	9.4	
Not Sure	77.5	65.7	65.5	
N (weighted)	289	827	975	

Source: 1996, Question 7 3; 1999-2000, Question 7a2 or 7a4.

Depending on the order in which the questions are asked, the percentage of those guessing correctly varies from one fifth to one quarter for respondents asked whether other agencies can get identified data, and between two fifths and one half for those asked whether the Census Bureau preserves confidentiality (data not shown; see Tourangeau, Singer, and Presser, 2001). Although the order in which respondents are asked these questions matters, what is more

striking is the difference between the two questions in those guessing correctly, even though both questions in principle refer to the same phenomenon.

When we asked respondents what "confidentiality" meant to them, the most frequent response by far was that the information would not be sold, shared, or forwarded; other responses referred to information not being released, or information remaining private, confidential, or protected (Table 2.9). The explanation for discrepancies between answers to the two questions, then, may lie in respondent uncertainty about whether sharing identified data with other government agencies (as opposed, for example, to sharing it with agencies or individuals outside the government) "counts" as a breach of confidentiality, but we have no data allowing us to test that hypothesis. (Alternatively, it is possible that respondents interpreted the "can get" question to be a question about the ability of other agencies to collect the kind of information currently being collected by the Census Bureau!)

Table 2.9
Meaning of Confidentiality to Respondent: By Year

The Census Bureau is interested in what people think "protecting confidentiality"means. When I asked you whether or not the Census Bureau protects confidentiality, what did you think I meant by "protecting confidentiality"? (open-ended)

3 (1 /	· · · · · · · · · · · · · · · · · · ·			
	1999	2000		
	%	%		
Information will not be sold / shared / forwarded	48.0	33.6		
Personal information will not be released	18.9	16.3		
Remains confidential / private / protected	16.8	38.5		
Other	9.9	6.7		
D. K.	6.4	5.1		
N (weighted)	527	635		

Source: 1999-2000: Questions 7e1 and 7e2.

After reporting their beliefs about whether or not personal responses to the census are shared, respondents were asked how sure they felt about these beliefs. Tables 2.10 and 2.11 show the responses of those who are certain the Census Bureau shares data, separately for respondents who were asked whether other agencies can get the data and for those asked whether the Census Bureau protects confidentiality.

Table 2.10
Certainty that Census Responses Are Shared: By Year

How sure are you that other government agencies can get people's names and addresses along with their answers to the census: very sure, fairly sure, not too sure, or not sure at all?

·				
	1995	1996	1999	2000
	%	%	%	%
Very Sure	58.3	61.0	57.2	48.4
Fairly Sure	32.6	35.6	33.5	37.1
Not Too Sure	7.0	0.4	8.1	8.3
Not Sure at All	2.1	3.0	1.2	6.2
N (weighted)	723	149	236	272

Source: 1995, Question 7b; 1996, Question 7b (but restricted to respondents who received 7 1); 1999-2000, Question 7d3.

Table 2.11
Certainty that Census Bureau Does Not Protect Confidentiality: By Year

How sure are you that the Census Bureau does not protect the confidentiality of this information: very sure, fairly sure, not very sure, or not sure at all?					
	1996 1999 2000				
	%	%	%		
Very Sure	22.1	25.0	27.0		
Fairly Sure	45.4	46.9	35.5		
Not Too Sure	22.5	21.4	24.4		
Not Sure at All	9.9	6.7	13.2		
N (weighted)	92	56	61		

Source: 1996, Question 7b1; 1999-2000, Question 7d4.

Between 1999 and 2000, there is a significant drop in the proportion of those who are very sure that the Census Bureau shares data with other agencies (Table 2.10). The proportion of those who are certain the Census Bureau does not protect confidentiality shows no significant change during this period, but in every year the proportion of those who are certain that other agencies can get data is greater than the proportion who are certain the Census Bureau does not protect confidentiality.

Tables 2.12 and 2.13 show the responses of those who are very sure that the Census Bureau protects the data. Those who believe other agencies cannot get identified data show a sharp drop in certainty between 1999 and 2000, from 37.6 percent to 23.0 percent (Table 2.12). The change between 1996 and 1999 in the proportion who are very sure that the Census Bureau protects confidentiality is significant, but there is not further change from 1999 to 2000 (Table 2.13).

Table 2.12 Certainty that Census Responses Are Not Shared: By Year

How sure are you that other government agencies cannot get people's names and addresses along with their answers to the census: very sure, fairly sure, not too sure, or not sure at all?

	1995	1999	2000
	%	%	%
Very Sure	34.1	37.6	23.0
Fairly Sure	24.8	21.2	31.4
Not Too Sure	21.4	26.4	23.4
Not Sure at All	19.8	14.8	22.2
N (weighted)	130	74	109

Source: 1995, Question 7a; 1999-2000, Question 7c3.

Table 2.13
Certainty that Census Bureau Protects Confidentiality: By Year

How sure are you that the Census Bureau protects the confidentiality of this information; very sure, fairly sure, not too sure, or not sure at all?					
	1996 1999 2000				
	%	%	%		
	19.5	31.5	30.4		
Fairly Sure	57.3	55.4	60.8		
Not Too Sure	12.0	9.6	5.6		
Not Sure at All	11.2	3.6	2.9		
N (weighted)	186	130	164		

Source: 1996, Question 7a1; 1999-2000, Question 7c4.

Respondents who thought that other agencies could get identified data, or who believed the Census Bureau does not protect confidentiality, were also asked whether they thought this happened only under unusual circumstances or whether it happened routinely. Table 2.14 shows trends in the proportion saying that such sharing with other agencies happens routinely. There is a large increase in the proportion responding that such sharing occurs only in "unusual" situations between 1999 and 2000, and a corresponding drop in the proportion of those responding that it occurs "routinely." In contrast, the change in the proportion responding that the government fails to protect confidentiality only in unusual situations is not significant (Table 2.15). These discrepancies once again suggest that these questions have different meanings for respondents.

Table 2.14
Beliefs Regarding the Frequency of Information Sharing: By Year

Do you think other government agencies get people's names and addresses along with their answers to the census only in unusual situations, or does this happen routinely?

1995
1996
1999
2000
%
%

Unusual Situations 20.3 19.0 22.3 34.4 68.2 Routinely 69.1 72.8 58.3 Don't Know 11.5 12.0 4.9 7.3 N (weighted) 722 373 237 272

Source: 1995-1996, Question 7c; 1999-2000, Question 7e3.

Note: When "don't know" is given as an explicit response option, or when "don't know" responses total more than 10 percent, the distribution of such responses is shown in the tables.

Table 2.15
Beliefs Regarding the Frequency of Failing to Protect Confidentiality: By Year

Do you think the Census Bureau does not protect the confidentiality of this information only in unusual situations, or does this happen routinely?						
	1996 1999 2000					
	% % %					
Unusual Situations	23.0	25.0	26.6			
Routinely	69.4 68.1 66.0					
Don't Know 7.6 6.9 7.5						
N (weighted)	94	58	61			

Source: 1996, Question 7c1; 1999-2000, Question 7e4.

Finally, respondents were asked how much it would bother them if their individual responses were shared with other agencies, or if the Census Bureau did not keep data confidential. Responses are shown in Tables 2.16 and 2.17. Both questions show a significant increase between 1996 and 1999 in the proportion saying they would be bothered "a lot." Thus, while there was some change in cognition about Census Bureau practices with respect to confidentiality during these years, there was also a marked increase in public concern about this issue.

31

Table 2.16
How Bothered If Census Responses Were Shared: By Year

How much would it bother you if another government agency, outside the Census Bureau, got your name and address along with your answers to the census? Would it bother you a lot, some, a little, or not at all?

	1995	1996	1999	2000
	%	%	%	%
A Lot	36.8	38.7	45.4	45.6
Some	21.9	23.4	23.9	20.1
A Little	9.8	11.1	9.6	12.5
Not at All	31.6	26.9	21.2	21.8
N (weighted)	1367	587	548	634

Source: 1995-1996, Question 7d; 1999-2000, Question 7f3.

Table 2.17
How Bothered If Census Bureau Did Not Protect Confidentiality: By Year

How much would it bother you if your answers to the census were not kept confidential? Would it bother you a lot, some, a little, or not at all?							
	1996	1996 1999 2000					
	%	%	%				
A Lot	36.6	46.4	49.6				
Some	18.0	18.6	17.7				
A Little	10.7	12.6	13.0				
Not at All	34.7	22.4	19.7				
N (weighted)	580	547	656				

Source: 1996, Question 7d1; 1999-2000, Question 7f4.

Near the end of the 1996 interview, respondents were asked whether the Census Bureau was forbidden by law from sharing identified data with other agencies, or (in a split-ballot version) whether the Census 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 are shown in Table 2.18, which shows a large increase in the proportion giving the correct response between 1996 and 1999, and a further proportional increase between 1999 and 2000. At the same time, incorrect responses also increased between 1996 and 1999, but this trend was reversed in 2000, perhaps as a result of Census Bureau publicity. Table 2.19, which shows responses to the "required to keep confidential" question, shows 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. This is further evidence that the meaning of the two questions, intended as equivalent, is not the same.

Table 2.18
Is Census Bureau Forbidden By Law from Sharing Information: By Year

As far as you know, is the Census Bureau forbidden by law from giving other government agencies information identified by name or address?						
	1996 1999 2000					
	% % %					
Yes, Forbidden	28.3	43.3	48.9			
No, Not Forbidden 17.1 29.7 19.0						
Don't know 54.6 27.0 32.1						
N (weighted)	579	762	973			

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

Table 2.19
Is Census Bureau Required to Keep Information Confidential: By Year

As far as you know, is the Census Bureau required by law to keep information confidential?							
	1996	1996 1999 2000					
	%	%	%				
Yes, Required	51.1	71.3	76.0				
No, Not Required	11.6	15.7	7.5				
Don't know	37.3	13.0	16.5				
N (weighted)	636	912	1004				

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

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 2.20 shows trends in responses to this question (because responses did not differ depending on which version of the preceding question the respondent received, they have been combined in this table). The small fluctuations in the percentage saying they would trust the Census Bureau are not statistically significant. But, coupled with the increase in 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 2.20
Trust Census Bureau to Keep Information Confidential
(Those Who Know the Law Only): By Year

Do you trust the Census Bureau to keep information confidential?						
	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 24b1.

Near 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, asked, "Do you believe the police and the FBI use the census to keep track of troublemakers?" The percentage of those giving the correct response increased significantly, form 52.1 percent to 63.5 percent, 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 saying Yes declined significantly, from 50.3 percent in 1999 to 42.1 percent 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 percentage agreeing declined from 39.2 percent to 37.3 percent, but this change was not statistically significant.

2.3 Attitudes toward Use of Administrative Records

The Census Bureau had considered using administrative records from other government agencies to help reduce the problem of the undercount in the 2000 census. Consequently, it was very much interested in ascertaining the views of the public on this issue, and especially trends in opinions over time.

2.3.1 Attitudes toward Using Administrative Records to Reduce the Undercount

In order to measure public attitudes, the surveys first informed respondents 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." Only two of the agencies were asked about in all four surveys. Trends in responses to the question about the Social Security Agency (SSA) are shown in Table 2.21; trends in responses to the question about the Internal Revenue Service (IRS) are shown in Table 2.22. The third agency asked about varied from year to year. In 1995 it was the Immigration and Naturalization Service (INS); in 1996, it was the Food Stamp Office (FSO); in 1999 and 2000 it was "agencies providing public housing assistance." Responses to questions about these agencies are shown in Table 2.23.⁵

⁵ Percentages shown average responses over the three orders in which questions were asked. Order of asking affects responses to the third agency asked about, but not those to either the SSA or the IRS. See Tourangeau, Singer, and Presser, 2001.

Table 2.21
Opinions Toward the SSA Sharing Short Form
Information with the Census Bureau: By Year

Would you favor or oppose the Social Security Administration giving the Census Bureau the name, address, age, sex, and race of all the people for whom they have information in their records?

	1995	1996	1999	2000
	%	%	%	%
Favor	76.8	76.1	64.6	65.3
Oppose	23.2	23.9	35.4	34.7
N (weighted)	1371	1159	1643	1925

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

Table 2.22
Opinions Toward the IRS Sharing Short Form
Information with the Census Bureau: By Year

Would you favor or oppose the Internal Revenue Service giving the Census Bureau the name, address, age, sex, and race of all the people for whom they have information in their records?

	1995	1996	1999	2000
	%	%	%	%
Favor	70.5	69.3	54.0	55.2
Oppose	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.

Table 2.23
Opinions Toward Other Agencies Sharing Short Form
Information with the Census Bureau: By Year

	1995	1996	1999	2000
	%	%	%	%
Favor	78.2	75.1	65.5	67.7
Oppose	21.8	25.0	34.5	32.3
N (weighted)	1336	1159	1610	1906

Source: 1995, Question 12a, b, or c, depending on order; 1996-2000, Question 10, 12, or 13, depending on order. In 1995, the agency asked about was the INS; in 1996, the FSO; and in 1999-2000, "agencies providing public housing assistance."

There is a twelve percentage point drop in approval of the SSA sharing data with the Census Bureau between 1995 and 1999; virtually all of this drop occurs between 1996 and 1999, and the level of approval remains constant between 1999 and 2000 (Table 2.21). The same pattern is apparent in Table 2.22, which shows trends in approval of the IRS sharing data, except that the decline in approval between 1996 and 1999 is even greater. Levels of approval for other agencies, which are shown in Table 2.23, parallel those for the SSA.

Table 2.24 shows the percentage approving data sharing by all three of the agencies mentioned. Here we can see a small drop in approval between 1995 and 1996, from 62.6 percent to 58.7 percent and then another decline to 43.8 percent and 44.3 percent in 1999 and 2000, respectively, by which time such sharing of administrative data is approved by only a minority of the population.

Table 2.24
Opinions Toward All Three Agencies Sharing Short Form Information with the Census Bureau: By Year

	1995	1996	1999	2000
	%	%	%	%
Favor All Three	62.6	58.7	43.8	44.3
Oppose At Least One	37.4	41.3	56.2	55.7
N (weighted)	1269	1106	1568	1843

Source: "Yes" to Questions 12a, b, and c in 1995, and to Questions 10, 12, and 13 in 1996-2000. The SSA and the IRS were asked about in all four years, and, in addition, the INS was asked about in 1995, the FSO in 1996, and "agencies providing public housing assistance" in 1999-2000.

A number of other questions on the survey are relevant to the issue of data sharing, and most show similar trends. First, it is clearly of importance to know how strongly beliefs about data sharing are held. For example, if approval has dropped but those opposed don't feel very strongly about this, the change in belief would have less significance than if the beliefs are strongly held. Tables 2.25 and 2.26 show the strength of belief of those who oppose data sharing by the SSA and IRS, respectively. There is no significant change between 1995 and 2000 in the percentage very strongly apposed to data sharing by either the SSA or the IRS.

Table 2.25
Strength of Opposition to Data Sharing by SSA: By Year

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?				
	1995	1996	1999	2000
	%	%	%	%
Very Strongly	58.3	56.6	55.2	52.8
Somewhat Strongly	29.6	36.0	32.5	40.0
Not Too Strongly	8.9	4.9	10.0	5.7
Not Strongly at All	3.2	2.5	2.2	1.5

87

166

217

Source: 1995, Question 12a1, for those opposed to data sharing by SSA; 1996-2000,

101

Question 11, for those opposed to data sharing by SSA.

N (weighted)

Table 2.26
Strength of Opposition to Data Sharing by IRS: By Year

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?						
	1995	1995 1996 1999				
	%	%	%	%		
Very Strongly	57.6	70.8	58.0	63.1		
Somewhat Strongly	26.8	23.1	32.9	31.0		
Not Too Strongly	12.3	5.0	7.3	5.4		
Not Strongly at All	3.3	1.1	1.9	0.5		
N (weighted)	135	114	241	282		

Source: 1995, Question 12a1 for those opposed to data sharing by IRS; 1996-2000,

Question 11 for those opposed to data sharing by IRS.

Strength of favoring data sharing by the SSA, shown in Table 2.27, shows a significant decline between 1995 and 2000 of about ten percentage points in those very strongly in favor of the proposal, offset by a corresponding rise in those favoring it "somewhat strongly." Opinion favoring data sharing by the IRS shows a somewhat different pattern (Table 2.28). The percentage of those very strongly in favor declines by almost 12 percentage points between 1995 and 1999, but then increases, in 2000, from 22.8 percent to 28.5 percent.

Table 2.27
Strength of Favoring Data Sharing by SSA: By Year

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?							
	1995	1995 1996 1999 20					
	%	%	%	%			
Very Strongly	39.5	35.4	28.2	29.1			
Somewhat Strongly	44.6	47.5	55.1	53.2			
Not Too Strongly	13.7	11.9	14.7	12.4			
Not Strongly at All	2.2	5.2	2.1	5.4			
N (weighted)	370	272	356	394			

Source: 1995, Question 12a1 for those favoring data sharing by SSA; 1996-2000, Question 11for those favoring data sharing by SSA.

Table 2.28
Strength of Favoring Data Sharing by IRS: By Year

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?							
	1995 1996 1999 20						
	%	%	%	%			
Very Strongly	34.4	32.0	22.8	28.5			
Somewhat Strongly	51.9	44.9	56.2	54.1			
Not Too Strongly	10.6	17.6	17.6	14.4			
Not Strongly at All	3.0	5.5	3.4	2.9			
N (weighted)	327	280	293	402			

Source: 1995, Question 12a1 for those favoring data sharing by the IRS; 1996-2000, Question 11 for those favoring data sharing by the IRS.

2.3.2 Attitudes toward Using Administrative Records to Replace the Short Form

So far, questions have addressed the use of information from other government agencies to augment information gathered by means of the census short form. We also, however, asked how respondents regarded the possibility of enumerating the population by using only records already in the possession of other government agencies, which would relieve everyone of the necessity for completing and returning a census short form.

Trends in the percentage of those favoring a records-only census are shown in Table 2.29. Support for this proposal declined by approximately seventeen percentage points between 1995 and 2000, and is much lower in every year than the proportion favoring the use of administrative records to reduce or eliminate the undercount.

Table 2.29
Opinions Toward a "Records Only" Census: By Year

Would you favor or oppose the Census Bureau getting everyone's name, address, age, sex, race, [and marital status] from the records of other government agencies, so no one would have to fill out a census form?

	1995	1996	1999	2000
	%	%	%	%
Favor	59.0	54.7	46.5	42.3
Oppose	41.0	45.3	53.5	57.7
N (weighted)	1338	1137	1629	1915

Source: 1995, Question 13; 1996-2000, Question 14.

Respondents who reported that they opposed the exclusive use of records as a way to enumerate the population were subsequently asked if they would favor this procedure if it saved money. The nonsignificant change between 1995 and 1996 was followed by a significant decline between 1996 and 1999 (Table 2.30), with no further change between 1999 and 2000. Those who opposed a records-only census were also asked whether they would favor such a practice if it led to a more accurate count. Under this condition, the percentage favoring the use of records is significantly higher in every year, but the fluctuations from year to year are not significant (Table 2.31).

Table 2.30
Opinions Toward a "Records Only" Census, If It Costs Less: By Year

If counting the population by combining information from different agencies costs less than sending out census forms, would you favor or oppose the Census Bureau getting everyone's name, address, age, sex, race [and marital status] from the records of other government agencies?

	1995	1996	1999	2000
	%	%	%	%
Favor	36.8	38.4	26.6	29.4
Oppose	63.2	61.6	73.4	70.6
N (weighted)	452	406	665	848

Source: 1995, Question 14a; 1996-2000, Question 15a.

Table 2.31
Opinions Toward a "Records Only" Census If It Increases Accuracy: By Year

If getting information from different agencies led to a more accurate count than sending out census forms, would you favor or oppose the Census Bureau getting everyone's name, address, age, sex, race [and marital status] from the records of other government agencies?

	1995	1996	1999	2000
	%	%	%	%
Favor	44.4	48.8	42.6	43.2
Oppose	55.6	51.2	57.4	56.8
N (weighted)	493	449	757	938

Source: Question 15b.

Those who remained opposed to a records-only census even if it were more accurate and cost less were asked about the reason for their opposition in an open-ended question. In 1996, the first time this question was asked, only about 16 percent of the sample continued to oppose a records-only census under these conditions. In 1999, some 23 percent of the sample remained opposed. The most frequent reasons given in 1999 for opposing the use of records to enumerate

the population included concerns about privacy/confidentiality (about 22 percent of those who were opposed); a belief that such a census would not be accurate (about 17 percent of those opposed); and a belief that the information would be shared or sold (about 11 percent of those opposed). About three percent said that giving the information should be voluntary (which is counter to the law governing the decennial census). In 2000, the percentage remaining opposed to a records-only census was 24 percent, and the number citing privacy/confidentiality concerns had increased to 29 percent of those opposed (though the percentage worried that the information would be shared or sold--which is also a privacy/confidentiality concern--had dropped to six percent, so the difference between years may be due to coding rather than to actual opinion change). Those citing lack of accuracy as a reason for their opposition remained fairly constant, at 19 percent. The percentage opposed to a records-only census because of a belief that providing information should be voluntary had doubled in 2000, to six percent, since 1999.⁶

2.3.3 Attitudes toward Record Sharing as a Means of Collecting Long-Form Information

About one sixth of the population receives a longer questionnaire (the so-called long form) during the decennial census, which asks questions about such things as jobs and income in addition to the basic questions needed to enumerate the population. During the 2000 census, the long form became the object of brief but intense negative publicity. Whether as a result of this negative publicity or for other reasons, preliminary reports indicated that differences in response rates between the long and the short form increased from five percent in 1990 to 11 percent in 2000 (Steven A. Holmes, "Defying Forecasts, Census Response Ends Declining Trend," *New York Times*, September 20, 2000").

Since 1995, the Survey of Privacy Attitudes has inquired whether people would be willing to have government agencies share data with the Census Bureau in order to make possible elimination of the census long form. This would reduce respondent burden but, like the use of agency records to collect short-form information, it may also raise public concerns about privacy.

Only about one fifth of the population said they were aware of the existence of the long

⁶ In 1996, 37 percent cited privacy/confidentiality concerns; 20 percent believed a records-only census would be less accurate; 13 percent thought the information might fall into the wrong hands or be misused; and five percent said it should be up to the individual citizen.

⁷This negative publicity peaked during the first week of April. On April 7, the U.S. Senate passed a nonbinding resolution urging that "no American will be prosecuted, fined, or in any wy harassed by the federal government" for not answering certain questions on the form, including one about race (D'Vera Cohn, "Senate Vote Suggests Census Reply Choices," *Washington Post*, April 8, 2000, A02: see also, for example, Haya El Nasser, "Census Shaken by Grumbling," *USA Today*, April 10, 2000, 4A; and D'Vera Cohn, "Census complaints Hit Home," *Washington Post*, May 4, 2000, A09).

form in 1996, down somewhat from 1995, and that figure had declined to some 17 percent in 1999. But by the time of the 2000 survey, which went into the field the week after census forms were delivered to every U.S. household, some 59 percent claimed awareness of the existence of the long form (Table 2.32). However, increased awareness did not translate into increased favorableness to having government agencies such as the IRS share data with the Census Bureau in order to eliminate the need for the long form. The percentage favoring data sharing for this purpose declined from 52.2 percent in 1995 to 42.9 percent in 2000, at an average of about two percentage points per year (Table 2.33); and those who oppose sharing of long-form information feel much more strongly than those who favor it (Tables 2.34 and 2.35). At the individual level, the relationship between awareness of the long form and favorableness to having government agencies share data with the Census Bureau in order to eliminate the long form was significant in only one of the four years (1996), with those more aware significantly more favorable toward sharing.

Table 2.32
Awareness of the Long Form: By Year

Did you know that most households got the short form but that some households were sent a long form?								
	1995 1996 1999 20							
	%	%	%	%				
Yes	28.2	22.1	16.8	59.0				
No	71.8	77.9	83.2	41.0				
N (weighted)	1416	1211	1664	1959				

Source: 1995, Question 17; 1996-2000, Question 18.

Table 2.33
Opinions Toward IRS Sharing Long Form Information with the Census Bureau: By Year

Would you favor or oppose the IRS giving the Census Bureau information on things like people's jobs and income, along with their name and address?

	1995	1996	1999	2000
	%	%	%	%
Favor	52.2	50.8	44.3	42.9
Oppose	47.8	49.2	55.7	57.1
N (weighted)	1365	1178	1645	1924

Source: 1995, Questions 18 and 19; 1996-2000, Questions 19 and 20.

Table 2.34
Strength of Favoring the IRS Sharing Long Form Information with the Census Bureau: By Year

How strongly do you feel about this [favoring the IRS giving the Census Bureau information on things like people's jobs and income, along with their name and address]?

	1995	1996	1999	2000	
	%	0/0	%	%	
Very Strongly	36.8	35.5	23.6	32.9	
Somewhat Strongly	50.1	48.0	58.1	52.6	
Not Too Strongly	11.0	13.9	16.5	13.5	
Not Strongly at All	2.1	2.5	1.9	0.9	
N (weighted)	452	191	255	291	

Source: 1995, Question 18a, if respondent favored in Question 18; 1996-2000, Question 19a, if respondent favored in Question 19.

Table 2.35
Strength of Opposing the IRS Sharing Long Form Information with the Census Bureau: By Year

How strongly do you feel about this [opposing the IRS giving the Census Bureau information on things like people's jobs and income, along with their name and address]?

	1995	1996	1999	2000
	0/0	%	%	%
Very Strongly	64.9	70.3	65.7	65.8
Somewhat Strongly	26.4	26.4	29.3	29.2
Not Too Strongly	7.5	2.8	3.7	3.9
Not Strongly at All	1.2	0.5	1.3	1.0
N (weighted)	425	212 300		383

Source: 1995, Question 18a for those who opposed in Question 18; 1996-2000, Question 19a, if respondent opposed in Question 19.

Table 2.36 compares the level of support for the IRS sharing long form data with the Census Bureau with the level of support reported earlier for sharing short form information. Clearly, the public is more reluctant to permit sharing of sensitive long-form data than it is to permit sharing of the basic information needed to produce a count of the population.

Table 2.36
Percent Favoring IRS Sharing Short Form versus Long Form Information with the Census Bureau: By Year

	1995	1996	1999	2000
	%	%	%	%
Favors IRS sharing short form information with the Census Bureau	70.5	69.3	54.0	55.2
Favors IRS sharing long form information with the Census Bureau	52.2	50.8	44.3	42.9

Source: Tables 2.22 and 2.33.

Table 2.37 examines the relationship between responses to the question whether other agencies can get Census Bureau data identified by name and address, and willingness to have the IRS and public housing agencies share long-form information with the Census Bureau. For this purpose, responses are classified as either favoring data sharing by both agencies, or opposing such sharing by at least one agency. There is essentially no relationship between responses to these questions in 1999, but in 2000, those who answer Don't Know to the question whether other agencies can get responses are significantly more likely to favor data sharing.⁸

Table 2.37
Opinions Toward the Sharing of Long Form Data with the Census Bureau
as a Function of Beliefs Regarding Other Agencies Obtaining Census Responses: By Year

Do you think other government 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?

	C	Can		Cannot		ure/DK
	1999	1999 2000		2000	1999	2000
	%	%	%	%	%	%
Favors both agencies giving the Census Bureau data for long form	35.4	32.4	35.7	31.5	34.0	42.6
Opposes at least one agency giving the Census Bureau data for long form	64.6	67.2	64.8	68.5	66.0	57.4
N (weighted)	351	393	98	167	349	374

Source: Questions 19 and 20 (combined) by questions 7a1 and 7a3.

The relationship between beliefs that the Census Bureau protects the confidentiality of information and willingness to have the IRS share long-form information is shown in Table 2.38. Unlike the previous table, this one shows a strong relationship in 1999 as well as 2000 between beliefs that the Census Bureau protects the confidentiality of the information it collects and willingness to have the IRS and public housing agencies share information with the Census Bureau. Those who believe the Census Bureau does protect data confidentiality are significantly more willing to have other agencies share data with the Census Bureau; the same was true in 1996.

Table 2.38

⁸ In 1996, when the Food Stamp Office was asked about instead of public housing agencies, there was also no relationship between responses to these questions.

Opinions Toward the Sharing of Long Form Data with the Census Bureau as a Function of Beliefs Regarding Census Bureau Protecting Confidentiality: By Year

Do you think the Census Bureau does or does not protect the confidentiality of this [household demographic] information or are you not sure?

	Does		Does Not		Not Sure/DK	
	1999	2000	1999	2000	1999	2000
	%	%	%	%	%	%
Favors both agencies giving the Census Bureau data for long form	49.8	47.5	21.6	25.0	36.5	30.9
Opposes at least one agency giving the Census Bureau data for long form	50.2	52.5	78.4	75.0	63.5	69.1
N (weighted)	182	231	93	89	519	600

Source: Questions 19 and 20 (combined) by questions 7a2 and 7a4.

2.4 Attitudes toward Privacy

Near the end of the interview, respondents were asked questions regarding their general concerns about privacy. For example, respondents were asked how much they agreed or disagreed with the following two statements, "People's rights to privacy are well protected" and "People have lost all control over how personal information about them is used." Some of these questions were asked in all four years; most were asked only in 1995, and then again in 1999 and 2000.

Responses to these questions are summarized in Table 2.39. To save space, only the proportion strongly agreeing with each question is shown in the table. These questions show little consistent change between 1995 and 2000. The proportion saying they were "very worried" about their personal privacy increased significantly between 1995 and 2000. The proportion "agreeing strongly" that the government "knows too much" declined significantly between 1995 and 2000, whereas the proportion "agreeing strongly" that people have lost control over personal information and saying their telephone had ever been tapped increased significantly in those years. The remaining items show no significant change in either direction.

Table 2.39

General Attitudes toward Privacy: By Year

Question ^a	1995	1996	1999	2000
	%	%	%	%
How worried about privacy (very worried)	22.0	-	25.7	25.0
Privacy rights well protected (strongly agree)	13.1	9.3	12.8	13.8
People have lost control over personal information (strongly agree)	40.3	44.2	42.1	44.1
Must regulate computers to protect privacy (strongly agree)	59.6	-	58.7	58.5
Government knows too much about me (strongly agree)	52.5	-	42.7	42.7
Ever victim of privacy invasion? (Yes)	27.3	-	28.6	28.2
Telephone ever tapped? (Yes)	10.0	-	14.3	17.2
N (weighted)	~1430	~1170	~1670	~1970

a The seven questions were the following: "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.26); "Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. People's rights to privacy are well protected"(Q.29c); "Please tell me if you strongly agree ... People have lost all control over how personal information about them is used" (Q.29d); "Please tell me if you strongly agree ... If privacy is to be preserved, the use of computers must be strictly regulated" (Q.29e); "Please tell me if you strongly agree ... The government knows more about me than it needs to" (Q.29f); "Have you personally ever been the victim of what you felt was an invasion of privacy?" (Q.27); and "Do you believe your telephone has ever been tapped--that is, someone has been able to listen in on all your phone calls without your knowing about it?" (Q.28). Question numbers refer to the 1999 and 2000 surveys; questions were asked in the same relative order in 1995 and (if asked) in 1996.

Respondents were also asked to weigh possible gains in efficiency from the use of

administrative records against possible loss of privacy. Specifically, they were asked, "Sharing information between different government agencies saves time and money, but it also means some loss of privacy for the individual. Do you think the benefits of saving time and money outweigh the loss of privacy?" The proportion saying the benefits of saving time and money outweighed possible privacy losses dropped from 44.9 percent in 1996, the first time this question was asked, to 40.0 percent in 1999, remaining unchanged in 2000.

Table 2.40
Views as to the Relative Importance of Saving Time and
Money versus Protecting Privacy: By Year

Sharing information between different agencies of government saves time						
and money, but it also means some loss of privacy for the individual. Do						
you think the benefits	you think the benefits of saving time and money outweigh the loss of					
privacy?						

	1996	1999	2000
	%	%	%
Yes	44.9	40.0	41.1
No	55.1	60.0	58.9
N (weighted)	548	1607	1881

Source: 1996, Question 23a; 1999-2000, Question 25.

2.5 Alienation from Government

Respondents were also asked questions related to their alienation from government. One question asked for respondents' level of agreement with the statement, "People like me don't have any say about what the government does." Another question assessed agreement with the statement, "I don't think public officials care much what people like me think." Answers to these questions are shown in Tables 2.41 and 2.42 for the four years 1995, 1996, 1999, and 2000. Both questions show a significant increase in agreement (either "somewhat" or "strongly") between 1995 and 1996, and then a decline in subsequent years.

⁹ It might be argued that what is lost is not privacy but the confidentiality of information given to one agency and now shared with another.

Table 2.41
Beliefs in Personal Influence on Government Actions: By Year

People like me don't have any say about what the government does.					
	1995 1996 1999 200				
	%	%	%	%	
Strongly Agree	32.0	33.5	30.1	30.7	
Somewhat Agree	27.2	29.4	26.6	24.9	
Somewhat Disagree	24.4	25.3	22.6	24.5	
Strongly Disagree	16.4	11.8	20.7	19.9	
N (weighted)	1407	1202	1645	1948	

Source: 1995, Question 27f; 1996, Question 24a; 1999-2000, Question 29a.

Table 2.42
Beliefs Regarding the Concern Government has for Citizens' Views: By Year

I don't think public officials care much what people like me think.						
	1995	1995 1996 1999 2000				
	%	%	%	%		
Strongly Agree	33.5	35.9	33.6	35.0		
Somewhat Agree	31.9	35.2	33.8	31.1		
Somewhat Disagree	23.3	20.8	21.5	21.4		
Strongly Disagree	11.2	8.1	11.0	12.5		
N (weighted)	1416	1206	1652	1943		

Source: 1995, Question 27g; 1996, Question 24b; 1999-2000, Question 29b.

Two other questions, one asked in all four years, the other in 1995 and then again in 1999 and 2000, are relevant to trends in alienation. The first question asked, "How much do you trust the government in Washington to do what is right?" The other asked, "How about the people running the government--would you say you have a great deal of confidence, only some confidence, or hardly any confidence in the people running the government?" Responses to these questions are shown in Tables 2.43 and 2.44. The tables show a small but significant increase in trust and confidence between 1995 and 2000.

Table 2.43
Trust in Government: By Year

How much do you trust the government in Washington to do what is right?				
	1995	1996	1999	2000
	%	%	%	%
Just about Always	3.5	3.3	5.0	6.2
Most of the Time	21.0	18.0	24.0	24.0
Some of the Time	56.5	53.8	52.3	48.7
Almost Never	19.0	25.0	18.6	21.0
N (weighted)	1425	1205	1666	1970

Source: 1995, Question 29; 1996, Question 25; 1999-2000, Question 30.

Table 2.44
Confidence in People Running the Government: By Year

How about the people running the government - would you say you have a						
great deal of confidence, only some confidence, or hardly any						
confidence at all in the people running the government?						

	1995	1999	2000
	%	%	%
A Great Deal	5.2	8.2	8.6
Only Some	63.9	69.6	65.9
Hardly Any	31.0	22.2	25.5
N (weighted)	1418	1656	1960

Source: 1995, Question 28; 1999-2000, Question 31.

2.6 Willingness to Provide Social Security Number

Table 2.45 shows that the percentage of people willing to provide their Social Security number to the Census Bureau to facilitate record sharing declined dramatically between 1996 and 1999, from 68.3 percent to 55.1 percent, remaining unchanged in 2000.

Table 2.45
Willingness to Provide Social Security Number: By Year

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?

	1996 1999		2000	
	%	%	%	
Yes	68.3	55.1	55.9	
No	31.7	44.9	44.1	
N (weighted)	1172	1641	1937	

Source: Question 21.

The decline in willingness is apparent even among those who consider the census important. Whereas in 1996, 76.4 percent of those who considered the census "extremely" important were willing to provide their SSN, this was true of only 65 percent of those in 1999 and 58.2 percent of those in 2000 (Table 2.46). Thus, even though the percentage of those regarding the census as extremely important increased significantly between 1996 and 1999/2000, this increase did not translate into increased willingness to provide one's Social Security number. The relationship between willingness to provide one's SSN and awareness of census uses showed a similar decline over time (Table 2.46).

Table 2.46
Willingness to Provide Social Security Number, by Attitudes toward the Census and Data Sharing: By Year

	Willing to provide SSN		
	1996 1999 200		2000
Attitude toward Census	%	%	%
Believes counting population is extremely important	76.4	65.0	58.2
Is aware of census uses	73.2	61.1	58.2
Would favor SSA giving Census Bureau short form information on people missed in census	76.9	67.1	67.1
Would favor IRS providing Census Bureau with information requested on the long form	81.3	71.4	70.3
Would favor a "records only" census	74.0	60.3	61.9
N (weighted)	~1200	~1600	~1900

Source: Questions 1; 8; 10, 12, or 13 for SSA; 14; 19 or 20 for IRS; 21.

Willingness to provide one's Social Security number declined significantly from 1996 to 1999 among those who favored record sharing, with no further decline apparent in 2000. Thus, even though people who were more aware of census uses, who considered the census extremely important, and who favored data sharing were significantly more willing to provide their SSN to the Census Bureau than their counterparts who were less aware and who did not favor data sharing (data not shown), sentiment for providing one's Social Security number declined significantly among all of these groups between 1996 and 2000.

Table 2.47 shows the relationship between various privacy attitudes and willingness to provide one's Social Security number. Large majorities of those who trust the Census Bureau, who agree that privacy rights are well protected, and who do not regard the items on the short form as an invasion of privacy are willing to provide their SSN to the Census Bureau. But the same large decline in willingness is apparent between 1996 and 1999, even among those who trust the Census Bureau and do not regard the census as an invasion of privacy.

Table 2.47
Willingness to Provide Social Security Number, by Attitudes toward Privacy: By Year

	Willing to provide SSN		
	1996	1999	2000
Attitude toward Privacy	%	%	%
Believes the five items on short form are not invasion of privacy	73.3	61.5	62.5
Trusts Census Bureau not to give out / keep confidential census responses ^a	80.8	62.3	65.2
Would be bothered "a lot" if another agency got their census responses ^b	54.3	43.4	44.3
Agrees privacy rights are well protected	79.7	65.4	65.7
N (weighted)	~1200	~1600	~1900

Source: Questions 16, 22a1, 7d/7d1, 21, and 24c in 1996; Questions 16_2, 24a1, 7f3/7f4, 21, and 29c in 1999-2000.

Table 2.48 shows the relationship over time between demographic characteristics and willingness to provide one's Social Security number to the Census Bureau. Only the three characteristics with significant relationships to willingness in any of the three years are shown in the table. In all three years (1996, 1999, and 2000), women were less willing to provide their SSN than men. Race was significantly related to willingness in two of the three years. Education was significantly associated with willingness in all three years, with the best educated more willing than other groups to provide their Social Security number, just as they are less concerned about privacy generally and more sympathetic to data sharing. However, willingness to provide SSN declined over time among all four educational categories.

^a Weighted N for this question is 449 in 1996, 942 in 1999, and 1182 in 2000.

^b Weighted N for this question is 579 in 1996, 1079 in 1999, and 1265 in 2000.

Table 2.48
Willingness to Provide Social Security Number, by
Demographic Characteristic: By Year

Demographic Characteristic	Willing to provide SSN				
	1996	1999	2000		
	% (N)	% (N)	% (N)		
Gender:					
Women	65.5 (602)	51.4 (850)	52.5 (997)		
Men	71.4 (571)	59.0 (791)	59.5 (939)		
Race:					
White	68.4 (974)	58.1 (1315)	57.2 (1507)		
Black or African American	63.4 (136)	43.1 (208)	46.0 (201)		
Other	76.0 (51)	46.1 (107)	62.9 (134)		
Education:					
Less than High School	71.2 (138)	55.0 (192)	55.0 (230)		
High School Graduate	63.9 (459)	51.6 (628)	50.3 (745)		
Some College	68.7 (315)	51.9 (370)	59.8 (454)		
College Graduate or More	76.8 (247)	62.5 (451)	61.2 (508)		

Source: Questions 2, 4, 21 and D1.

2.7 Summary: Patterns of Change

One of the striking findings of a comparison between the 1995 and 1996 surveys was the absence of significant change in most of the measures directly related to the census and the Census Bureau (Singer, Presser, and Van Hoewyk, 1997). Furthermore, there was no particular pattern to those changes (5 of 22 questions about the Census Bureau were significant at the .10 level) that did occur. At the same time, there were significant changes in attitudes of trust in government, concern about privacy, and feelings of political efficacy, all of which changed significantly in the direction of less trust, less efficacy, and greater concern about privacy in the course of a year.

But, from the perspective of five years, many of the small changes that failed to register as statistically significant over the space of a year turn out to be significant over-time trends, whereas some of what appeared as short-term change appears, in retrospect, to have been merely fluctuation. In this section, several different patterns of attitude change are distinguished.

One distinct pattern of change is apparent with respect to knowledge and awareness of the census, measured by questions that asked how important it was to count the population, whether people had heard of the undercount, whether they were aware of the uses of the census and of the census long form, and how important it was to cooperate with the census. All of these questions show small fluctuations between 1995 and 1999, and then large changes between 1999 and 2000, all in the direction of greater knowledge and awareness. Undoubtedly, this pattern is attributable to what has been referred to as the "census climate"--the huge amount of media attention generated by the census in the decennial year. Other things being equal, these responses can be expected to return to "normal" by the middle of the decade, and to resemble those in 1995.

Another pattern of responses characterizes questions tapping knowledge specifically about Census Bureau confidentiality practices--questions that inquire into knowledge of laws, or beliefs about practices. All of these questions show small but significant trends in the direction of greater accuracy. 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 percent to 17.3 percent between 1999 and 2000, and a decline in incorrect responses to the question whether the Census Bureau is required by law to keep information confidential.

Paralleling this pattern of an increase over time in knowledge about the Census Bureau's confidentiality practices, however, is a significant increase over time in the percentage saying they would be bothered "a lot" if their census data were shared with anyone outside the Census Bureau, as well as a decline in approval of data sharing for all three of the purposes asked about. Expressed willingness to provide one's Social Security number 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. Two of the three questions about possible misuse of census data show a significant decline in distrust between 1999 and 2000. The question asking whether people trust the Census Bureau to keep data confidential (if they correctly perceived that there were laws governing confidentiality) shows no significant change. The question asking whether the census short form is an invasion of privacy shows a small significant decline between 1995 and 2000, but other questions asking about general privacy concerns show little consistent change. Finally, people's trust in "the government in Washington" shows a small, significant

3. CHANGE IN ATTITUDES, 1999-2000

As already noted, the Census Bureau engaged in an extensive outreach campaign, starting in October 1999, to persuade the U.S. population that returning census forms was in their best interests, and that nothing bad would happen to them as a result. However, again as already noted, some negative publicity erupted almost simultaneously with the mailing of the census forms to U.S. households, raising questions about the sensitive nature of some of the information requested on the long form (see note 7, above). In this chapter we examine changes in attitudes that took place between 1999 and 2000 and what effects, if any, both positive and negative publicity had.

3.1 Which Attitudes Changed?

We begin by looking at whether or not some key variables asked in 1999 and 2000 changed significantly during the roughly ten months between surveys. Note that these are cross-sectional changes; we do not have data on individuals, and do not know how the persons surveyed in 1999 might have answered in 2000, or vice versa.

To measure change, we constructed 13 indicators of key attitudes. Five of these indicators combine responses to more than one question; eight consist of responses to single questions, although sometimes responses to alternative versions of a question are combined. In this section, we first describe the particular attitude and its measurement, and then report whether or not the attitude changed significantly between 1999 and 2000, and in what direction, in the absence of any controls.

Knowledge about the census. To measure knowledge about the census, we asked four questions. First, in Q.8, we asked, "The census is used in many different ways. It is used to decide how many representatives each state has in Congress. The census is also used to decide how much money communities get from the government. Have you heard about either of these uses of the census?" If respondents answered Yes to Q. 8, they were asked Q. 8a: "How much would you say you know about how the Census is used--a lot, something, a little, or almost nothing?" Q. 9, administered in split-ballot form, asked, "In the 1990 census about five million people were not counted. Some communities/big cities and cities with large minority populations were more likely to be undercounted than others. As a result, undercounted communities got fewer political representatives and less money from the government than they should. Have you heard about some communities/big cities and cities with large minority populations getting fewer political representatives or less money BECAUSE they were

undercounted?10"

If respondents answered Yes to this question, they were asked 9(1):"How much would you say you know about the census undercount--a lot, something, a little, or almost nothing?" An index running from two to ten was constructed from the responses to these questions, with ten indicating greater knowledge.

The mean score on the Knowledge index was 4.578 (S.D.=2.465) in 1999 and 5.241 (S.D.=2.334) in 2000; t= -8.301, df=3485, p<.001, indicating a highly significant gain in knowledge about census uses between 1999 and 2000.

Importance of the census. This index consists of the sum of responses to Q.1, "Every year the Census Bureau counts the people in the United States. How important do you think it is to count the people in the United States--extremely important, very important, somewhat important, not too important?" and Q. 23, "As I said earlier, some communities/big cities with large minority populations were more likely to be undercounted in the census than others. As a result, undercounted communities get fewer political representatives and less money from the government than they should. Do you think this problem is very serious, somewhat serious, not too serious, or not serious at all?" High scores indicate that the respondent attaches greater importance to the census count.

In 1999, the mean score on this index was 6.317 (S.D.=1.236); in 2000, it was 6.549 (S.D.=1.235); t=- 5.65, df= 3653; p<.001, indicating a small but significant increase in the importance attached to counting the U.S. population.

Concern about privacy. We measured general concern about privacy by combining responses to five questions tapping general (i.e., not specifically census-related) concerns. The 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. (scoring on 29c was reversed).

The mean score on the Privacy Index was 15.130 (S.D.=2.819) in 1999 and 14.918

Response distributions to the two versions of the question diverged somewhat in 2000. In 1999, 41 percent said they had heard about the undercount in "some communities" and 44 percent said they had heard about it "in big cities"; in 2000, the corresponding percentages were 49 percent and 57 percent.

(S.D.=2.944) in 2000; t=2.20; df=3653, p<.05. Thus, general concern about privacy declined slightly but significantly between 1999 and 2000.

Census an invasion of privacy. In addition to the general questions above, we also asked specifically, in Q.16, whether or not respondents considered the questions asked on the census short form an invasion of privacy: "Do you feel it is an invasion of your privacy for the Census Bureau to ask your age, race, and sex along with your name and address?"

In 1999, 23.0 percent of respondents said that they considered the questions an invasion of privacy; in 2000, this response was chosen by 20.9 percent, a difference that was not statistically significant.

Census information misused. Three questions in 1999 and 2000 assessed whether or not people believed census information was misused. Q. 32 asked, "Do you believe the police and the FBI use the census to keep track of troublemakers?" Q. 33 asked, "How about to locate illegal aliens? Do you believe the census is used for that?" Q. 34 asked, "Do you agree or disagree that people's answers to the census can be used against them?" The index of census misuse consisted of the sum of the Yes /Agree answers to these questions.

In 1999, the mean score was 1.365 (S.D.=1.075); in 2000, it was 1.179 (S.D.=1.091); t=5.17, df=3653, p<.001, indicating that people were considerably less likely to think census information would be misused by law enforcement agencies after the census forms were mailed than they had been before the start of the public information campaign in 1999.¹¹

Believe other agencies can get data. Near the beginning of the interview, respondents were asked in alternative ways whether they believed the Census Bureau kept data confidential. A random subsample was asked, in Q. 7a3, "The questions I just asked are on the census form along with the household's address. 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, and race. Do you think other government 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?" Another random subsample was asked this question first, in 7a1, and then asked whether or not the Census Bureau protected the confidentiality of the data. In this analysis, we combine the responses of those who were asked **only** whether other agencies could get the data and those who were asked this question **first**, before the question on protecting confidentiality.

In 1999, 12.2 percent said No to this question; the rest thought the records would be made available, or did not know. By 2000, this percentage had increased to 17.3 percent, a

All three questions showed a decline in agreement between 1999 and 2000, although only the decline in the first two was statistically significant.

significant increase (chi-square=9.30, df=1, p<.01) in those giving the correct response, although these are still a small minority of all respondents.

Believe the Census Bureau protects data confidentiality. A different random subsample of respondents was asked, in Q. 7a4, "The questions I just asked are on the census form along with the household's address. 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, and race. Do you think the Census Bureau does or does not protect the confidentiality of this information, or are you not sure?" Another random subsample was asked this question first, in Q.7a2, and then asked whether they thought other agencies could get identified data. In this analysis, we combine the responses of those who were asked only whether the Census Bureau protects confidentiality, and those who were asked this question first.

The percentage of those who believe the Census Bureau protects the confidentiality of the data rose from 22.8 percent to 25.1 percent between 1999 and 2000, a difference that was not statistically significant (chi-square=1.34, df=1).

Trust census to keep data confidential. Near the end of the interview, respondents were asked, in split-ballot form, whether the Census Bureau was forbidden by law from giving other agencies census information identified by name or address/required by law to keep data confidential (Q. 24a/b). The percentage of those saying the government was forbidden from giving identified information to other agencies increased from 43.3 percent in 1999 to 48.9 percent in 2000; the percentage of those saying the government was required to keep data confidential increased from 71.3 percent in 1999 to 76.0 percent in 2000 (both changes are significant at .001). Those answering each question correctly were then asked, in Q. 24a1/b1, "Do you trust the Census Bureau not to give other government agencies information identified by name and address/to keep the data confidential?" Responses to the two questions were combined for this analysis.

The percentage saying they would trust the Census Bureau declined from 69.3 percent to 67.8 percent between 1999 and 2000, a difference that was not statistically significant (chi-square=0.542, df=1).

Trust government. Trust in the federal government was measured by the sum of responses to two questions. Q. 30 asked, "How much do you trust the government in Washington to do what is right? Just about always, most of the time, some of the time, or almost never?" Q. 31 asked, "How about the people running the government--would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in the people running the government?"

The mean of this index was 3.962 (S.D.=1.148) in 1999 and 3.987 (S.D.=1.197) in 2000; t= -0.657, df=3598, ns. Thus, there was no change in the public's generalized trust in

government during the period of time separating the two surveys.

Willingness to have agencies share data to fix undercount. For this index, we used the answer to Q. 10: "Now I will ask you about a proposal to fix the undercount. It involves using records from a number of government agencies to identify people who are missed in the census. One of the agencies is the Social Security Administration/Internal Revenue Service/Agencies providing public housing assistance. People who have a Social Security record/tax return/public housing agency record could then be counted. Would you favor or oppose giving the Census Bureau the name, address, age, sex [and race] of all the people for whom they have information in their records?" A random third of the sample was asked first about each of the three agencies; subsequent questions probed their attitudes toward the sharing of information by the other two. For this analysis, we used only the information about the first agency asked about; results do not change if we look at the results separately for each agency.

The percentage willing to share data for this purpose in 1999 was 64.0 percent, and in 2000, 64.7 percent, a nonsignificant increase (chi-square=0.170, df=1). Thus, there was no change in willingness to have other agencies share data with the Census Bureau in order to reduce the undercount between 1999 and 2000, although this willingness had declined substantially between 1996 and 1999 (cf. Chapter 2, Tables 21, 22, and 23).

Willingness to have agencies share data to eliminate census. We also asked, in Q. 14, "Another proposal is to do away with census forms entirely. No one would be asked to fill out a form. Instead, the Census Bureau would count the entire population by getting information from other government agencies. Would you favor or oppose the Census Bureau getting everyone's name, address, sex, age, and race from other government agencies, so no one would have to fill out a census form?" By implication, because of the reference to "counting" the population and because of the information that would be obtained, this question referred to elimination of the short census form.

The percentage favoring data sharing in order to eliminate the short census form was 46.5 percent in 1999 and 42.3 percent in 2000, a decline significant at .01 (chi-square=6.22, df=1), continuing a decline that began in 1996 (cf. Chapter 2, Table 2.29).

Willingness to have agencies share data to eliminate the long form. Finally, we asked (Q. 19/20), "Other government agencies such as agencies providing public housing assistance/the IRS 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 the agencies providing public housing assistance/IRS giving the Census Bureau information on things like people's jobs and income, along with their name and address?" In 1999, 49.5 percent expressed a

willingness to have government agencies share data under these conditions; in 2000, 47.5 percent expressed such willingness, a nonsignificant decline (chi-square=1.48; df=1). For this analysis, we used responses to the first agency asked about.

Willingness to give Social Security number. Following the questions about willingness to have agencies share data in order to facilitate the census count, people were asked, in Q. 21, "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?" Thus, the question about SSN was asked specifically in the context of combining information from several government agencies.

The percentage increase from 55.1 percent to 55.9 percent between 1999 and 2000 was not statistically significant (chi-square=0.27, df=1); and both percentages were significantly lower than they had been in 1996, when some 68.3 percent of the sample had indicated willingness to provide their SSN under identical circumstances.

Cooperate. Q. 29 asked respondents to indicate the extent of their agreement or disagreement with the statement, "Everyone has an obligation to cooperate with the census." In 2000, 66 percent agreed strongly that people should cooperate, a significant change from 1999, when only 50 percent endorsed this response option.

Summary of change, 1999-2000. It is clear from the foregoing summary that a number of significant changes in attitudes occurred during the ten months separating the two surveys. People's awareness of the uses to which the census is put increased, as did the importance they attached to it. Although there was no change in the percentage--a fifth of the population--who considered the census an invasion of privacy, there was a significant decline in the belief that census data were likely to be misused, and a significant increase in the percentage of those perceiving, correctly, that other government agencies could not get census data identified by name and address. The percentage of those who knew that the Census Bureau is required by law to protect the confidentiality of the data it collects (or forbidden by law to disclose it) also increased significantly. These changes are, in all likelihood, attributable to publicity about the census commissioned or stimulated by the Census Bureau, since in most cases they reverse or dramatically accelerate trends apparent from 1995 to 1999.

At the same time, a number of related questions showed no significant change between 1999 and 2000, even though the messages disseminated by the Census Bureau might have been expected to have an impact on responses to at least some of them. First, and perhaps most important, there was no significant increase in the percentage of those who said they think the government protects the confidentiality of the data. (Given the other findings cited here, we are inclined to interpret the absence of change in responses to this question as signifying that it tapped an element of trust rather than awareness or knowledge about the law.) Nor was there a significant increase in the percentage of those saying they trust the Census Bureau to keep data

confidential. This question was asked only of those who answered, correctly, that the Census Bureau is required by law to protect the confidentiality of the data it collects (or prevented by law from disclosing it), percentages that did show a significant increase between the two years. Nor was there any change in the generalized trust which people expressed in the federal government.

A series of questions pertaining directly to willingness to have the Census Bureau use data from other agencies to fix the undercount, eliminate the need for a census altogether, or eliminate the need for answering questions on the long form, either showed no change between 1999 and 2000 or, in the case of willingness to have agencies share data to eliminate the census, showed a significant decline. Similarly, willingness to provide one's SSN in order to facilitate such sharing showed no significant change between these two years. It is hard to know how to interpret these findings. A significant decline in willingness to have agencies share data, and to provide one's SSN, had been apparent since 1995 or 1996. The fact that this trend appears to have been halted, if not reversed, between 1999 and 2000 is perhaps attributable indirectly to the impact of the Census Bureau's outreach campaign.

Finally, there does not appear to have been an increase between 1999 and 2000 in concern about either privacy in general or census-related information. An indicator of generalized privacy concerns actually showed a small but significant decline between 1999 and 2000. And responses to Q. 7f3 and 7f4, which asked, "How much would it bother you if another government agency, outside the Census Bureau, got your name and address, along with your answers to the census?" and "How much would it bother you if your answers to the census were not kept confidential?" showed sizable increases in concern from 1995 (or 1996, the first time the question about confidentiality was asked) to 1999, and no significant change thereafter.

3.2 Predictors of Attitudes, 1999-2000

In an attempt to specify more precisely what factors affect attitudes toward the census, toward data sharing, and toward confidentiality, we examined predictors of each of the beliefs or attitudes defined above. For each dependent variable, that is, we investigated the impact of a series of independent predictor variables: Year of survey (1999 or 2000); gender; age (logged); education (5 categories); nonwhite race; Hispanic ethnicity; income; and a variable indicating whether or not income had to be imputed, 12 which we found to have strong correlations with

¹² We also ran these regressions without this variable. Only seven of 91 coefficients changed from "significant" to "nonsignificant," or vice versa. Two of these involve income, which becomes a significant positive predictor of willingness to provide SSN and a significant negative predictor of considering the census an invasion of privacy; three involve age, which becomes nonsignificant with respect to these same two variables but becomes a significant negative predictor of considering the census extremely important; one is the coefficient for nonwhites, which becomes a significant negative predictor of trust in the Census Bureau in the absence of the variable signifying a failure to provide income; and the final one is female, which

confidentiality concerns. In each case, we used logistic or ordinary least-squares regression, as appropriate. When such regression results are reported, the analyses also impute for itemmissing data using the multiple imputation strategy described by Raghunathan and colleagues (in press). We do not examine the impact of one attitudinal variable on another, since all of them were measured simultaneously.

Table 3.1 summarizes the results of thirteen such regression equations. The dependent variables are shown across the top of the table; the predictor variables are shown along the side. Each cell indicates the significance level of a predictor variable with respect to a particular dependent variable (with all of the other predictor variables included simultaneously in the equation), as well as the direction of the effect. Thus, for example, responses in 2000 differ significantly from those in 1999 with respect to knowledge about the census, with respondents in 2000 exhibiting greater knowledge than those in 1999.

With demographic variables included as controls, only five of the year-to-year changes were statistically significant: knowledge about the census and beliefs about its importance; the belief that other agencies cannot get identified census data; the belief that census data can be misused by law enforcement agencies; and willingness to have other agencies share data in order to eliminate the census. The first four variables changed significantly in the direction of greater accuracy between 1999 and 2000; changes in the last indicate less willingness to have administrative agencies share data in order to eliminate the census--which perhaps reflects the success of the Census Bureau's efforts to encourage participation in the (conventionally conducted) 2000 census. One variable that was significant in the absence of demographic controls--the index of general privacy concerns--shows no significant change when demographic variables are added to the equation, but in general the results do not differ from the bivariate results.

becomes a nonsignificant predictor of trust in government.

¹³The imputations were created through a sequence of univariate regressions with the covariates including all other variables observed or imputed for the individual. The type of regression used (i.e., linear versus logistic) depended on the variable to be imputed. The sequence of imputing missing values was continued in a cyclic manner, each time overwriting the previously imputed values to build more interdependence and exploit the correlational structure of the data.

						Tabl	e 3.1						
						Table 3	.1						
		Predic	tors of Att	itudes tow	ard Priv	acy, Co	nfide ntiali	ty, and I	Data Sha	ring (N ~ 36	54)		
	Knowledg	e		Agencies	Census					Share to	Share to	Share to	
Demographic	about	Importance	Trust	Cannot Get		Trust	Invasion	Census	Privacy	Reduce	Eliminate	Eliminate Census	Provide
Characteristic	Census	of Census	Government	Data	Data	Census	of Privacy	Misued	Index	Undercount	Census	Long Form	SSN
Year ^a	***	***	ns	***	ns	ns	ns	***	ns	ns	***	ns	ns
								(-)			(-)		
	ļ												
Female	***	***	*	ns	ns	ns	ns	**	***	***	*	ns	***
	(-) ^b							(-)					(-)
Age (logged)	***	ns	***	*	ns	***	**	ns	***	**	***	***	**
1180 (108804)			(-)		110	(-)	(-)	110		(-)	(-)	(-)	
Education	***	***	ns	***	*	ns	***	***	*	ns	***	**	***
							(-)	(-)	(-)		(-)		
Nonwhite	ns ^c	***	ns	*	***	ns	***	***	***	***	ns	ns	***
				(-)	(-)					(-)			(-)
Hispanic	ns	***	***	***	ns	**	ns	***	ns	ns	ns	*	**
								(-)					
Income	***	ns	ns	ns	ns	***	ns	***	**	*	*	ns	ns
			(p = .11)			(-)		(-)			(-)		
			(-)										
Income Imputed	***	***	***	ns	*	***	***	***	***	***	***	***	***
	(-)	(-)	(-)		(-)	(-)				(-)	(-)	(-)	(-)
p <.10; ** p <.05	*** n < 0	1.											
Only the years 19	•		ed. with 1999 t	he omitted c	ategory								
A minus (-) sign i													

With one exception, a behavioral indicator of privacy concerns-- the need to impute for income--is significantly related, in predictable ways and even in the presence of a series of control variables, to the dependent variables being modeled, which provides good evidence for their validity. And some demographic variables are also related in consistent ways to dependent variables conceptually related to each other. Better educated respondents, for example, know more about the census and consider it more important than those with less education; they have fewer privacy concerns and are less likely to see the census as an invasion of privacy or to believe census information will be misused. They are significantly more likely to believe that other agencies cannot get identified census data and that the Census Bureau protects data confidentiality; they are more willing to have agencies provide data to the Census Bureau to eliminate the long form, and to provide their SSN to make this possible.

The attitudes of nonwhites are also quite consistent. Nonwhites are significantly more concerned about privacy than whites, less likely to believe the Census Bureau protects confidentiality; less likely to be willing to have agencies share data to reduce the undercount, and less willing to provide their SSN. At the same time, they are actually more likely to see the census as important than whites are.

The effect of self-identification as Hispanic has nonsignificant relationships to many variables, but those that are significant tend to resemble those of the better-educated. Interestingly enough, Census Bureau officials were quoted as suggesting that the higher over-all mail response rates in the 2000 census could be attributed to improved performance by Hispanic households (cf. Steven Holmes, *loc. cit.*).

Some effects of gender are nonsignificant, but those that are significant are to some extent inconsistent with one another. Women are less knowledgeable about the census but see it as more important than men do. They are marginally more likely to express trust in government. They are more concerned about privacy in general but less likely to believe that answers to the census will be misused. And though they are significantly more likely than men to favor data sharing under certain circumstances, they are less willing to provide their Social Security number to facilitate this.

The effects of age and income are also somewhat inconsistent across the set of dependent variables examined. Older people are significantly more knowledgeable about census uses, and they also have significantly higher scores than younger people on the general privacy index. They are significantly more likely to believe that other agencies cannot get identified data and less likely to consider the census an invasion of privacy, but they are significantly less likely to trust the Census Bureau to uphold confidentiality laws (and less likely to trust government in general). They are significantly less likely than younger people to agree to any form of data sharing, yet they are significantly more willing to provide their Social Security number to facilitate such sharing.

Like older people, those with higher incomes have significantly higher scores (greater concern) on the privacy index and are significantly less likely than those with lower incomes to trust the Census Bureau to uphold confidentiality laws. Yet they are also significantly less likely than those with lower incomes to think responses to the census will be used against people, and their answers to the data sharing questions are inconsistent (although the latter are significant at the .10 level only).

3.3 The Impact of Media Exposure on Attitudes in 2000

So far, we have considered changes between 1999 and 2000, as well as some of the factors affecting attitudes toward confidentiality, data sharing, privacy, and the census during those years. In this section, we consider the effect on those attitudes of self-reported exposure to positive and negative publicity about the census, controlling for date of interview as well as the same set of demographic predictor variables included in the preceding section. This analysis is limited to the 2000 survey only, since the questions about media exposure were not asked in the preceding year (and there was little, if any, information about the census in the media). Furthermore, because these questions were only added after the survey was in the field, 233 people who were not asked these questions are excluded from the analysis.

Three questions were asked about exposure to information about the census. First, respondents were asked, "Since Census Day, April 1, have you seen or heard anything in the news media about the census?" Those who said they had were then asked, "What have you heard?" Those who said they had heard something and gave answers indicating exposure to encouragement to fill out the form, the importance of accuracy, the importance of being counted, people being missed in the census, response rates, making a difference for the community or government, obligation to return the form, census workers making personal calls, deadlines, or general information or advertisements about the census were coded as having been exposed to positive information about the census. We hypothesized that those exposed to positive information would be more knowledgeable about the census, more likely to consider it important, and more likely to say there was an obligation to cooperate with the census; we did not make predictions concerning exposure to positive publicity and privacy attitudes. Just about half the sample said, in 2000, that they had heard or read something positive about the census.

Following the open-ended question above, respondents were asked, "Since April 1, have you seen or heard anything in the news media about not returning the census long form, or about not answering some of the questions on the long form?" Those who answered Yes to this question, or who answered No, but mentioned privacy or confidentiality issues in answer to the preceding open-ended question, were coded as having been exposed to negative publicity about the census; 41.9 percent said they had heard something negative about the census.

Of course, being exposed to negative publicity did not preclude exposure to positive publicity, or vice versa; on the contrary, we would expect a great deal of overlap between the two. We found that 30.4 percent of the sample had been exposed to neither positive nor negative publicity; 19.5 percent, to negative publicity only; 27.7 percent, to positive publicity only; and 22.3 percent, to both positive and negative publicity.

Before reporting on the effects of exposure, we examine differences on the dependent variables between respondents who were interviewed early in the field period, and so were not asked the questions about exposure, and those who were interviewed later. Gender, education, age, ethnicity, race, and income were included as control variables in each of the equations, along with a variable indicating whether or not income had to be imputed for the respondent.

Respondents interviewed early in the field period differed significantly from those interviewed later on only three variables, with a fourth significant at 0.11. They were significantly more willing to have agencies share data with the Census Bureau in order to eliminate the undercount; they were significantly more willing to give their SSN to facilitate such matching; and they were significantly more likely to report that they had returned their census form. They were also more knowledgeable about the census than respondents interviewed later (p=0.11). The picture is of respondents somewhat more knowledgeable about the census and more cooperative, both with the census itself and (perhaps) with the survey.

Because of these differences between the two groups, it is possible that the analysis that follows understates the effect of positive publicity about the census on people's attitudes and behavior. Nevertheless, as we show below, the effect of such publicity is considerable.

Table 3.2 summarizes the effects of different kinds of self-reported exposure to publicity on the same set of dependent variables described above, relative to no exposure, which is the omitted category. A fourteenth dependent variable, perceived obligation to cooperate with the census, was also included. The set of demographic control variables described above was included in these regressions, as controls, as was the variable indicating whether or not income had to be imputed for the respondent. Also modeled was a variable indicating how many days after the start of the field period the respondent had been interviewed, since we assumed that the effects of publicity might wane as the field period lengthened. For simplicity, the effects of these other variables are not shown.¹⁴

¹⁴Date of interview was significantly related to only four of the dependent variables included in the analysis. With demographic variables controlled, people interviewed later were significantly less knowledgeable about the census and significantly less likely to be willing to have agencies share data in order to eliminate the long form; they were significantly more likely to say other agencies cannot get census data identified by name, and they expressed significantly more trust in government. These differences suggest no consistent pattern for those interviewed earlier vs. those interviewed later.

Table 3.2
Effects of Exposure to Positive and/or Negative
Publicity on Beliefs and Attitudes about the Census

Belief/Attitude	Positive/	Negative	Positiv	e Only	Negativ	e Only
	Beta	(SE)	Beta	(SE)	Beta	(SE)
Knowledge	1.498***	(0.145)	1.025***	(0.138)	0.723***	(0.149)
Importance	0.159*	(0.083)	0.384***	(0.077)	0.084	(0.086)
Privacy Index	0.494**	(0.195)	-0.418**	(0.179)	0.301	(0.201)
Census an Invasion of Privacy	0.294*	(0.168)	-0.235	(0.166)	0.219	(0.172)
Census Misused	-0.157**	(0.073)	-0.194***	(0.067)	-0.038	(0.075)
Census Protects Data	0.526**	(0.235)	0.610***	(0.218)	-0.024	(0.261)
Agencies Cannot Get Data	0.556**	(0.261)	0.261	(0.254)	-0.048	(0.294)
Share Data to Reduce Undercount	-0.082	(0.144)	0.245*	(0.136)	-0.114	(0.148)
Share Data to Eliminate Census	-0.049	(0.143)	0.182	(0.129)	0.116	(0.145)
Share Data to Eliminate Long Form	0.068	(0.140)	0.169	(0.128)	-0.087	(0.144)
Trust Census Bureau	-0.017	(0.159)	0.436***	(0.158)	-0.013	(0.168)
Trust Government	-0.015	(0.083)	0.267***	(0.076)	0.061	(0.086)
Willingness to Provide SSN	-0.279**	(0.141)	0.178	(0.131)	-0.124	(0.145)
Cooperate	0.546***	(0.151)	0.496***	(0.137)	0.167	(0.150)

On nine of fourteen variables, those who reported being exposed to positive publicity only differed significantly from those exposed to no publicity, all in the direction one would predict. They scored significantly higher on the knowledge index and were significantly more likely to consider the census important, to trust the government, to think the Census Bureau protects confidentiality, to trust the Census Bureau to protect confidentiality, and to be willing to have agencies share data with the Census Bureau in order to reduce the undercount; they were also significantly less likely to think that the census is misused and they had lower scores on the privacy index (i.e., they were less concerned about privacy).

They also were significantly more likely to agree strongly that everyone has an obligation to cooperate with the census.

Those who reported exposure to both positive and negative publicity also differed significantly from those who reported no exposure on nine dependent variables. Like those exposed to positive publicity only, they were more knowledgeable, considered the census more important, were more likely to think the Census Bureau protects confidentiality, less likely to think the census is misused, and more likely to agree strongly that everyone has an obligation to cooperate with the census. In addition, they were more likely than those reporting no exposure to believe that other agencies cannot get identified data.

However, unlike those who reported exposure to positive publicity only, those who reported exposure to negative as well as positive publicity were significantly more likely than those who reported no exposure to consider the census an invasion of privacy; they scored significantly higher on the privacy index; and they were significantly less willing to provide their Social Security number.

In order to gain a better understanding of the effects of exposure to positive publicity alone, and of negative publicity alone, on knowledge about and attitudes toward the census, we ran a separate set of regressions in which self-reported exposure to both positive and negative publicity was the omitted category. From this analysis, it is clear that those who report exposure to positive publicity only differ significantly on most variables from those reporting exposure to both positive and negative publicity, whereas those exposed to any negative publicity do not differ very much from those reporting exposure to negative publicity only.

The results are summarized in Table 3.3. Those reporting exposure to positive publicity only are significantly less concerned about privacy, significantly less likely to consider the census an invasion of privacy, consider the census more important, are significantly more willing to have other agencies share data to reduce the undercount, marginally more willing (p = 0.11) to have agencies share data to eliminate the census, significantly more willing to give their SSN, to trust the Census Bureau, and to trust the government, than are those reporting exposure to negative as well as positive publicity. Interestingly enough, they are also significantly less knowledgeable than those reporting exposure to both negative and positive publicity.

Table 3.3

Effects of Exposure to Positive or Negative Publicity
Only, Compared with Exposure to Both Positive and
Negative Publicity, on Beliefs and Attitudes about the Census

Belief /Attitude	Positive Only Beta (SE)	Negative Only Beta (SE)
Knowledge	-0.473*** (0.146)	-0.775*** (0.161)
Importance	0.225*** (0.084)	-0.074 (0.093)
Privacy Index	-0.912*** (0.197)	-0.193 (0.217)
Census an Invasion of Privacy	-0.529*** (0.177)	-0.075 (0.183)
Census Misused	-0.037 (0.074)	0.119 (0.081)
Census Protects Data	0.084 (0.216)	-0.550** (0.258)
Agencies Cannot Get Data	-0.295 (0.259)	-0.604** (0.302)
Share Data to Reduce Undercount	0.327** (0.148)	-0.032 (0.159)
Share Data to Eliminate Census	0.231 (0.143)	0.165 (0.158)
Share Data to Eliminate Long Form	0.102 (0.140)	-0.155 (0.155)
Trust Census Bureau	0.453*** (0.166)	0.004 (0.176)
Trust Government	0.282*** (0.084)	0.076 (0.092)
Willingness to Provide SSN	0.457*** (0.144)	0.155 (0.156)
Cooperate	-0.050 (0.157)	-0.378** (0.168)

Those reporting exposure to negative exposure only, on the other hand, differed on very few variables from those reporting exposure to both kinds of publicity. Like those reporting positive exposure only, they were significantly less knowledgeable about the census. They were also significantly less likely to believe that other agencies cannot get identified data, significantly less likely to believe that the Census Bureau protects data, and significantly less likely to say that everyone has an obligation to cooperate with the census. On these last three variables they do not differ significantly from those reporting no exposure at all.

In sum: those reporting exposure to both positive and negative publicity were more knowledgeable about the census and considered the census more important than those reporting no exposure; they were also more likely to believe that the Census Bureau protects confidentiality and to think that everyone has an obligation to cooperate with the census. But they had significantly more privacy concerns than those reporting no exposure. Those reporting negative exposure only differed very little from those reporting exposure to positive as well as negative publicity, except that they were less likely to believe the Census Bureau's assurances of confidentiality and less likely to endorse an obligation to cooperate with the census. In contrast, those reporting exposure to positive publicity only differed significantly on most variables from those reporting exposure to both positive and negative publicity. They considered the census more important and were more trusting of the Census Bureau's confidentiality assurances, as well as more willing to provide their Social Security number.

The relationships between attitudes and self-reported exposure to publicity are quite clear, and they remain after controls for a series of demographic variables. But, given the nonexperimental design, it is impossible to tell whether publicity has a causal effect on attitudes, or whether, instead, the relationships arise from selective exposure or selective retention

4. ATTITUDES AND BEHAVIOR

So far, we have considered trends in privacy attitudes over time, as well as changes in those attitudes that took place specifically in response to positive as well as negative publicity about Census 2000. Those attitudes are important in their own right, but they are also valuable as potential indicators of behavior in relation to requests by the Census Bureau. Because the Census Bureau matched 1999 and 2000 survey responses to its Master Address File(and subsequently to the Hundred Percent Unedited Census File (HCUF) using the MAF ID), it was possible to examine the relationship between attitudes and behavior, which previous surveys, undertaken in non-census years, were not able to do.

At the conclusion of the interview, all respondents to the 1999 and 2000 (n = 3655) surveys were asked by The Gallup Organization interviewers for their address "in case the Census Bureau wants to do any follow-up research". (If the address had already been obtained prior to the survey, the interviewer merely verified it with the respondent.) In 1999, Gallup obtained 1399 addresses from 1677 respondents, or 83.4 percent; in 2000, they obtained 1682 addresses from 1978 respondents, or 85 percent.

The process of assessing census participation among the survey respondents involved two steps. First, on receiving the survey respondent file (n = 3655) from the University of Michigan and The Gallup Organization, the Geography Division matched addresses against the MAF in order to append the MAF ID number to the respondent file. After discounting survey records having no address information (574) and those with insufficient information (175) for an address match (e.g., those with a ZIP Code only), 2906 records remained eligible for matching. Of these, 2725 were processed as city-style addresses and 181, as rural addresses (where the telephone number also was a match key).

Through city-style address matching processes, the Geography Division matched 2327 addresses to the MAF , and 398 remained unmatched. Of the matched addresses, 1606 were from automated exact matches, 532 from automated equivocated matches, and 189 from a clerical match. Of the rural addresses, 58 were successfully matched and 123 were not. Considering the universe of 2906, the Geography Division successfully matched 2385 records (82 percent) and appended MAF ID's to the respondent file: 521 (18 percent) were not matched.

In the second step, the Planning, Research, and Evaluation Division matched the MAF ID's that were appended to the respondent file (2385) against state-level partitions of the HCUF and provided HCUF variables to the University of Michigan. The Planning, Research, and Evaluation division successfully matched 2182 records. Depending on the universe one uses, this constitutes 75 percent of 2906 or 91 percent of the 2385. There were 203 unmatched records in this step, meaning that the respondent file contained MAF ID's not in the HCUF.

About 90 percent of these unmatched records were not in the Decennial Master Address File

and therefore not in the HCUF.

Thus, the analyses in this section are based on the 2182 of 3655 respondents (59.7 percent) who provided an address that was matched by the Census Bureau. Because this is a very low percentage, ¹⁵ we also consider, later in this chapter, the extent to which respondents who either did not supply an address or whose address could not be matched differ on attitudinal and demographic characteristics from those whose address was successfully matched by the Census Bureau.

4.1 Mail Return Rates among Respondents

All but four respondents in 1999, and all but four in 2000, were designated to return their census form by mail. These eight respondents are excluded from the analyses that follow. Among respondents interviewed in 1999 and designated for mail return, 85.6 percent whose addresses were matched by the Census Bureau returned their census form by mail; in 2000, this percentage was 86.2 percent. This was considerably higher than the rate of 76.1 percent reported in Singer, Mathiowetz, and Couper (1993)--an indication that those who provided their addresses in 1999 and 2000 were generally more cooperative respondents.¹⁶

Of those interviewed in 1999, 16.6 percent received the long form, compared with 19.6 percent of those interviewed in 2000. In both years, the return rate varied according to which form had been received. For those interviewed in 1999, it was 87.1 percent for the short form vs. 78.3 percent for the long form, or a difference of 8.8 percentage points; for those interviewed in 2000, it was 87.8 percent vs. 80.9 percent, or a difference of 6.9

¹⁵ For example, for their analysis of privacy and confidentiality as factors in response to the 1990 census, Singer, Mathiowetz and Couper (1993) used respondents to the Survey of Census Participation, carried out in the summer of 1990 by the National Opinion Research Center (NORC) with a response rate of 89.8 percent. Respondents to this survey had been linked to decennial census information as part of a larger project on survey participation (see Groves and Couper, 1992); 97.6 percent of the addresses were successfully matched at the household level. For details of the match operation, see Couper and Groves (1992). Since the Survey of Census Participation was face-to-face survey, good addresses were available for all or most all respondents.

¹⁶An alternative way of computing a return rate, based on the Census Bureau's Nonresponse Follow-up Universe variable (NRU), yields a slightly lower return rate: 79.9 percent in 1999 and 80.9 percent in 2000. NRU takes into account the date of return, classifying all census forms received after April 19 as non-returns. We have included all returns, regardless of the date, and have even included one CATI and two Be Counted returns in the analyses reported in this section, but we ran all analyses with both dependent variables and comment on differences as appropriate.

percentage points.¹⁷ For all mail returns, preliminary reports indicate a difference of 11 percentage points between the long and the short form (Holmes, *loc cit.*)

4.2 Predictors of Mail Return¹⁸

In order to determine the effect of attitudes on behavior, we estimated a logistic regression equation with probability of return as the dependent variable and form type, six demographic variables, and eleven attitudinal variables as predictors.¹⁹ Another behavioral indicator, refusal or inability to provide income on the survey, was also included as a predictor.

Results are shown in Tables 4.1 and 4.2 separately for 1999 and 2000. The effect of form type is highly significant in both years; with other variables controlled, those receiving the long form were only about half as likely to return the form by mail as those receiving the short form.

Age and education were significant in both years. In the 1999 but not the 2000 sample, women were significantly more likely to return their census form. In the 2000 but not the 1999 sample, nonwhites were significantly less likely to do so, as were respondents from the Northeast.

Contrary to expectation, belief that census data may be misused was a significant *positive* predictor of returning the census form among respondents interviewed in 1999, though the effect is relatively small (odds ratio of 1.17;p<0.10). Willingness to provide one's SSN was also a significant positive predictor in 1999, and failure to provide income, a significant negative predictor.

As we would expect, belief that the census may be misused for law enforcement

¹⁷The differences between long and short forms are larger if the NRU variable is used: 14.6 percent in 1999 and 13.7 percent in 2000.

¹⁸All remaining analyses are based on weighted and imputed data. The chapter in Lane et al. (2002), based in part on these data, uses unweighted data rather than the weighted data shown in tables 4.1-4.4. As a result, the parameter estimates and standard errors vary somewhat from those shown here, as do the significance levels of some of the variables.

¹⁹For a definition of the attitudinal variables, see Section 3.

purposes was a highly significant *negative* predictor of census returns among respondents interviewed in 2000, as was a greater concern about privacy (a higher score on the Privacy Index), though the effect of the latter variable was relatively small (odds ratio of 0.941; p<0.10). Thus, concerns about privacy and about the possibility of the census being misused appear to be predictive of cooperation with the 2000 census, findings that replicate those reported by Singer, Mathiowetz, and Couper in 1993.

Among respondents interviewed in 2000, willingness to have agencies share data in order to eliminate the census was also negatively related to returning the census form. This is consistent with evidence presented in Section 3, which suggests that respondents answer this question in terms of "eliminating the census" rather than willingness to have agencies share data. That is, respondents who were opposed to eliminating the census as traditionally conducted were more likely to return their census form.²⁰

Table 4.1

²⁰These results change slightly when the return variable based on NRU is substituted in the analysis. In 1999, income becomes a significant predictor of return, whereas being female is no longer significant, and *none* of the attitudinal variables are significant. In 2000, income becomes a significant predictor of return, whereas none of the regional variables are significant. Obligation to cooperate, and trust in the government in Washington, become significant predictors of return, whereas the Privacy Index is no longer statistically significant.

Demographic and Attitudinal Predictors of Census Mail Returns, 1999

Variable	Parameter Estimate	Standard Error
Intercept	-1.075	1.395
Form type (long)	- 0.810***	0.221
Female	0.456**	0.193
Age (logged)	0.774***	0.265
Nonwhite	0.237	0.265
Hispanic	0.299	0.351
Income	0.090	0.078
Education	0.216**	0.100
Northeast	- 0.006	0.297
Midwest	0.231	0.284
South	0.314	0.262
Privacy Index	- 0.042	0.038
Invasion of Privacy	0.036	0.275
Knowledge about Census	0.059	0.047
Importance	- 0.025	0.083
Census Misused	0.156*	0.092
Share to Reduce Undercount	- 0.259	0.225
Share to Eliminate Census	0.229	0.199
Share to Eliminate Long Form	0.128	0.204
Willing to Give SSN	0.340*	0.202
Trust Government	- 0.081	0.093
Obligation to Cooperate with Census	- 0.099	0.203
Income Imputed	0.683**	0.347

Table 4.2

Demographic and Attitudinal Predictors of Census Mail Returns, 2000

Variable	Parameter Estimate	Standard Error
Intercept	- 0.769	1.239
Form type (long)	- 0.571***	0.194
Female	- 0.083	0.175
Age (logged)	1.097***	0.237
Nonwhite	- 0.652***	0.205
Hispanic	0.048	0.297
Income	- 0.011	0.070
Education	0.239***	0.087
Northeast	- 0.596**	0.265
Midwest	- 0.135	0.258
South	0.032	0.239
Privacy Index	- 0.061*	0.036
Invasion of Privacy	0.131	0.239
Knowledge about Census	0.007	0.040
Importance	0.001	0.077
Census Misused	- 0.221***	0.081
Share to Reduce Undercount	- 0.250	0.213
Share to Eliminate Census	- 0.361**	0.179
Share to Eliminate Long Form	- 0.110	0.188
Willing to Give SSN	- 0.098	0.194
Trust Government	0.065	0.076
Obligation to Cooperate with Census	0.311	0.195
Income Imputed	- 0.012	0.276

* p=.10 ** p<.05 *** p<.01

4.2.1 The Effect of the Public Relations Campaign on Census Returns

Given the importance placed by the Census Bureau on the public relations campaign to stimulate returns to the 2000 census, we examined the impact of self-reported exposure to positive and negative publicity on mail returns. The analysis was limited to the 2000 sample, and excluded the 233 respondents who had not been asked about self-reported exposure as well as those who could not be matched to the Decennial Master Address File.

We first examined the zero-order relationship (i.e., the relationship without any control variables) between self-reported exposure to positive publicity and census returns. Regardless of whether we defined positive exposure as exposure to positive publicity only, or exposure to both positive and negative publicity, there was no significant relationship to the respondent's likelihood of having returned the census form. (For self-reported exposure to positive publicity only, F = 0.22, df = 1, p = 0.636; for self-reported exposure to positive and negative publicity, F = 0.00, df = 1, p = 0.954.) This was true even when we substituted a measure of return based on the NRU variable (see footnote 16 in Section 4) for that based on the variable showing mail check-in source (i.e. no return, mailback, CATI, Internet, or Be Counted).

A further exploration of the effect of self-reported exposure on returns, based on the four-category definition (i.e., no exposure, positive only, positive and negative, negative only), indicates that those reporting exposure to *negative* publicity only were significantly more likely to return their census form than those reporting no exposure (F=3.57, df=1, p=0.059), whereas those reporting positive exposure only, or positive as well as negative exposure, did not differ significantly from those reporting no exposure. The return rates for the four groups were as follows: No exposure, 80.9 percent; positive only, 83.4 percent; exposure to positive and negative exposure, 88.5 percent; exposure to negative publicity only, 89.9 percent. The significance of this relationship survived the addition of demographic and attitudinal controls.

This finding suggests that respondents who remembered reading or hearing negative publicity about the census were not, as a result, deterred from returning their census form. The relationship between exposure to negative publicity and census returns may be spurious, reflecting the fact that respondents who were more attentive to the media were both more likely to return their census form and to be exposed to negative publicity about the census. Unfortunately, we have no way of testing this hypothesis.

As a final check on the findings concerning the relationship between self-reported exposure and census returns, we decomposed the variance in census returns into four blocks

The model F value was not significant (p=0.249), but when the return rate based on NRU was used, both the model F value and the coefficient for negative exposure were statistically significant; in both cases, p<.05.

of variables: demographic characteristics and form type; positive attitudes toward the Census Bureau and the census (i.e., obligation to cooperate, importance, and knowledge, which we know were affected positively by the public relations campaign); concerns about privacy and confidentiality; and attitudes toward data sharing, entered in that order. Self-reported exposure was not included in this analysis. The significance of the incremental variance explained by each block of variables was assessed by Hosmer and Lemeshow's likelihood ratio R^2 (1989:148), which can be considered an analogue of the measure of variance explained calculated from an ordinary least-squares regression.

For the 1999 sample, the variance explained by demographic characteristics and form type alone was 4.4 percent; none of the other blocks added significantly to this amount. For the 2000 sample, the variance explained by demographic characteristics and form type was 6.6 percent. Positive attitudes added a nonsignificant increment to this amount, but each of the remaining blocks of variables added a significant increment. The total variance explained by all the variables entered was 9.1 percent. ²²

We repeated this analysis for 2000, adding self-reported exposure to positive publicity as the first block of predictor variables after demographics and form type. The incremental variance explained by this block was not significant.

These findings may to some extent understate the impact of the public relations campaign. As already noted, self-reported exposure to positive publicity significantly affected general concerns about privacy, the belief that census data may be misused, trust in the government, and willingness to provide one's Social Security number in addition to the four variables defined as "positive attitudes" above (i.e., the obligation to cooperate with the census, knowledge about census uses, importance attributed to the census, and trust in government; see Table 3.2). ²³ If we attribute all these changes to the public relations campaign, then the total variance in census returns indirectly attributable to the campaign would be somewhat higher than is suggested by the figures above.

4.3 Differences between Matched and Unmatched Respondents

When the return rate calculated from the NRU variable is substituted for that based on MAILS, the 1999 findings do not change but positive attitudes become significant in 2000, adding 0.009 percent to the explained variance (p<.05).

²³ Note that three other variables significantly related to self-reported exposure to positive publicity--the belief that other agencies cannot get census data identified by name and address, trust in the Census Bureau to maintain confidentiality, and the belief that the Census Bureau maintains the confidentiality of the data it collects--cannot be included as predictors of census returns since they were measured for subsamples only.

Tables 4.3 and 4.4 display, for 1999 and 2000, respectively, the characteristics that differentiate those households whose survey responses we were able to match to census information from those for whom no match was made. Among 1999 respondents, only one demographic characteristic significantly predicts a match: Older people were significantly more likely to be matched than younger ones. There were regional variations, as well: Respondents from the Midwest were significantly more likely to be matched than those from the West.

Among respondents in 2000, two demographic characteristics were significant predictors of matchability. Hispanics were significantly less likely to be matched, and those with higher incomes were significantly more likely to be matched. Regional variations were also significant in 2000, with respondents from the Northeast significantly less likely to be matched than those from the West.

In each of the two years, several attitudinal variables significantly differentiated respondents for whom a match could be made from those for whom it could not. In both years, those who considered the census an invasion of privacy and those for whom income had to be imputed were significantly less likely to be matched, and those who were willing to provide their SSN and who approved of using administrative records to reduce the undercount were significantly more likely to be matched. In 1999, those who approved of using administrative records to eliminate the long form were also significantly more likely to be matched, and in 2000, this was true of those who scored higher on trust in government.

This profile of demographic and attitudinal characteristics generally reinforces a perception that respondents providing matchable addresses were less concerned about privacy issues and, perhaps, more favorable toward the Census Bureau than those whose addresses could not be matched. In all likelihood, then, the inability to include some 40 percent of the sample in the analysis of the relationship between attitudes and behavior serves to understate the extent to which concerns about privacy negatively affect willingness to cooperate with the decennial census. Even with the large sample loss, however, the negative impact of privacy concerns and of the perception that census data are misused for law enforcement purposes is clearly significant in 2000, and remains so despite a variety of demographic controls on the relationship.

Demographic and Attitudinal Predictors of Match Between Survey and Census Records, 1999

Variable	Parameter Estimate	Standard Error
Intercept	-1.833**	0.736
Female	0.071	0.107
Age (logged)	0.433***	0.149
Nonwhite	- 0.166	0.137
Hispanic	- 0.133	0.184
Income	0.023	0.044
Education	0.012	0.053
Northeast	- 0.111	0.163
Midwest	0.315**	0.159
South	0.201	0.142
Privacy Index	0.021	0.021
Invasion of Privacy	- 0.597***	0.133
Knowledge about Census	0.003	0.025
Importance	- 0.050	0.046
Census Misused	- 0.075	0.050
Share to Reduce Undercount	0.257**	0.121
Share to Eliminate Census	- 0.061	0.112
Share to Eliminate Long Form	0.345***	0.115
Willing to Give SSN	0.270**	0.115
Trust Government	0.060	0.049
Obligation to Cooperate with Census	0.016	0.114
Income Imputed	- 0.572***	0.147

Table 4.4

Demographic and Attitudinal Predictors of Match Between Survey and Census Records, 2000

Variable	Parameter Estimate	Standard Error
Intercept	0.630	0.715
Female	- 0.154	0.100
Age (logged)	- 0.097	0.139
Nonwhite	- 0.131	0.126
Hispanic	- 0.420 **	0.165
Income	0.113 ***	0.041
Education	- 0.072	0.047
Northeast	- 0.526 ***	0.152
Midwest	0.010	0.152
South	- 0.158	0.134
Privacy Index	- 0.029	0.019
Invasion of Privacy	- 0.226 *	0.127
Knowledge about Census	0.034	0.023
Importance	- 0.011	0.045
Census Misused	- 0.026	0.047
Share to Reduce Undercount	0.429 ***	0.111
Share to Eliminate Census	- 0.019	0.105
Share to Eliminate Long Form	0.117	0.109
Willing to Give SSN	0.254**	0.106
Trust Government	0.074*	0.043
Obligation to Cooperate with Census	0.156	0.113
Income Imputed	- 0.489***	0.132

5. ATTITUDES TOWARD THE CENSUS IN PUERTO RICO

As mentioned in Chapter 1, the Census Bureau commissioned a small telephone survey of Puerto Rico residents in an effort to understand what appeared to be a relatively low mail return rate to Census 2000 there. The survey went into the field several weeks after the main survey, and used the Spanish-language translation prepared for use with Spanish-speaking respondents in the United States. Because there was not enough money for a face-to-face survey, the Puerto Rico sample was interviewed by telephone even though telephone coverage is far lower in Puerto Rico than in the rest of the United States, and therefore certain strata of the population are less well represented. Although we used poststratification adjustment to compensate for this to some extent, it clearly cannot do the whole job, especially when about a third of the population does not own a telephone.

Tables 5.1 through 5.48 show the responses of the Puerto Rico sample alongside those of the U.S. 2000 sample. With five exceptions--Tables 5.11, 5.14, 5.25, 5.26, and 5.31--the distributions differ significantly by chi-square test at the .05 level; and in three of the tables listed above, the distributions differ significantly at the .10 level. Here, we briefly summarize those differences.

5.1 Knowledge about and Attitudes toward the Decennial Census

As can be seen from Tables 5.1-5.7, residents of Puerto Rico consider the census more important; consider it more important to ask the demographic questions, are less likely to see asking about demographic characteristics as an invasion of privacy, and express a stronger obligation to cooperate with the census than the rest of the U.S. population does. This is true in spite of the fact that, not unexpectedly, they are less aware of census uses and of the 1990 undercount.

Perceived Importance of the Census: U.S. and Puerto Rico, 2000

How important do you think it is to count the people in the United States?				
	U.S.	Puerto Rico		
	%	%		
Extremely Important	45.5	49.3		
Very Important	40.6	48.4		
Somewhat Important	10.5	1.6		
Not Too Important	3.4	0.7		
N (weighted)	1962	668		

Source: Question 1.

Note: In all tables in Section 5, "U.S." pertains to all 50 states plus the District of

Columbia.

Table 5.2
Perceived Importance of Items on the Short Form:
U.S. and Puerto Rico, 2000

How important do you think it is for the Census Bureau to ask about age, race, and sex?					
	U.S.	Puerto Rico			
	0/0	%			
Very Important	45.1	81.8			
Somewhat Important	32.3	13.5			
Not Too Important	11.9	3.0			
Not Important at All	10.7	1.7			
N (weighted)	1953	668			

Source: Questions 17a and 17b (combined).

Table 5.3

Opinions Toward the Census as an Invasion of Privacy: U.S. and Puerto Rico, 2000

Do you feel it is an invasion of your privacy for the Census Bureau to ask your age, race, and sex, along with your name and address?

	U.S.	Puerto Rico
	%	%
Yes	20.9	13.4
No	79.1	86.6
N (weighted)	1966	670

Source: Question 16.

Table 5.4
Awareness of Census Uses: U.S. and Puerto Rico, 2000

[The census] is used to decide how many representatives each state has in Congress... [and] how much money communities get from the government. Have you heard about either of these uses of the census?

	U.S.	Puerto Rico
	%	%
Yes	70.6	59.3
No	29.4	40.7
N (weighted)	1967	666

Source: Question 8.

Table 5.5

Awareness of Undercount in "Some Communities": U.S. and Puerto Rico, 2000

Have you heard about some communities getting fewer representatives or less money				
because they were under-counted?				
	II C	Duranta Diaa		

	U.S.	Puerto Rico
	%	%
Yes	48.7	18.5
No	51.3	81.5
N (weighted)	967	319

Source: Question 9a.

Table 5.6
Awareness of Undercount in
"Big Cities": U.S. and Puerto Rico, 2000

Have you heard about big cities and cities with large minority populations getting fewer representatives or less money because they were under-counted?

	U.S.	Puerto Rico
	%	%
Yes	56.7	13.2
No	43.3	86.8
N (weighted)	982	346

Source: Question 9b.

Table 5.7
Obligation to Cooperate with Census: U.S. and Puerto Rico, 2000

Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Everyone has a responsibility to cooperate with the Census.		
	U.S.	Puerto Rico
	%	%
Strongly Agree	66.4	87.1
Somewhat Agree	26.0	9.7
Somewhat Disagree	4.6	1.8
Strongly Disagree	3.0	1.5
N (weighted)	1969	673

Source: Question 29g.

5.2 Beliefs and Attitudes about Confidentiality

Respondents in Puerto Rico are less likely to believe that the Census Bureau shares identified data with other government agencies, and far more likely to believe that the Census Bureau protects data confidentiality, than respondents in the main sample (Tables 5.8-5.9).

On both questions, there is a far lower proportion answering Don't Know among the Puerto Rico sample. Residents of Puerto Rico are less certain that responses are shared, and more certain that the Census Bureau protects confidentiality (Tables 5.10-5.13); they are more likely to believe that the Census Bureau fails to protect confidentiality only in unusual situations (Table 5.15); and they are less likely to say they would be bothered "a lot" or "some" if the Census Bureau shared data or failed to protect confidentiality (Tables 5.16-5.17).

Residents of Puerto Rico are significantly more likely to think the Census Bureau is required by law to keep information confidential, and also significantly more likely to say they would trust the Census Bureau to do so (Table 5.19-5.20). There are no significant differences in the proportions saying the Census Bureau is forbidden from disclosing identified data to other agencies (Table 5.18).

Table 5.8
Beliefs Regarding Sharing of
Census Responses: U.S. and Puerto Rico, 2000

Do you think other government 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?

	U.S.	Puerto Rico
	%	%
Other Agencies Can Get Names	42.0	32.4
Other Agencies Cannot Get Names	17.3	34.4
Not Sure	40.7	33.2
N (weighted)	989	305

Source: Question 7a1 or 7a3.

Table 5.9
Beliefs Regarding Protection of
Confidentiality: U.S. and Puerto Rico, 2000

Do you think the Census Bureau does or does not protect the confidentiality of this information, or are you not sure?

U.S. Puerto Ric

	U.S.	Puerto Rico
	%	%
Census Protects	25.1	65.6
Census Does Not Protect	9.4	2.9
Not Sure	65.5	31.5
N (weighted)	975	349

Source: Question 7a2 or 7a4.

Table 5.10 Certainty that Census Responses Are Shared: U.S. and Puerto Rico, 2000

How sure are you that other government agencies can get people's names and addresses along with their answers to the census: very sure, fairly sure, not too sure or not sure at all?

	U.S.	Puerto Rico
	%	%
Very Sure	48.4	38.1
Fairly Sure	37.1	31.4
Not Too Sure	8.3	27.8
Not Sure at All	6.2	2.8
N (weighted)	272	65

Source: Question 7d3.

Table 5.11
Certainty that Census Bureau Does Not
Protect Confidentiality: U.S. and Puerto Rico, 2000

How sure are you that the Census bureau does not protect the confidentiality of this information: very sure, fairly sure, not very sure or not sure at all?

	U.S.	Puerto Rico
	%	%
Very Sure	27.0	26.8
Fairly Sure	35.5	18.2
Not Too Sure	24.4	44.5
Not Sure at All	13.2	10.5
N (weighted)	61	7

Source: Question 7d4.

Table 5.12 Certainty that Census Responses Are Not Shared: U.S. and Puerto Rico, 2000

How sure are you that other government agencies cannot get people's names and addresses along with their answers to the census: very sure, fairly sure, not too sure or not sure at all?

	U.S.	Puerto Rico
	%	%
Very Sure	23.0	30.9
Fairly Sure	31.4	12.2
Not Too Sure	23.4	39.7
Not Sure at All	22.2	17.1
N (weighted)	109	71

Source: Question 7c3.

Table 5.13
Certainty that Census Bureau Protects
Confidentiality: U.S. and Puerto Rico, 2000

How sure are you that the Census Bureau protects the confidentiality of this information: very sure, fairly sure, not too sure or not sure at all?

	U.S.	Puerto Rico
	%	%
Very Sure	30.4	48.4
Fairly Sure	60.8	47.3
Not Too Sure	5.6	3.7
Not Sure at All	2.9	0.6
N (weighted)	164	166

Source: Question 7c4.

Table 5.14
Beliefs Regarding the Frequency of
Information Sharing: U.S. and Puerto Rico, 2000

Do you think other government agencies get people's names and addresses along with their answers to the census only in unusual situations, or does this happen routinely?

	U.S.	Puerto Rico
	%	%
Unusual Situations	34.4	41.5
Routinely	58.3	44.5
Don't Know	7.3	14.0
N (weighted)	272	67

Source: Question 7e3.

Table 5.15
Beliefs Regarding the Frequency of Failing to
Protect Confidentiality: U.S. and Puerto Rico, 2000

Do you think the Census Bureau does not protect the confidentiality of this information only in unusual situations, or does this happen routinely?

	U.S.	Puerto Rico
	%	%
Unusual Situations	26.6	69.3
Routinely	66.0	18.4
Don't Know	7.5	12.3
N (weighted)	61	8

Source: Question 7e4.

Table 5.16
How Bothered If Census Responses
Were Shared: U.S. and Puerto Rico, 2000

How much would it bother you if another government agency, outside the Census Bureau, got your name and address along with your answers to the census? would it bother you a lot, some, a little or not at all?

	U.S.	Puerto Rico
	%	%
A Lot	45.6	35.0
Some	20.1	16.0
A Little	12.5	16.7
Not at All	21.8	32.3
N (weighted)	634	208

Source: Question 7f3.

Table 5.17
How Bothered If Census Bureau Did Not
Protect Confidentiality: U.S. and Puerto Rico, 2000

How much would it bother you if your answers to the census were not kept confidential? would it bother you a lot, some, a little or not at all?

	U.S.	Puerto Rico
	%	%
A Lot	49.6	45.0
Some	17.7	13.3
A Little	13.0	13.4
Not at All	19.7	28.3
N (weighted)	656	257

Source: Question 7f4.

Table 5.18
Is Census Bureau Forbidden By Law from
Sharing Information: U.S. and Puerto Rico, 2000

As far as you know, is the Census Bureau forbidden by law from giving other government agencies information identified by name or address?

	U.S.	Puerto Rico
	%	%
Yes, Forbidden	48.9	45.6
No, Not Forbidden	19.0	26.7
Don't know	32.1	28.0
N (weighted)	973	351

Source: Question 24a.

Table 5.19
Is Census Bureau Required to Keep Information
Confidential: U.S. and Puerto Rico, 2000

As far as you know, is the Census Bureau required by law to keep information confidential?		
	U.S.	Puerto Rico
	%	%
Yes	76.0	80.5
No	7.5	11.4
Don't know	16.5	8.1
N (weighted)	1004	318

Source: Question 24b.

Table 5.20
Trust Census Bureau to Keep Information Confidential
(Those Who Know the Law Only): U.S. and Puerto Rico, 2000

Do you trust the Census Bureau to keep information confidential?		
	U.S.	Puerto Rico
	%	%
Yes	67.8	86.5
No	32.2	13.5
N (weighted)	1197	397

Source: Question 24a1.

5.3 Attitudes toward the Use of Administrative Records

Just as residents of Puerto Rico appear to have more trusting attitudes toward the maintenance of confidentiality by the Census Bureau, so they are more likely to favor data sharing to reduce the undercount (Tables 5.21-5.24) and to favor a "records only" census (Table 5.29). Those in favor are more likely to be "very strongly" in favor (Tables 5.27 and 5.28), but, at the same time, the smaller number who are opposed are also more likely to be "very strongly" opposed (Table 5.26).

Regardless of their beliefs about Census Bureau practices, residents of Puerto Rico are much more likely to favor having both agencies give data to the Census Bureau than respondents in the main U.S. sample. Table 5.37 seems somewhat puzzling in this regard, for it shows that those who think other agencies can get identified data are most likely to favor such sharing by other agencies. The most likely explanation is that there is a reciprocity norm at work:--i.e., if the Census Bureau shares with other agencies, these agencies should share with the Census Bureau. Table 5.38 indicates that those who believe the Census Bureau maintains data confidentiality are much more likely to be willing to have other agencies share their data with the Census Bureau. In both Tables 5.37 and 5.38, residents of Puerto Rico who express uncertainty are likely to favor data sharing; the U.S. manifests the opposite pattern.

Table 5.21
Opinions Toward the SSA Sharing Short Form
Information with the Census Bureau: U.S. and Puerto Rico, 2000

Would you favor or oppose the Social Security Administration giving the Census Bureau the name, address, age, sex and race of all the people for whom they have information in their records?		
	U.S.	Puerto Rico
	%	%
Favor	65.3	84.9
Oppose	34.7	15.1
N (weighted)	1925	646

Source: Question 10, 12, or 13, depending on order.

Table 5.22
Opinions Toward the IRS Sharing Short Form
Information with the Census Bureau: U.S. and Puerto Rico, 2000

Would you favor or oppose the Internal Revenue Service giving the Census Bureau the name, address, age, sex and race of all the people for whom they have information in their records?		
	U.S.	Puerto Rico
	%	%
Favor	55.2	77.9
Oppose	44.8	22.1
N (weighted)	1925	628

Source: Question 10, 12, or 13, depending on order.

Table 5.23
Opinions Toward Other Agencies Sharing Short Form
Information with the Census Bureau: U.S. and Puerto Rico, 2000

	U.S.	Puerto Rico
	%	%
Favor	67.7	84.9
Oppose	32.3	15.1
N (weighted)	1906	650

Source: Question 10, 12, or 13, depending on order. The agency asked about was "agencies providing public housing assistance."

Table 5.24
Opinions Toward All Three Agencies Sharing Short Form
Information with the Census Bureau: U.S. and Puerto Rico, 2000

	U.S.	Puerto Rico
	%	%
Favor All Three	44.3	69.4
Oppose At Least One	55.7	30.6
N (weighted)	1843	600

Source: "Yes" to Questions 10, 12, and 13. The three agencies were the SSA, the IRS, and agencies providing public housing assistance.

Table 5.25
Strength of Opposition to
Data Sharing by SSA: U.S. and Puerto Rico, 2000

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?

	U.S.	Puerto Rico
	%	%
Very Strongly	52.8	54.8
Somewhat Strongly	40.0	37.2
Not Too Strongly	5.7	2.7
Not Strongly at All	1.5	5.3
N (weighted)	217	19

Source: Question 11for those opposed to data sharing by SSA.

Table 5.26 Strength of Opposition to Data Sharing by IRS: U.S. and Puerto Rico, 2000

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?

	U.S.	Puerto Rico
	%	%
Very Strongly	63.1	78.4
Somewhat Strongly	31.0	12.3
Not Too Strongly	5.4	9.3
Not Strongly at All	0.5	0.0
N (weighted)	282	46

Source: Question 11 for those opposed to data sharing by IRS.

Table 5.27 Strength of Favoring Data Sharing by SSA: U.S. and Puerto Rico, 2000

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?

	U.S.	Puerto Rico
	%	%
Very Strongly	29.1	61.7
Somewhat Strongly	53.2	32.3
Not Too Strongly	12.4	4.8
Not Strongly at All	5.4	1.2
N (weighted)	394	180

Source: Question 11 for those favoring data sharing by SSA.

Table 5.28
Strength of Favoring Data Sharing
by IRS: U.S. and Puerto Rico, 2000

How strongly do you feel about this: very strongly, somewhat strongly, not too strongly, or not strongly at all?

	U.S.	Puerto Rico
	%	%
Very Strongly	28.5	59.9
Somewhat Strongly	54.1	31.9
Not Very Strongly	14.4	6.0
Not at All Strongly	2.9	0.0
N (weighted)	402	156

Source: Question 11 for those favoring data sharing by the IRS.

Table 5.29 Opinions Toward a "Records Only" Census: U.S. and Puerto Rico, 2000

Would you favor or oppose the Census Bureau getting everyone's name, address, age, sex, and race [and marital status] from the records of other government agencies, so no one would have to fill out a census form?

	U.S.	Puerto Rico
	%	%
Favor	42.3	60.1
Oppose	57.7	39.9
N (weighted)	1915	657

Source: Question 14.

Table 5.30 Opinions Toward a "Records Only" Census, If It Costs Less: U.S. and Puerto Rico, 2000

If counting the population by combining information from different agencies costs less than sending out census forms, would you favor or oppose the Census Bureau getting everyone's name, address, age, sex, race [and marital status] from the records of other government agencies?

	U.S. Puerto Rico		
	%	%	
Favor	29.4	41.1	
Oppose	70.6	58.9	
N (weighted)	848	197	

Source: Question 15a.

Table 5.31 Opinions Toward a "Records Only" Census If It Increases Accuracy: U.S. and Puerto Rico, 2000

If getting information from different agencies led to a more accurate count than sending out census forms, would you favor or oppose the Census Bureau getting everyone's name, address, age, sex, race [and marital status] from the records of other government agencies?

	U.S.	Puerto Rico
	%	%
Favor	43.2	50.5
Oppose	56.8	49.5
N (weighted)	938	204

Source: Question 15b.

Just as they are less aware of census uses and of the undercount, so residents of Puerto Rico appear to be less aware of the existence of a long census form (Table 5.32). Nevertheless, they are more likely to favor sharing long-form information (Tables 5.33). Those residents of Puerto Rico who favor the IRS sharing data with the Census Bureau in order to eliminate the long form feel more strongly about this than the remainder of the U.S. population (Table 5.34) but there is no difference in the strength of opposition among those who are opposed (Table 5.35).

Table 5.32 Awareness of the Long Form: U.S. and Puerto Rico, 2000

Did you know that most households got the short form but that some households were sent a long form?							
U.S. Puerto Rico							
	% %						
Yes	59.0	44.9					
No	41.0	55.1					
N (weighted)	1959	670					

Source: Question 18.

Table 5.33
Opinions Toward IRS Sharing Long Form Information with the Census Bureau: U.S. and Puerto Rico, 2000

Would you favor or oppose the IRS giving the Census
Bureau information on things like people's jobs and
income, along with their name and address?

	U.S.	Puerto Rico
	%	%
Favor	42.9	69.4
Oppose	57.1	30.6
N (weighted)	1924	643

Source: Questions 19 and 20.

Table 5.34
Strength of Favoring the IRS Sharing Long Form Information with the Census Bureau: U.S. and Puerto Rico, 2000

How strongly do you feel about this [favoring the IRS giving the Census Bureau information on things like people's jobs and income, along with their name and address]?

	U.S.	Puerto Rico
	%	%
Very Strongly	32.9	61.9
Somewhat Strongly	52.6	29.7
Not Too Strongly	13.5	6.6
Not Strongly at All	0.9	1.8
N (weighted)	291	140

Source: Question 19a, if respondent favored in Question 19.

Table 5.35
Strength of Opposing the IRS Sharing Long Form Information with the Census Bureau: U.S. and Puerto Rico, 2000

How strongly do you feel about this [opposing the IRS giving the Census Bureau information on things like people's jobs and income, along with their name and address]?

	U.S.	Puerto Rico
	%	%
Very Strongly	65.8	62.5
Somewhat Strongly	29.2	25.5
Not Too Strongly	3.9	5.6
Not Strongly at All	1.0	6.5
N (weighted)	383	66

Source: Question 19a, if respondent opposed in Question 19.

Table 5.36
Percent Favoring the IRS Sharing Short Form versus Long Form Information with the Census Bureau: U.S. and Puerto Rico, 2000

	U.S.	Puerto Rico
	%	%
Favors IRS sharing short form information with the Census Bureau	55.2	77.9
Favors IRS sharing long form information with the Census Bureau	42.9	69.4

Source: Tables 22 and 33.

other agencies against attitudes toward having the IRS and agencies with public housing data share long-form data with the Census Bureau.

Regardless of their beliefs about Census Bureau practices, residents of Puerto Rico are much more likely to favor having both agencies give data to the Census Bureau than respondents in the main U.S. sample. Table 5.37 seems somewhat puzzling in this regard, for it shows that those who think other agencies can get identified data are most likely to favor such sharing by other agencies. The most likely explanation is that there is a reciprocity norm at work:--i.e., if the Census Bureau shares with other agencies, these agencies should share with the Census Bureau. Table 5.38 indicates that those who believe the Census Bureau maintains data confidentiality are much more likely to be willing to have other agencies share their data with the Census Bureau. In both Tables 5.37 and 5.38, residents of Puerto Rico who express uncertainty are likely to favor data sharing; the U.S. manifests the opposite pattern.

Table 5.37
Opinions Toward the Sharing of Long Form Data with the Census Bureau as a Function of Beliefs Regarding Other Agencies Obtaining Census Responses:

U.S. and Puerto Rico, 2000

Do you think other government 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?

	Can		Cannot		Not Sure /DK	
	U.S.	Puerto Rico	U.S.	Puerto Rico	U.S.	Puerto Rico
	%	%	%	%	%	%
Favors both agencies giving the Census Bureau data for long form	32.4	71.8	31.5	48.8	42.6	61.3
Opposes at least one agency giving the Census Bureau data for long form	67.2	28.2	68.5	51.2	57.4	38.7
N (weighted)	393	95	167	99	374	94

Source: Questions 19 and 20 by questions 7a1 and 7a3 (combined).

Table 5.38

Opinions Toward the Sharing of Long Form Data with the Census Bureau as a Function of Beliefs Regarding Census Bureau Protecting Confidentiality:

U.S. and Puerto Rico, 2000

Do you think the Census Bureau does or does not protect the confidentiality of this [household	
demographic] information or are you not sure?	

	Does		Does Not		Not Sure/DK	
	U.S. Puerto Rico		U.S.	Puerto Rico	U.S.	Puerto Rico
	%	%	%	%	%	%
Favors both agencies giving the Census Bureau data for long form	47.5	67.0	25.0	39.1	30.9	56.5
Opposes at least one agency giving the Census Bureau data for long form	52.5	33.0	75.0	60.9	69.1	43.5
N (weighted)	231	210	89	10	600	101

Source: Questions 19 and 20 by questions 7a2 and 7a4 (combined).

5.4 Attitudes toward Privacy, Alienation from Government, and Willingness to Provide Social Security Number

In general, the Puerto Rico sample expresses less concern about privacy than the U.S. sample does (Table 5.39). Although they do not feel less alienation from government (Table 5.41-42), they appear to have a great deal more trust in government and more confidence in the people running the government (Tables 5.43-44). Perhaps as a result, they are much more willing to provide their Social Security number to facilitate data sharing (Table 5.45).

This appears to be true even controlling for responses to questions about the census and data sharing and about privacy (Tables 5.46-5.47). And it is true in all demographic categories; hence, small discrepancies in the sample proportions between Puerto Rico and the U.S. cannot account for these differences (Table 5.48).

In sum, attitudes toward the census, and toward privacy and confidentiality, expressed by the Puerto Rico sample do not appear to account for the lower than expected response rate to the 2000 census in Puerto Rico, and it would seem more fruitful to pursue other possible explanations for this phenomenon.

It is of course possible that the attitudes expressed do not truly reflect the attitudes held; or that attitudes are not predictive of behavior in the Puerto Rico sample. We were unable to match the Puerto Rico sample to census address files, and so were unable to carry out the

attitude-behavior analysis for this sample. Finally, as already noted, the telephone population is less representative of the total population in Puerto Rico than in the rest of the U.S., and the attitudes expressed by the sample may not be representative of the attitudes held by the total population.

Table 5.39
General Attitudes toward Privacy: U.S. and Puerto Rico, 2000

Question ^a	U.S.	Puerto Rico
	%	%
How worried about privacy (very worried)	25.1	30.3
Privacy rights well protected (strongly agree)	13.8	43.7
People have lost control over personal information(strongly agree)	44.1	32.9
Must regulate computers to protect privacy (strongly agree)	58.5	69.7
Government knows too much about me (strongly agree)	42.7	42.1
Ever victim of privacy invasion? (Yes)	28.2	8.6
Telephone ever tapped? (Yes)	17.2	14.7
N (weighted)	~1970	~664

The seven questions were the following: "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.26); "Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. People's rights to privacy are well protected" (Q.29c); "Please tell me if you strongly agree . . . People have lost all control over how personal information about them is used" (Q.29d); "Please tell me if you strongly agree . . . If privacy is to be preserved, the use of computers must be strictly regulated" (Q.29e); "Please tell me if you strongly agree . . . The government knows more about me than it needs to" (Q.29f); "Have you personally ever been the victim of what you felt was an invasion of privacy?" (Q.27); and "Do you believe your telephone has ever tapped--that is, someone has been able to listen in on all your telephone without your knowing about it?" (Q.28).

been calls

Table 5.40
Views as to the Relative Importance of Saving Time and
Money versus Protecting Privacy: U.S. and Puerto Rico, 2000

Sharing information between different government agencies saves time and money, but it also means some loss of privacy for the individual. Do you think the benefits of saving time and money outweigh the loss of privacy?

	U.S.	Puerto Rico
	%	%
Yes	41.1	36.1
No	58.9	63.9
N (weighted)	1881	632

Source: Question 25.

Table 5.41
Beliefs in Personal Influence on
Government Actions: U.S. and Puerto Rico, 2000

People like me don't have any say about what the government does.		
	U.S.	Puerto Rico
	%	%
Strongly Agree	30.7	29.4
Somewhat Agree	24.9	17.1
Somewhat Disagree	24.5	15.5
Strongly Disagree	19.9	38.1
N (weighted)	1948	626

Source: Question 29a.

Table 5.42
Beliefs Regarding the Concern Government Has for Citizens' Views: U.S. and Puerto Rico, 2000

I don't think public officials care much what people like me think.			
	U.S.	Puerto Rico	
	%	%	
Strongly Agree	35.0	38.8	
Somewhat Agree	31.1	27.2	
Somewhat Disagree	21.4	18.4	
Strongly Disagree	12.5	15.6	
N (weighted)	1943	643	

Source: Question 29b.

Table 5.43
Trust in Government: U.S. and Puerto Rico, 2000

How much do you trust the government in Washington to do what is right?			
	U.S.	Puerto Rico	
	%	%	
Just about Always	6.2	37.6	
Most of the Time	24.0	35.4	
Some of the Time	48.7	19.5	
Almost Never	21.0	7.5	
N (weighted)	1970	653	

Source: Question 30.

Table 5.44 Confidence in People Running the Government: U.S. and Puerto Rico, 2000

How about the people running the government - would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in the people running the government?

	U.S.	Puerto Rico
	%	%
A Great Deal	8.6	15.7
Only Some	65.9	63.0
Hardly Any	25.5	21.4
N (weighted)	1960	662

Source: Question 31.

Table 5.45
Willingness to Provide
Social Security Number: U.S. and Puerto Rico, 2000

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?

	U.S.	Puerto Rico
	%	%
Yes	55.9	83.7
No	44.1	16.3
N (weighted)	1937	660

Source: Question 21.

Table 5.46
Willingness to Provide Social Security Number, by Attitudes toward the Census and Data Sharing: U.S. and Puerto Rico, 2000

	Willing to provide SSN	
	U.S.	Puerto Rico
Attitude toward Census	%	%
Believes counting population is extremely important	58.2	84.8
Is aware of census uses	58.2	85.6
Would favor SSA giving Census Bureau short form information on people missed in census	67.1	87.2
Would favor IRS providing Census Bureau with information requested on the long form	70.3	90.6
Would favor a "records only" census	61.9	91.1
N (weighted)	~1900	~536

Source: Questions 1; 8; 10, 12, or 13 for SSA; 14; 19/20, and 21.

Willingness to Provide Social Security Number, by Attitudes toward Privacy: U.S. and Puerto Rico, 2000

	Willing to provide SSN	
	U.S.	Puerto Rico
Attitude toward Privacy	%	%
Believes the five items on short form are not invasion of privacy	62.5	74.9
Trusts Census Bureau not to give out / keep confidential census responses ^a	65.2	80.1
Would be bothered "a lot" if another agency got their census responses ^b	44.3	56.9
Agrees privacy rights are well protected	65.7	79.9
N (weighted)	~1900	~807

Source: Questions 16_2, 24a1, 7f3/7f4, 21, and 29c.

^a Weighted N for this question is 1182 in U.S. and 455 in Puerto Rico.

^b Weighted N for this question is 1265 in U.S. and 578 in Puerto Rico.

Willingness to Provide Social Security Number, by Demographic Characteristic: U.S. and Puerto Rico, 2000

Demographic Characteristic	Willing to provide SSN	
	U.S.	Puerto Rico
	% (N)	% (N)
Gender:		
Women	52.5 (997)	84.9 (305)
Men	59.5 (939)	82.6 (355)
Race:		
White	57.2 (1507)	86.7 (418)
Black or African-American	46.0 (201)	77.4 (56)
Other	62.9 (134)	77.4 (129)
Education:		
Less than High School	55.0 (230)	88.7 (156)
High School Graduate	50.3 (745)	82.5 (181)
Some College	59.8 (454)	79.8 (148)
College Graduate or More	61.2 (508)	83.7 (176)

Source: Questions 2,4,21 and D1.

6. CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Analysis of the surveys of privacy attitudes carried out under Census Bureau sponsorship between 1995 and 2000 leads to four major conclusions. For a more detailed summary of findings, please see the Executive Summary and the concluding sections of the several chapters:

- 1. Except in the period surrounding the decennial census, when publicity about the census is at its height, knowledge and beliefs about the Census Bureau and attitudes toward privacy and confidentiality show only small year-to-year changes.
- 2. Knowledge, beliefs, and attitudes are all significantly related to self-reported exposure to both positive and negative publicity about the census. However, we found no direct effect of self-reported exposure on census returns.
- 3. Attitudes about confidentiality and privacy are reliable predictors of behavior. Concerns about confidentiality practices and about privacy predict the respondent's mailing back of the census form in 2000. And in both 1999 and 2000, attitudes toward the census as an invasion of privacy, plus willingness to have other agencies share data with the Census Bureau, predict the respondent's willingness to provide Gallup Organization interviewers with an address permitting match of the survey household with the Census Bureau's Master Address File.
- 4. Approval of data sharing among federal agencies, as well as willingness to provide one's Social Security number to facilitate such sharing, have declined consistently since 1995 to an extent greater than would be expected from the trend in privacy-related attitudes as measured in these studies.

Given these general conclusions, we make the following recommendations for future research in this area by the Census Bureau:

- 1. Continue to monitor trends in knowledge, beliefs, and attitudes, but at less frequent intervals. Conduct the next survey between 2004 and 2006. Such a survey will be useful in documenting to what extent, if any, changes in knowledge and beliefs attributable to the "census climate" of 2000 are sustained during the intervening period. A second survey should be conducted just prior to the next census, and another immediately afterwards; the findings of these surveys can then be compared with the 2000 surveys considered as a baseline.
- 2. Between 2001 and 2005, design, conduct, and analyze small-scale research that develops and then tests more effective ways of communicating the Census Bureau's confidentiality practices to the general public. Such messages should focus on the protections afforded data by the Census Bureau. They should provide enough detail, in everyday language, so that ordinary people can readily understand the concepts and practices involved. They should also make clear the extent to which data are shared with other government agencies, and the

extent to which these agencies provide information to the Census Bureau. If possible, the effectiveness of these messages should be tested in conjunction with the mid-decade survey.

- 3. Conduct qualitative research on impediments to trust in the Census Bureau and in the government more generally, and on ways in which feelings of trust might be enhanced. Such feelings were documented, especially in the 1996 survey, as being predictive of willingness to provide one's Social Security number to facilitate data sharing. Research of this kind may be especially useful among groups, for example African-American respondents, who are less likely to cooperate with the Census Bureau.
- 4. Conduct methodological research that attempts to quantify the impact of nonresponse on the substantive findings reported in the surveys of privacy attitudes. Such research might consider two questions: First, what is the impact of nonresponse to the surveys on estimates of the attitudes reported? Second, what is the impact of inability to match respondents to census records on estimates of the relationship between attitudes and behavior?
- 5. Because attitudes toward privacy and confidentiality account for only a small portion of the variance in census mail returns, design and conduct research to identify and reduce other barriers to response.

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