

This column is the first in a series to explore issues relating to the federal statistical agencies. To suggest or write an article for the series, contact Steve Pierson, ASA director of science policy, at pierson@amstat.org.

On Planning for the 2020 Census

This article is based on a talk given at the 2008 FCSM Statistical Policy Seminar to stimulate thinking about the 2020 Census and provide tentative ideas and a set of preliminary actions that might be taken toward it. In that spirit, the ideas presented below are a brief exploration of these actions.

~Hermann Habermann

The organizers of the 2008 FCSM Statistical Policy Seminar asked if I would share some thoughts about preparing for the decennial census—not the 2010 Census, but the 2020 Census. At present, the attention of Congress, the U.S. Census Bureau, and the user community is properly focused on the 2010 Census. Indeed, it may seem fatuous to devote energy to the 2020 Census when the problems with completing the 2010 Census are upon us. However, I believe now is the time to begin planning for the 2020 Census—in fact we may be late.

For example, in the past, development models for how administrative data and information can be incorporated into the enumeration process have been delayed until it is too late to build, test, and incorporate them. We must start now, if we have any hope of making major changes in the 2020 Census.

In the remainder of my comments, list the areas that need consideration and concrete actions that may be useful. I would like to emphasize that these suggestions should be taken as just that, tentative ideas that should be modified, eliminated, or enhanced.

The activities of the decennial census can be roughly divided into three broad areas:

- administration
- operations
- statistical evaluation

Administration of the decennial census involves the customary areas of management, oversight, coordination, and planning. It also involves keeping track of the activities on a timeline and keeping a budget as close to real-time as possible. The operations areas include engineering procedures and processes of the decennial census. Finally there is statistical evaluation. This area—which includes

topics such as coverage evaluation, development of algorithms to reduce duplicates, and demographic analysis—is used to inform and guide the administration and operations processes.

Attention must be paid from the start to ensure Congress is aware and involved. Even for those steps that could be accomplished by the U.S. Census Bureau, it is crucial that Congress and users are more than just informed and consulted; they must be treated as ends, rather than means. This does not imply that the U.S. Census Bureau should give up its professional responsibilities for the planning and conduct of the decennial census or that the decennial is a ‘joint’ process. It does mean that, in many areas, a consensus must be formed between Congress, the U.S. Census Bureau, and the user community. As consensus building is a difficult and lengthy process, it is essential to begin now.

Areas of Concern and Proposed Actions

Some of the following actions can be proposed and initiated by the U.S. Census Bureau on its own. Others can only be accomplished by others (e.g., Congress), but all should be associated with a significant public process to develop a consensus on the part of government and users to move forward. This public process can be facilitated by existing institutions, such as the National Academies or the National Academy of Public Administration.

Appoint an Associate Director for the 2020 Census

Traditionally, the U.S. Census Bureau has had one executive in charge of the decennial census, and the responsibilities of that position change over time from the current decennial census to planning and

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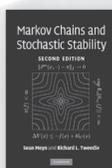
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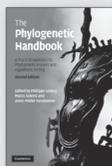
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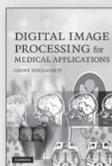
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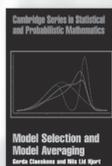


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conducting the next decennial census. This system does not provide for adequate preparation time. In fact, an associate director for the 2020 Census should be appointed in 2009.

This person would start with a small staff of fewer than 10 people. In the beginning, he or she would have two primary responsibilities. First is to learn from the activities of the 2010 efforts. No matter how successful a census is, there are always lessons to be learned and improvements to be made. Often, when in the midst of planning and conducting an activity, it is not possible to take an objective view and gain the benefit of these lessons. The 2020 associate director would not be responsible for the operational or preparation activities of the 2010 Census and would not have to justify the actions taken for the 2010 Census.

Second, the associate director would be responsible for developing and carrying out a program to propose and test changes to the decennial census. While I have made some initial suggestions, the associate director would be responsible for the public program to add, examine, and test these changes before implementation. More generally, he or she would be responsible for identifying changes in the three broad areas of the decennial census: administration, operations, and statistical evaluation.

Improve Management of IT Projects

The dependence on information technology, and perhaps the dependence on contractors for information technology, is a relatively recent phenomenon in the decennial census. While the U.S. Census Bureau has endured its share of criticism over its management of information technology projects, it should be noted that this is not a situation peculiar to the bureau. The difficulty—often the inability—to manage information technology projects is endemic in the federal government. This stems from the evolution of information technology from a field with largely self-taught and home-grown experts into an exceedingly complex discipline. For example, security aspects of information technology are daunting. Adding to the problem is the government's inability to compete for scarce resources. It also stems from an intentional hollowing out of expertise in the government in general and

in information technology in particular that has taken place over the last several administrations.

Unfortunately, the government has become dependent on contractors without the concomitant increase in the ability to manage contractors and information technology contracts. This is due to insufficient numbers of well-trained contracting officers and to current thinking that mistakenly considers contractors to be partners with the same goals as the government. A private company has a goal of making a profit, which is quite different from the government's public service goal. Recognition of this should not prevent the development of a professional business relationship, however. Throughout the government, more attention needs to be paid to recruitment and training of contracting officers and to establishing a business relationship with contractors.

Because of this hollowing out, most government agencies, including the U.S. Census Bureau, do not have the necessary technical expertise to provide sufficient oversight for contractors. Part of the answer lies in the development and use of "trusted advisors." Federally Funded Research and Development Centers (FFRDC) have traditionally been used for this purpose. For the relationship to work, the agency has to be able to trust the FFRDC and share all its innermost thoughts. This has been difficult to do in the past. Because of the scarcity of FFRDCs, for-profit corporations have attempted to fill the role of trusted advisor and work with government agencies to manage contracts and contractors. There are, of course, possible ethical considerations, and the success of these efforts are ongoing. In any event, the U.S. Census Bureau should continue to strengthen its relationship with its trusted advisors. It will become more critical, not less, in the future.

Improve Information Flows to Congress and User Community

It is difficult for government agencies to be transparent. Sometimes, it almost seems all the forces work against being open and transparent. Agencies are often reluctant to give bad news for fear the news will provoke a killing of the messenger—even if the messenger is without fault—instead of a discussion

about how to solve the problem. Nevertheless, as painful as the immediate pain may be, and even in the absence of an environment that looks to mutually solve problems and not just place blame, an agency should always be as open as possible as soon as possible. This is not only because it is in the agencies' best interest in the long run, but also because it engenders mutual trust.

In this context, there are two actions that can be helpful. The first is to build a dynamic cost model, which is not just based on indexing inflation. This will be difficult because budget officers and politicians like to see stability in cost estimates. The tendency is to give people in authority what they demonstrate they want. Nevertheless, an enterprise such as the decennial census, particularly if it is to be innovative, must admit to a dynamic cost model. This will not be easy to do and will require significant buy-in by Congress. The alternative is to defend numbers developed years ago.

The second action is to eliminate the filter that exists between the U.S. Census Bureau and Congress and the media: the undersecretary's office. If the director of the U.S. Census Bureau was not a presidential appointment/Senate-confirmed position, the current institutional arrangement might be understandable. As it exists, it serves to hinder communication between the U.S. Census Bureau and Congress. Moreover, the filter slows down decisionmaking and allows for executive branch decisions, which are made further from substantive knowledge. A spokesperson for the 2020 Census should be appointed in 2011. This person should be able to speak for the director and associate director on all matters related to the 2020 Census.

Integrate Administrative Data

Viewed objectively, the decennial census is an impossible operation. It is not possible to make an accurate count at the precision required by most users, including Congress. This observation is not new, and the problems are well-known. One of them is accounting for people who live in multi-family dwellings. This problem is not restricted to New York City, or even the major urban areas. In fact, as economic conditions deteriorate, we will find more dwellings that appear to be single-family units containing more than one household.

Often, these multi-family dwellings are not marked properly and are inadequately represented in post office files. In many cases, the ability of enumerators to either canvass or accomplish non-response follow-up is severely limited. This problem is likely to increase by the 2020 Census. One of the tasks of the newly appointed associate director of the 2020 Census is to begin a program that will result in models that use local administrative data—including inter alia, water, sewer, electricity, school, tax, and property data—to augment the attempted

enumeration. (One question that needs answering is the extent to which this local data can or should be used to supplant enumerated data.)

These data are a mixture of private and local government data. To a large extent, this is uncharted territory and there will be significant technical and cost considerations. In addition to these, however, there are many issues relating to privacy, confidentiality, accuracy, and reliability that must be resolved. To what extent will users have to give permission for the U.S. Census Bureau to gain access to these data? Should private firms be indemnified for misuse? What standards should be created for the accuracy and reliability of local data? How should they be created? How can they then be enforced, and by whom? Will there be remedies for correction? How is the privacy of the integrated information to be protected? This argues again for the need for a public consensus and for the process to begin no later than 2010.

Integrating the Field Structure with Headquarters

Of the bureau's approximately 10,000 employees, half are located outside its headquarters in Suitland, Maryland. During the critical operations activities of the decennial census, this number will swell for a brief period to several hundred thousand. However, the field structure of the U.S. Census Bureau is not freshly created for each decennial census. The field structure also is given many surveys and data collections fielded by the U.S. Census Bureau, such as the Economic Census that is conducted every five years.

Headquarters staff members are considered to be the planners, analysts, and methodologists, while field staff members are the doers. After the planning is done at headquarters, it is the field staff and regional directors who have the day-to-day responsibility of carrying out the decennial census. There should not be any disconnect between field and headquarters. It is critical that these components be in harmony.

Consider, for example, the introduction of new technology. As the field staff is responsible for the day-to-day operation of the census, it is reasonable that they will have serious concerns about the effect of new technology on their operations. At the same time, it is important that the field be open to new approaches and that they buy into the new technology in the end. This is never easy to do and was not done well with the introduction of the new handheld technology. The 2010 Census will provide an opportunity to learn lessons that can be used to rethink how the field and headquarters structures and missions can be better integrated and more mutually supportive. The program to do this can probably not start before 2011.

“One of the tools often proposed for improving the enumeration is an adjustment based on a post-enumeration survey.”

Adopt Real Continuous Updating of the Master Address File

The Master Address File (MAF) is perhaps the critical component of the current approach to conducting a decennial census. In recognition of that, the U.S. Census Bureau has procedures in place to provide for updates to the MAF. At present, I understand the U.S. Census Bureau has instituted a program for a 100% block canvass to update the MAF. While I do not disagree with the intent, the existence of the program indicates the current procedures to update the MAF are not adequate. This calls into question, for example, the placement of the MAF program in the U.S. Census Bureau bureaucracy, the adequacy of the local community update program and, in the context of the previous section, how field updates can be more consistently incorporated into the MAF. As much as any of the previous suggestions, this must involve the user community and government at all levels. A program to accomplish this should be started in 2010.

Actively Incorporate Statistical Evaluation Considerations

While the decennial census is an enormous operations enterprise involving several hundred thousand workers with the intent of touching everyone in the country, it is also a statistical enterprise. Statistical tools have been used in all stages of the decennial census. The most controversial topic has been one of employing post-enumeration adjustment. The nation will spend more than \$10 billion on the 2010 Census and the U.S. Census Bureau will strive mightily to count everyone. In fact, it has an obligation to try and account for everyone. Nevertheless, it will not be possible to achieve the level of accuracy required by many users.

One of the tools often proposed for improving the enumeration is an adjustment based on a post-enumeration survey. It is not possible in this brief space to review the adjustment issues that have raged over the past decades. However, the U.S. Census Bureau agreed to not adjust the 2000 Census and I am not aware of any plans to try to adjust the 2010 Census. However, advances in knowledge are always made, and despite the contentious nature of this issue, it may be necessary to revisit the decision in 2011 or 2012 to determine whether it should be reaffirmed.

There are other statistical issues that could require attention, such as how the evaluation procedures can be improved and made timelier and how to improve the estimates of differential coverage by race/Hispanic origin and local area.

Should There Be a 2020 Census?

Up to now, I have posed questions to do with planning for the 2020 Census. This really begs a question: Should there be a 2020 Census at all? At first look, the question seems silly and the answer seems obvious. That may well be so, but here is a major public policy issue that transcends all the preceding ones. I do not suggest here that we not have a census in 2020 (although other countries seem to survive without one), but that the question may be ripe for consideration.

Unless dramatic changes are made, the cost of the current census will be approximately \$15 billion in 2009 dollars. Although this number does not seem to be large compared with some of the projects discussed today, I would argue it is still a considerable amount of money. Moreover, the traditional decennial census is disruptive to the U.S. Census Bureau and the budget process. It is true that there is a constitutional mandate to perform a census. It is also true that it is not clear whether this mandate can be changed. While the census is used for reapportionment and redistricting, it cannot meet the required accuracy. Other models might be developed for reapportionment and redistricting.

The decennial census was traditionally used for small-area data, but two changes have taken place over time. First, we already use models to produce estimates that are accepted by Congress for allocation of funds in small governmental areas. Second, the American Community Survey has come to be the source for much small-area (and not-so-small-area) data with more current data than the decennial. Finally, it may be that the decennial census cannot keep up with the structural changes in society.

It is relatively easy to take a blank piece of paper and make suggestions about how to plan for the 2020 Census. It is even easier when one is not responsible for implementing the suggestions. The hard work is done every day at agencies such as the U.S. Census Bureau. The lack of resources, money, and people, as well as daily pressures, will cause difficult choices to be made about what is possible for planning the 2020 Census. While the U.S. Census Bureau and Congress are properly focused on the next decennial census, now may be the best time to begin serious planning for the 2020 Census. ■

Hermann Habermann was deputy director of the U.S. Census Bureau, director of the United Nations Statistics Division, and chief of statistical policy at the Office of Management and Budget.