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Panel to Review the 2010 Census
Committee on National Statistics
Division of Behavioral and Social Sciences and Education

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***Prepared Statement of Thomas M. Cook,
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Subcommittee on Federal Financial Management, Government Information,
Federal Services, and International Security
U.S. Senate Committee on Homeland Security and Governmental Affairs
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Mr. Chairman, Ranking Member Brown, and members of the subcommittee, thank you for asking me to testify before you today. I am Thomas Cook, co-chair of the National Research Council's* Panel to Review the 2010 Census. As such, I am pleased to be able to summarize the panel's recently released interim report, *Change and the 2020 Census: Not Whether But How*, copies of which have been provided to the subcommittee and which is available on the National Academies Press Web site. But I also speak in the capacity in which I accepted the panel chairmanship in 2009—as an experienced operations researcher and systems engineer viewing the challenges of the decennial census from anew. I trust that you understand that I speak on the panel's and the National Academies' behalf when commenting on the panel's interim report, but that—particularly in answering any questions you may have—my opinions are strictly my own, and should not be construed as formal guidance from either the panel or the Academies.

Sponsored by the U.S. Census Bureau, the Panel to Review the 2010 Census is charged to provide an independent evaluation of the 2010 census with an eye toward suggesting research and development for a more cost-effective 2020 census. In support of that work, the panel held five public meetings during its first year of operation, and subgroups of panel members also participated in brainstorming sessions with Census Bureau staff and other stakeholders. A working group of panel members also visited Statistics Canada headquarters in Ottawa for comprehensive discussions of Canada's use of the internet and field automation and its plans for Canada's 2011 census. However, many of our panel's impressions of directions were formed through the extensive series of 58 site visits we conducted during 2010, to observe 2010 census processes in operation at local census offices, regional census centers, data capture sites, and other census support facilities.

Our panel is not yet in a position to provide a thorough evaluation of the 2010 census; much remains to be learned from the Bureau's Census Coverage Measurement program and its procedural evaluations. But I think it safe to note some broad outlines, as prelude to 2020 planning. Through our site visits, we were uniformly impressed by the dedication of the local and regional census staff—a workforce of exceptionally high quality and diversity, owing to the

* The National Research Council is the operating arm of the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine of the National Academies, chartered by Congress in 1863 to advise the government on matters of science and technology.

state of the economy. Yet the great paradox of the 2010 census is that this high-quality workforce was made to execute plans and procedures that largely follow the “scripts” of the 1970 census. Moreover, in several key respects—for example, the failed attempt to fully develop handheld computers, the major difficulties with the Paper-Based Operations Control System, and the 2006 decision not to permit Internet response—the 2010 census was arguably more hindered than enabled by technology.

From our 18 months of work, I think that the panel is convinced that it is possible to make the 2020 census much more efficient and cost-effective than its predecessors. However, the central premise of the report is that these significant efficiencies are possible if and only if there is a major transformation from 40-year-old, paper-driven processes to processes that are facilitated using today’s technology. Successfully executing that major transformation will require:

1. A senior management commitment to change that is publicly announced early in the process and continuously communicated throughout the transformation process;
2. Continued and frequent involvement and oversight in the planning process from senior management representing the key departments including the field organization;
3. Adequate early investment in the research and planning phases of the transformation process; and
4. External help for all phases of the transformation process from research and planning through development, testing and implementation.

In the report, the panel’s core recommendations are attitudinal in nature. We suggest that the Census Bureau needs to put some stakes in the ground that should not be the subject of debate, once agreed upon—for example, committing to the use of the Internet for initial response to the census, to implementing automation in its field systems, or to minimizing the use of paper. Generally—as our “Not Whether but How” subtitle suggests—we think that the Census Bureau should explore possible changes as real, viable options, and not as purely hypothetical ideas. As has been observed in the past, increased use of administrative records data has been thought of as the “next big thing” for the “next census”—for at least the past three decennials. Until the question changes from simply *whether* a change could be made to precisely *how*, and to what degrees, a change could be made, promising innovations will remain as merely hypothetical.

In our report, we explicitly recommend that the Census Bureau should motivate its planning and reengineering for the 2020 census by setting clear and publicly announced goals; specifically, we argue that the Bureau should commit to reduce significantly (and not just contain) the per housing unit cost of the census, while limiting the extent of gross and net census errors. Our experience with successful reengineering projects in both the public and private sector is that the setting of bold goals is essential to underscore the *need* and *importance* of that reengineering—again, to avoid it being case as a purely hypothetical exercise.

If I may interject a personal observation that is decidedly not a formal statement of the Academies; my private-sector experience with major systems change suggests that successful reengineering will depend critically on early investment and availability of resources; this is a case where some money must be spent early in the decade in order to make it possible to dramatically reduce costs of the entire census. My experience also suggests that the Bureau will need to be able to tap external expertise and needs to have the capacity to do so.

The panel's report identifies four high-priority topic areas for research and development efforts in 2020 planning:

1. The application of modern operations engineering to census field data collection operations;
2. Emphasizing multiple modes of response to the census, including response via the Internet;
3. Using administrative records-based information to supplement a variety of operations, and;
4. The continuous improvement and updating of the Bureau's geographic resources.

Very briefly, with respect to the first two topic areas, a point to emphasize is that the Census Bureau should not reinvent the wheel, but should build on and work from external experiences. It should learn from other countries about what works and what doesn't—in particular, from Canada's efforts to double the Internet-response take-up to its 2011 census (from about 18 percent Internet response in 2006) and from Brazil's retooled and handheld computer-based field infrastructure in its 2010 census. The Bureau can also learn from private industry, especially regarding the reengineering of the field processes, and may also derive lessons from other government reengineering projects.

The use of administrative records data is an area where “not whether but how” is particularly salient. In the past, the tendency has been to automatically leap from “administrative records use in the census” to the concept of an “administrative records census”—the most extreme of possible options in this area, using records as a near-complete substitution for enumeration. Accordingly, work in the area has mainly focused on building up records sources and seeing how close the counts come to census results, for the nation as a whole as well as specific study areas. As our report states, the idea of records as a wholesale substitution for “the census” is no longer the most interesting question (if it ever was). What *is* interesting to study is the extent to which records might be used throughout the census process—for updating the address list and inventories of group quarters facilities, for targeting outreach resources and early census operations, as a substitute to asking neighbors or landlords in “last resort” or proxy enumeration, and—most critically, for possible cost reduction—as a possible supplement to nonresponse follow-up. To be sure, there are thorny legal and practical issues that must be worked through regarding the use of records, but the existence of those challenges should not stymie active exploration of the cost-quality trade-offs involved in using records match—and the Bureau's planned match of 2010 census returns to its existing administrative records data system for research purposes should be a useful first step.

Finally, with respect to updating the Bureau's Master Address File (MAF) and its TIGER geographic database, the basic point that the report makes is that continuous updating has a lot of appeal over one-shot, once-a-decade efforts like the comprehensive Address Canvassing operation in 2009. But we argue that the key first step is the development of adequate quality metrics for both MAF and TIGER—objective ways to assess the coverage of both and identify possible gaps. Without such metrics, the Bureau would be flying blind and necessitating expensive, late-stage operations just to achieve comfort with the geographic resources—which, as we and earlier National Academies panels have observed, are the bedrock of a quality census.

Thank you again for the opportunity to testify before you, and I look forward to any questions you may have.