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Myths and Realities About the 1960 Census *By Margaret O. Adams and Thomas E. Brown*

"The United States is in danger of losing its memory," declared the 1985 *Report of the Committee on the Records of Government*.¹ It asserted that "governments—federal, state, and local— already have lost control of paper records" and then considered the outlook for the preservation of public records given that "governments are rapidly shifting to electronic recordkeeping." Overall, the *Report* effectively called attention to the potential dangers of loss of historically valuable records. Unfortunately, however, in order to raise the volume of the valuable alarm it was ringing, the Report repeated what was by then already an apocryphal story:

By the mid 1970s, when computer tapes for the 1960 census came to the attention of archivists, there remained only two machines capable of reading them. One was already in the Smithsonian. The other was in Japan!²

From time to time, staff at the National Archives and Records Administration (NARA) receive inquiries about this claim and respond to each that the story is untrue. But the story lives on.

Ten years after the 1985 report, the *Draft Report of the Task Force on Archiving of Digital Information*, commissioned by the Commission on Preservation and Access and the Research Libraries Group (CPA/RLG), included a related tale. The section on "The Limits of Digital Technology" stated:

Numerous examples illustrate the danger of losing the significant cultural memories that information in digital form may represent. The 1960 Census, for example, was written on tapes for the Univac I, a machine that has been obsolete for more than two decades. Its obsolescence caused much of the census data to be lost.³

Slightly further into the report, it says, "Countless anecdotes about the loss of satellite imagery or census data as a result of error or neglect feed our general anxiety about the future of the cultural record we are accumulating in digital form."⁴ Following a review of the draft, Margaret Adams wrote to the task force:

The allusions in the report to the loss of 1960 Census data, while not exactly a repetition of the apocryphal story about there being two computers in the world that can read the 1960 Census tapes . . . are still misleading. It is my understanding that no 1960 Census data that were scheduled to be preserved as having long-term value were lost because of technological obsolescence, per se. The losses of valuable data . . . that have occurred throughout the 20th century and in contexts in which technology has been used to collect, create, and use information objects, have by and large been because there was no expectation, on any level, that these information objects should be preserved, nor any plan to assure that they were.⁵

One of the co-chairs of the CPA/RLG Task Force then asked for clarification.⁶ The documentation related to the electronic records of the 1960 census resided in unpublished correspondence, memorandums, and records schedules on file at NARA. All of that material is open for public inspection, but because it is

unpublished, it is easily accessible only to those in the Washington, D.C., area. Therefore two NARA staff decided to use this request as an opportunity to describe what happened to data from the 1960 census. The final report of the CPA/RLG Task Force used parts of that essay and makes a digital copy available.⁷ A revised version of this narrative follows.

Historical Narrative: Data from the 1960 Census

By 1961 staff at the National Archives knew that the Bureau of the Census had used a computer for tabulating the 1960 census and that summary tape files from this activity were a basic product of the census. They also knew that the bureau microfilmed the transcribed census schedules and were preserving the microfilm. A transcript of an April 1961 trainee's report at the National Archives and Records Service (NARS) provided the results of a NARS study of current practices of federal agency users of electronic data-processing equipment in connection with the records disposition problems that arose from those new operations. It mentioned that the bureau planned to retain 1960 summary tape files (i.e., microaggregation files) for, among other reasons, "statistical comparison with the 1970 Census, but presumably, like the punch cards for earlier censuses, [these tapes] will lose their usefulness in time."⁸

That commentary reflects a general practice at the time in many agencies of the federal government as well as the prevailing attitude at the National Archives. In 1939 an advisory committee at the National Archives had determined that in the case of punch card records, federal agencies (rather than archivists) could determine whether the records had historical value and should be preserved. Following this decision, few agencies retained any punch card records for historical purposes. The Bureau of the Census disposed of basic microdata records on punch cards once derivative data were produced.⁹

An internal 1963 Bureau of the Census technical memorandum listed tape files produced in connection with the 1960 census of population and housing that the bureau was retaining in "permanent data storage." It did not list any files with basic microdata records from the entire census, which seems consistent with the above assessment. It is also not surprising, given what NARS staff had learned when they interviewed Bureau of the Census personnel for the study mentioned above. The bureau's records officer mentioned that he considered both punch cards and magnetic tapes to be "non-record," but he also described tape files that the bureau was retaining because of potential need for them for programmatic purposes.

The discussion of any loss of 1960 census data must therefore focus on the tape files reported in 1963 to have been in "permanent data storage." In 1975 another internal Bureau of the Census technical memorandum indicated that the bureau had retained data files from the 1960 census on 7,297 tapes "readable" with UNIVAC II-A tape drives, 1,678 "readable" with UNIVAC III-A tape drives, and 146 tapes "readable" with then contemporary industry-compatible tape drives.

In the 1970s NARS had inaugurated a "Targeted Agency" program that attempted to assist selected agencies with permanently valuable electronic records to bring them under records management control. With the help of NARS archivists in the Targeted Agency program, the bureau in August 1975 outlined a plan to provide for the "adequate retention of the 1960 data." The Census Bureau would retain 132 of the industry-compatible tapes and would copy the tape files on 1,273 of the III-A tapes onto industry-compatible tapes. NARS staff informally agreed to the plan.

At issue were the data on the 7,297 II-A tapes. All of the stories about loss of 1960 census data have to do with the 1960 derivative data that the bureau stored on tapes readable only by UNIVAC II-A tape drives. During 1975 and 1976, a member of the NARS Machine Readable Archives Division reviewed the microaggregation or derivative files that the Bureau of the Census had preserved from the 1960 census on the II-A tapes. Her review identified seven series as having long-term value to compensate for the lack of the basic microdata records

from the complete census. The seven series resided on 642 of the II-A tapes. But by this time, the Univac II-A tape drives were obsolete, and thus migrating these tapes to industry-compatible tapes presented a major engineering challenge. Despite the challenge, the census staff prevailed.

By 1979 the Census Bureau reported that they had successfully completed copying 640 of the 642 II-A tapes onto 178 industry-compatible tapes. Two of the II-A tapes could not be found. The missing tapes held 7,488 records, or about .5 percent of the approximately 1.5 million records on all II-A tapes that had been identified as having long-term value. On the 640 tapes that were located, only 1,575 records (or less than .2 percent of the total number of valuable records on II-A tapes) could not be copied because of deterioration. Hence a small volume of records from the 1960 census was lost. This occurred because of inadequate inventory control and because of the physical deterioration of a minuscule number of records, not technological obsolescence.

Most of the data extant from the 1960 census, even in the microaggregations, are restricted from public disclosure for seventy-two years (or until 2032) by Title 13, U. S. Code. During fiscal year 2000, the Census Bureau transferred to the National Archives Title 13-covered microaggregations from the 1960 census. They will be preserved, verified, and accessioned into the National Archives, to be released to the public beginning in 2032. In fiscal year 1987, the bureau transferred and NARA accessioned the 1960 public use microdata sample files.

In case readers are wondering, none of the documentary material used for this narrative mentions anything about computers at the Smithsonian Institution or in Japan.

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Notes

1. Committee on the Records of Government, *Report* (March 1985). The committee was sponsored by the American Council of Learned Societies, the Social Science Research Council, and the Council on Library Resources. Anna K. Nelson was the committee staff director. Funded by the Andrew W. Mellon Foundation, the Rockefeller Foundation, the Alfred P. Sloan Foundation, and the Council on Library Resources.

2. *Report*, p. 9.

3. "Preserving Digital Information," *Draft Report of the Task Force on Archiving of Digital Information*, Version 1.0, Aug. 24, 1995, p. 2. The task force was commissioned by the Commission on Preservation and Access (CPA) and the Research Libraries Group (RLG).

4. "Preserving Digital Information," p. 4.

5. Email from Margaret Adams to John Garrett and Donald Waters, Nov. 2, 1995.

[6.](#) Email from Don Waters to Margaret Adams, Mar. 31, 1996.

[7.](#) Margaret O. Adams and Thomas E. Brown, "Historical Narrative on Data from the 1960 Census," unpubl. report, Apr. 3, 1996, Center for Electronic Records, National Archives and Records Administration. http://www.oclc.org:5046/oclc/research/links/archtf/census_1960.html.

[8.](#) Richard A. Jacobs, "Transcript of Training Lecture No. 56 on Records Disposition and Magnetic Tape," p. 5, National Archives and Records Service, April 1961. The other sources used for this narrative include correspondence between the chief of the administrative services division at the Bureau of the Census and the director of the [then] Machine Readable Archives Division at the National Archives during the 1970s and related memorandums.

[9.](#) An expanded discussion of this topic is in Margaret O. Adams, "Punch Card Records: Precursors of Electronic Records," *American Archivist* 58 (Spring 1995): 182–201.

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