



**U.S. DEPARTMENT OF COMMERCE**  
**Office of Inspector General**

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**U.S. CENSUS BUREAU**

***Enumerating Group Quarters  
Continues to Pose Challenges***

***Final Inspection Report  
No. IPE-18046/September 2006***

**PUBLIC RELEASE**

***Office of Inspections and Program Evaluations***





**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Inspector General**  
Washington, D.C. 20230

SEP 29 2006

MEMORANDUM FOR: Charles Louis Kincannon  
Director, Bureau of the Census

FROM: Johnnie E. Frazier

SUBJECT: Final OIG Inspection Report  
*Enumerating Group Quarters Continues To Pose  
Challenges (IPE-18046)*

As follow up to our September 8, 2006, draft report, we are pleased to provide you with the final report on our review of the group quarters operation for the 2006 Census Test. This is the second site test of concepts, proposed systems, and procedures being explored for a reengineered 2010 decennial census.

Our review found that while the bureau took action on many recommendations regarding group quarters enumeration made in previous internal Census evaluations and OIG and other external reviews, group quarters enumeration is very unique and many challenges still remain for Census.

We offer a number of specific recommendations on pages 29 and 30 that we believe, if implemented, will help improve the group quarters enumeration operation for the 2010 decennial census. We are pleased to note that the Census, in its written response to our draft report, concurred with many of our recommendations. However, we request additional information for those recommendations that you either partially or fully disagreed with. As such, we request that you provide us with an action plan within 60 calendar days describing the actions you have taken or plan to take in response to the agreed upon recommendations, as well as additional support and reasoning for the recommendations that the bureau did not agree with.

We appreciate the cooperation and courtesies extended to us during our review by Census Bureau headquarters, and regional and local office personnel. If you would like to discuss this report or the requested action plan, please call me at (202) 482-4661 or Jill Gross, Assistant Inspector General for Inspections and Program Evaluations, at (202) 482-2754.

Attachment

cc: E.R. Anderson, Acting Under Secretary for Economic Affairs  
Preston J. Waite, Associate Director for Decennial Census  
Marvin D. Raines, Associate Director for Field Operations  
Otto J. Wolff, Chief Financial Officer and Assistant Secretary for Administration



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## **SUMMARY**

The decennial census is a constitutionally mandated population count conducted for the purpose of reapportioning seats in the U.S. House of Representatives. Decennial census data is also used for a myriad of other purposes, such as allocating federal funds to state and local governments and providing official, uniform information on the nation's social, demographic, and economic trends. Because of its importance, the decennial census should be as accurate and complete as possible.

Leading up to the 2010 decennial census, the Census Bureau is conducting a program of early planning, development, and testing culminating with a 2008 dress rehearsal of the actual 2010 census. As such, the bureau is currently conducting a test (called the 2006 Census Test) in two locations—a portion of Travis County, Texas, that includes parts of the city of Austin and its suburbs, and the Cheyenne River Reservation and Off-Reservation Trust Land in South Dakota. The bureau chose these two sites because their demographics and geography support test objectives.

The vast majority of U.S. residents live in residential housing units such as single-family houses, apartments, and mobile homes. However, the 2000 decennial census enumerated over seven million people living in group situations such as college dormitories, nursing homes, prisons, and group homes, collectively known as “group quarters” (GQs). Since 1970, the U.S. Census Bureau has conducted a separate operation to enumerate the group quarters population. The Travis County, Texas, site is ideal for testing the group quarters operation because it includes four universities and colleges, a state prison, and other group living facilities.

There are several operations associated with enumerating people living in group quarters. One of the first, and most critical tasks, is to develop a comprehensive list of existing group quarters, and then once all are identified, to validate them. During the validation operation, Census employees visit every address on the list to determine whether the address is actually a group quarters and, if so, what type (See Appendix B). After validation, a final list is produced for enumeration. Residential housing units receive a Census questionnaire in the mail. But enumerators visit each group quarters by appointment to either complete the Individual Census Report (ICR) or drop it off to be filled out by residents or the group quarters administrator (See Appendix A). Once an ICR for each resident has been completed and reviewed, the forms are taken to the local census office to be shipped for processing at the National Processing Center in Jeffersonville, Indiana. (See Table 1 on page 3 for a summary of the 2006 Census Test operations that impact group quarters enumeration.)

We conducted this review of the group quarters operations to determine (1) whether the recommendations made by internal and external evaluations following the 2000 Census and 2004 test for the 2010 decennial were addressed, (2) the existence of new or continuing problems in the operation, and (3) whether all existing group quarters in the test area had been identified and enumerated. We conducted our review from March through July 2006 at bureau headquarters in Suitland, Maryland, and the Travis County, Texas test site. We

observed group quarters enumeration during the second week of the operation and conducted some additional on-site follow-up after the operation ended.

We concluded that although the bureau is clearly testing new methods to better enumerate the group quarters population, it continues to face a number of challenges. Our specific findings are as follows:

**Previously Recommended Solutions to Many Census 2000 Group Quarters Problems Were Tested in the 2006 Census Test.** After the 2000 decennial census and the 2004 census test, a number of operational assessments and evaluations were issued by the Census Bureau, the National Research Council of the National Academy of Sciences, the Government Accountability Office, and the Office of Inspector General. We reviewed the reports and compiled a list of group quarters recommendations discussed in two or more reports. We sought to determine whether the bureau addressed those recommendations in the 2006 Census Test and found that in many instances it did, including trying methods of improving the group quarters list and reducing list duplication, revising group quarters definitions and the ICR questionnaire, better tracking of the ICR questionnaire, and counting people where they sleep (e.g., dorms) rather than where administrative records are kept (e.g., University of Texas). (See page 5.)

**Issues Surfaced in Our Review of the Group Quarters Validation Documentation and Require Resolution.** During the 2006 Census Test, the group quarters list building activities identified 1,778 addresses to be validated as a group quarters, housing unit, or non-residential address. If this validation determined the address was a group quarters, the group quarters type was ascertained. Although we did not observe the validation operation, we spoke with the supervisors and enumerators who conducted it, and we reviewed more than 1,500 validation questionnaires. In our review of the questionnaires, we discovered that some residents or managers of non-traditional student housing, specifically private dorms and student cooperative housing, self-identified themselves as a group quarters facility even though they did not fit into any of Census's group quarters definitions. As a result, the number of facilities and population counts for that type of group quarters may be inaccurate. If these non-traditional student housing units were defined as private residences that received housing unit questionnaires, there was an increased likelihood that students who did not respond had moved out of their residence prior to the non-response follow-up operation. When this occurred, enumerators relied on records kept in administrative offices, which often lacked Hispanic origin and race information. Moreover, more time and effort may have been spent to enumerate these facilities than if the building had originally been defined as a group quarters.

In addition, we found that 42 percent of the 1,778 addresses were associated with large apartment complexes. During address canvassing, individual apartments in large complexes were erroneously identified as potential group quarters. This caused inefficiencies in the group quarters validation and the non-response follow-up (NRFU) operations, including (1) consuming an inordinate amount of lister and enumerator time, (2) wasting resources (such as other living quarters validation questionnaires), and (3) antagonizing apartment managers by having several enumerators visit them multiple times (the managers are relied

on to obtain resident information during NRFU). The processes used to enumerate large apartment complexes appear unwieldy, yet Census has not identified or altered its enumeration procedures for these apartment facilities. (See page 8.)

**The Final Enumeration List Missed Some Group Quarters and Contained Duplicates.**

Four sources were used to develop the list used in the group quarters validation operation. The validation operation refined the list into a final group quarters enumeration list. However, by conducting a limited Internet search and speaking with group home administrators, a practice that was recommended following the 2000 Census but was not a part of the 2006 Census Test, we found an additional 15 group quarters that had not been included on the list. We also found three facilities that appeared twice on the list and six addresses on both the group quarters enumeration and housing unit lists. Duplicates can result in an inaccurate count of the population because people may be counted twice.

Census's oversight and evaluation methods appear lacking because they do not adequately capture the problems associated with the group quarters validation and enumeration lists. Census can, just as we did, access online tools (e.g., state licensing websites) to identify additional group quarters facilities and increase the overall completeness of the lists. (See page 13.)

**New Methods for Improving Student Enumeration Need Consideration.** The Travis county site includes four large universities and colleges, making it an ideal test site for the student population. Students proved a particularly challenging population for enumerators. Based on our observations, we concluded that one of the most difficult groups on college/university campuses to enumerate is students living in fraternities and sororities. Because few questionnaires were returned, administrative records were used to enumerate dorms, which generally lacked Hispanic origin and race information. Additional measures, such as using the internet, are needed to more accurately count students living in college/university group quarters. (See page 19.)

**Some Additional Group Quarters Processes and Procedures Warrant Management Attention.** We found some group quarters enumeration processes and procedures that could be improved in preparation for the 2008 dress rehearsal and the 2010 decennial. For example, because some ICRs were unaccounted for or could not be associated with a particular group quarters in 2000, the bureau implemented a procedure to scan all ICRs when they arrived at the local Census office and then scan them again when they are shipped out to the National Processing Center. In the event that an ICR form becomes separated from the batch, this new procedure will be able to associate the ICR to the appropriate group quarters. However, scanning all ICRs twice will increase the document scanning workload by at least 15 million ICRs over the 2000 local Census office workload and may not be necessary if the forms and batch envelopes are unopened from the time they were scanned in to the time they are shipped. (See page 22.)

A summary of our recommendations can be found on page 29.



### **Census Response and OIG Comments**

In its response to our draft report, the Census Bureau concurred with some of our findings and recommendations, but took issue with others. In particular, it believes that its quality assurance methods to identify, quantify, and rectify problems (recommendation 1) are sufficient. The bureau also disagrees with exploring the use of the Internet as a possible response option for campus student enumeration (recommendation 8) although it agreed with the recommendation that the bureau use the Internet and other resources to improve both the completeness and accuracy of its group quarters list (recommendation 5(b)). Based on the results of Census 2000 and three other tests of the Internet response option, the bureau has concluded in a memo that the low usage, increased security risk of census data, and high implementation costs were sufficient to eliminate the Internet option. However, unlike the Internet response option used in Census 2000 and the other tests, we suggested that the bureau explore using the Internet to contact a small, specific population (students) via e-mail, and provide them the option to respond electronically. Given that the aforementioned memo is the only documentation we have received regarding the Internet response option, we would like copies of Internet option evaluations.

Census also did not agree with our recommendation to eliminate the check-out scan of ICRs not selected for reinterview (recommendation 9). In addition, the bureau only partially agreed to review and revise, as necessary, the methods used to evaluate the accuracy of the group quarters lists, and to reduce duplication (recommendations 4 and 6). We request that Census provide us with additional support and reasoning for the above recommendations that lacked full or partial concurrence. In addition, the bureau's action plan should describe the actions you have taken or plan to take to implement the agreed upon recommendations, or to otherwise address the problems cited in our report.

We discuss Census's responses to our findings and recommendations in greater detail at the end of each chapter of this report. The bureau also provided technical clarifications on the text of our draft report, which we have incorporated into the final report as appropriate. Census's response is included in its entirety as Appendix D.

## **BACKGROUND**

The decennial census is a constitutionally mandated population count conducted for the purpose of reapportioning seats in the U.S. House of Representatives. Decennial census data is also used for a myriad of other purposes, such as redrawing state legislative district boundaries and allocating federal funds to state and local governments. Decades of decennial censuses have provided official, uniform information on the nation's social, demographic, and economic trends. Because of its importance, the decennial census should be as accurate and complete as possible.

The Census Bureau has reengineered its strategy for the 2010 decennial to improve accuracy, reduce risks, and contain costs. The new strategy is to (1) replace the decennial long form with a smaller annual survey known as the American Community Survey, (2) improve the bureau's address list and geographic database, and (3) conduct a program of early planning, development, and testing culminating with a 2008 dress rehearsal of the actual 2010 census.

A site test is a partial census of population and housing that the bureau conducts under realistic conditions in selected areas. The purpose is to determine the validity and effectiveness of a variety of operations, procedures, and systems prior to a decennial census. The Census Bureau is currently conducting such a test (called the 2006 Census Test) in two locations—a portion of Travis County, Texas, that includes parts of the city of Austin and its suburbs, and the Cheyenne River Reservation and Off-Reservation Trust Land in South Dakota. The bureau chose these two sites because their demographics and geography support test objectives.

Most residents in the United States live in single-family houses, apartments, and mobile homes. But more than 7.8 million people live in group situations such as college dormitories, nursing homes, prisons, migrant worker dormitories, convents, and group homes. The Census Bureau calls these forms of housing *group quarters*.

Since the 1970 decennial, the bureau has used different procedures to enumerate this population, because counting group quarters differs from enumerating other types of housing units. During the 2000 decennial Census, 48.9 percent—nearly half—of the information collected at group quarters was gathered from the records maintained by public and private organizations that identify and describe a set of persons or addresses that are participants, licensees, or recipients of a prescribed activity. Such administrative records are used in instances where residents are unable to fill out the census questionnaires themselves or are difficult to contact. Examples of group quarters facilities that more often rely on administrative records include correctional facilities, hospitals, nursing homes, and group homes. However, using administrative records is generally not as accurate as collecting information directly from the respondent because the records often lack Hispanic origin information and may only contain limited race information (e.g., black, white, other). The 2006 Census Test questionnaire asked about Hispanic origin, contained six race categories, and included a write-in ancestry/tribe question. (See Appendix A.)



The household questionnaire that generally works well for small groups of related persons in a housing unit is not effective for counting unrelated persons living in a group quarters situation, such as a college dormitory or nursing home, because the household questionnaire collects the relationship information (e.g., spouse, child, stepchild, grandparent, sibling) of the people living in the household. A group quarters enumeration questionnaire, called the Individual Census Report (ICR), does not collect relationship information. (See Appendix A.) A group quarters questionnaire contains nine questions and is considered complete only if at least three of the first five questions are answered:

- Name
- Sex
- Date of birth
- Hispanic origin
- Race

Enumerating group quarters in the 2006 Census Test consisted of developing a list of potential group quarters, validating the list to verify and define the type of group quarters, and enumerating group quarters residents.

**Development of the Group Quarters List.** One of the first, and most critical tasks, was to develop a comprehensive list of potential group quarters. In 2000, the bureau created the list from scratch. The 2006 Census Test developed the list using group quarters identified in (a) the 2000 Census, (b) two commercial administrative lists, (c) the address canvassing operation, and (d) other bureau survey work.<sup>1</sup> This effort began in 2004 and ended in September 2005, following the completion of the address canvassing operation.

**Validation of the Group Quarters List.** Once the 1,778 potential group quarters (referred to as other living quarters by Census) in the Travis County local Census office area were identified and compiled, Census employees visited every potential group quarters and conducted an interview using the “2006 Other Living Quarter Validation Questionnaire” in December 2005 through mid-January 2006. The spiral bound, 35-page validation questionnaire guides the resident or facility administrator to identify the address as a housing unit or group quarters. If a group quarters, through a series of questions, the facility type, contact name, and phone number are collected. Once the completed validation questionnaire has confirmed a group quarters residence, an advance visit questionnaire is used to schedule an enumeration appointment.

**Group quarters enumeration.** Following the validation operation, a complete list of verified group quarters was compiled for enumeration, which occurred April through mid-May for the 2006 Census Test. Enumerators placed ICRs and a copy of the Census bureau privacy notice in addressed envelopes to (1) distribute to group quarters residents for them to fill out, (2) leave with administrators (such as dorm resident managers) to distribute, or (3) leave with administrators to fill out. In some cases they visited each group quarters resident or met with the administrator to count residents.

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<sup>1</sup> Primarily field work associated with the American Community Survey that targets areas for updating the map and address databases.

After collecting the information, enumerators checked to ensure all ICRs were accounted for and complete. The ICR forms for each group quarters then were bundled together in a single envelope and passed on to the crew leader who also reviewed them. Once at the local Census office, a clerk checked each one in by scanning the barcode. After check-in, 20 group quarters went through the quality control reinterview process, which meant they were randomly selected for Census office clerks to call the group quarters contact person and confirm that an enumerator visited the correct facility at the correct address and obtained an acceptable population count (i.e., a number that falls within twenty percent above or below the enumerator’s count). This quality control check helped ensure that the enumerators had correctly done their jobs, and that none of the 20 selected for quality control checks failed. All completed ICRs were rescanned (checked out) and shipped to Census’s National Processing Center in Jeffersonville, Indiana.

The table below summarizes the four major field operations conducted by the bureau to enumerate people living in group quarters.

**Table 1: Summary of Group Quarters (GQ) Operations**

2006 Census Test Operations				
Operation	GQ List Development	Address Canvassing	GQ Validation/ Advance Visit	GQ Enumeration
Dates	June 2004 – with updates throughout 2006 Census Test	July 2005 – September 2005	December 2005 – January 2006	April 2006 – May 2006
Description	List created using: <ul style="list-style-type: none"> <li>• 2000 GQs</li> <li>• Administrative records</li> <li>• Address Canvassing (Other Living Quarters)</li> <li>• Other Census survey work</li> </ul>	Identify potential “Other Living Quarters” (OLQs)  Ensure addresses are correct and/or make changes to update the Master Address File	Listers visited 1,778 OLQs in Austin and 84 OLQs on the Cheyenne River Reservation to designate address status as a: <ul style="list-style-type: none"> <li>• GQ</li> <li>• Housing Unit</li> <li>• Non-residential</li> <li>• Vacant</li> <li>• Transient</li> <li>• Duplicate</li> <li>• Other</li> </ul> GQ administrators contacted regarding upcoming GQ enumeration, privacy and confidentiality are discussed	Enumeration of all identified GQ facilities takes place

Source: U.S. Census Bureau, December 2005. *2006 Census Test Project Management Plan*, 2010 Census Memoranda Series No. 8 (Reissue), Washington, D.C.: U.S. Census Bureau.

## **OBJECTIVES, SCOPE, AND METHODOLOGY**

The Office of Inspector General conducted this review in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency, dated January 2005, and under the authority of the Inspector General Act of 1978, as amended, and Departmental Organization Order 10-13, dated May 22, 1980, as amended.

The objectives of this review were to: (1) assess whether the recommendations regarding group quarters operations made by internal and external reviews following the 2000 Census and 2004 test were addressed, (2) assess group quarters operational procedures and processes for new or continuing problems, and (3) to the extent possible, independently assess the completeness of the group quarters listing prepared for the Census 2006 Census Test.

We conducted our review from March through July 2006 at bureau headquarters in Suitland, Maryland, and the test site in Travis County, Texas. We did not include the Cheyenne River Reservation and Off-Reservation Trust Land in South Dakota (Census's second test site) in this review because there are few group quarters located there.

We reviewed the bureau's most recent administrative, technical, training, and instructional manuals covering the group quarters validation and advance visit operation and the group quarters enumeration operation. We also reviewed Census 2000 manuals. In addition, we reviewed a number of evaluations of the Census 2000 group quarters operation (see Appendix C) and pertinent census test and 2010 planning and decision memorandums. We also conducted Internet searches for group quarters information for the portion of Travis County associated with the test.

We observed group quarters enumeration during the week of April 9 to 14, 2006, the second week of operation, and conducted additional follow-up in Travis County June 14-15, 2006, which included meeting with listers who conducted the December 2005 group quarters validation operation. During the enumeration operation, we observed meetings between the field operations supervisor and crew leaders, attended numerous crew leaders meetings, and observed enumeration of three group quarters. We also met with group quarters administrators and independently verified some group quarters. At the Austin, Texas, local Census office, we observed the office clerks responsible for document scanning and quality control. We also reviewed more than 200 ICRs and other internal communications and documents associated with managing the operation. We conducted interviews with headquarters, regional managers, local office managers, and numerous field staff during and following our April 2006 field visit. In Washington, D.C., we observed a group quarters focus group session with group quarters facility representatives, which was conducted for the Census Bureau by a consultant, and reviewed more than 1,500 completed validation questionnaires at Census headquarters.

During the review, we briefed group quarters managers on our work and initial findings. At the conclusion of our review, we discussed our findings with the Associate Director for Decennial Census and other key bureau staff at an exit briefing on September 6, 2006.

## OBSERVATIONS AND CONCLUSIONS

### I. Previously Recommended Solutions to Many Census 2000 Group Quarters Problems Were Tested in the 2006 Census Test

After the 2000 census and 2004 census test, a number of operational assessments and evaluations were issued by Census, the National Research Council of the National Academy of Sciences (NRC), the Government Accountability Office (GAO), and our office. Census for its part conducted the most detailed reviews of the group quarters operation, issuing three separate reports in 2003, 2004, and 2005. An objective of this review was to determine the extent that the bureau addressed the recommendations, specific to group quarters, discussed by two or more reports. The table below is a summary of the major recommendations. A full listing of the reports is in Appendix C.

**Table 2: Summary of Group Quarters Recommendations**

Recommendation	REPORTS & EVALUATIONS <sup>2</sup>						
	Census (2005)	Census (2004)	Census (2003)	NRC (2004)	GAO (2005)	GAO (2003)	OIG (2004)
Improve group quarters address listing	☑	☑	☑	☑			
Reduce duplication between housing units and group quarters		☑	☑				
Revise group quarters definitions		☑		☑			☑
Revise group quarters questionnaires	☑			☑			
Track individual forms from enumeration through data capture		☑	☑	☑			
Revisit group quarters procedures			☑		☑		
Count people where they sleep (versus where records are kept)		☑				☑	

The Census bureau addressed many of the issues that surfaced during the 2000 Census in the 2006 Census Test and officials said they intend to conduct both formal and informal reviews of the 2006 Census Test results. We found that Census solved some basic group quarters enumeration problems by incorporating the recommendations from the earlier assessments of the 2000 Census in the 2006 Census Test.

**Improve the group quarters list and reduce list duplication.** After the 2000 Census, one recommendation was to integrate the group quarters address list development operation with the housing unit address list operation. To do this, during the 2004 and

<sup>2</sup> A bibliography of the reports from which the recommendations came is listed in Appendix C.

2006 Census Tests, potential group quarters were identified as other living quarters during address list canvassing operation. Census procedures called for employees to knock on every door in every neighborhood to verify housing unit status and determine whether, for example, multiple households existed at any one address or the house served as a group quarters. Addresses deemed potential group quarters were designated as other living quarters and validated during a separate group quarters validation operation. According to the bureau, a benefit of combining the two address list operations may be a reduction in duplications on group quarters and housing unit lists. (The bureau is conducting a formal operational assessment to evaluate the effectiveness of the other living quarters operation but has missed its final report issue date, planned for May 2006.)

**Revise group quarters definitions.** The 2000 group quarters definitions and terminology were not always consistent or current with that of other federal agencies, state and local officials, or the understanding of the general public. For the 2006 Census Test, group quarters definitions were based on the feedback from nine focus groups conducted in five cities across the country, expert interviews, consultations with federal interagency working groups, and the 2004 test results. The Census Bureau will now evaluate how respondents identified their group quarters type during the group quarters validation operation of the 2006 Census Test and use information from focus groups and local Census office staff debriefings to assess whether the new definitions were effective.

**Revise and better track the group quarters ICRs.** Changes were made to the ICRs based on bureau tests after Census 2000. For example, question No. 7 on the 2006 form (“Did you stay in this facility on the night of Saturday, April 1, 2006?”) is a research-driven question to detect individuals counted more than once. This question and other changes (e.g., form layout, elimination of skip patterns, word changes) are part of the test and will be subsequently reviewed.

**Count people where they sleep (versus where records are kept).** “Special places” was a Census 2000 term that referred to institutions with group quarters where people live and sleep, such as University of Texas and its dormitories. In 2000, enumeration was at the group quarters level, while validation occurred at the special place level. As a result, some group quarters residents were counted as living at the main address of, for example, the college instead of the actual street address of the dormitory which could be blocks or miles away. This resulted in large concentrations of people being placed in the wrong geographical location, substantially increasing the population count in some areas and decreasing it in others, which could potentially impact redistricting efforts. For the 2006 Census Test, Census conducted validation and enumeration operations at the actual group quarters locations.

As evidenced above, the Census Bureau introduced several changes in operations and procedures in its 2006 Census Test of group quarters enumeration. Its efforts to try new methods to develop the list and test new definitions contrast with the findings in our 2006

address canvassing report<sup>3</sup> that noted that the bureau had missed opportunities to test new operations.



**Census Response and OIG Comments**

In its response to our draft report, the Census Bureau provided clarification or additional details on this section, some of which have been incorporated in the text of the final report.

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<sup>3</sup> U.S. Department of Commerce, Office of Inspector General, March 2006. *Valuable Learning Opportunities Were Missed in the 2006 Test of Address Canvassing*, OIG-17524. Washington, D.C.: Department of Commerce OIG.

## II. Issues Surfaced in Our Review of the Group Quarters Validation Documentation and Require Resolution

During our reviews of other living quarters validation questionnaires and the group quarters enumeration list and our observation of the enumeration operation, we noted that non-traditional student housing, such as private dorms and student cooperative housing, could not be categorized into the bureau's 2006 group quarters definitions<sup>4</sup>. (See Appendix C.) Most non-traditional student housing units were not enumerated as group quarters.

In addition, when we reviewed the other living quarters validation booklets, we learned Census had no process in place to quickly and efficiently validate large apartment complexes, thereby costing Census valuable resources in terms of enumerator time, salary, and supplies.

### A. *Non-traditional student housing did not match Census group quarters definitions*

**Enumerating private dormitories as group quarters would be cheaper and increase Census accuracy.** There are at least eight private dorms that provide college and university students room and board for the academic year in Austin. These private dorms are independent of college/university-sponsored housing and do not meet the bureau's definition of college/university group quarters. During our April 2006 visit, local Census officials told us private dorms were a concern, but Census headquarters officials were unaware of the high number of private dorms in Austin until we brought it to their attention. Since then, the bureau has told us it conducted a focus group session via telephone with private dorm and student cooperative administrators across the country in August 2006 as part of ongoing research to refine definitions of group quarters.

During the validation operation, two private dorms were erroneously identified by residents as group quarters. Six private dorms were identified as residential housing units. As a result, two private dorms were enumerated during the group quarters enumeration operation in April 2006, but the apartment addresses that the bureau had for the remaining six dorms received the Census regular housing unit questionnaires by mail. Census's non-response follow-up (NRFU) enumeration began the last week in April just prior to the time that the semester ended and students left campus. If students have already left, NRFU enumerators are required to make six attempts to contact the resident before visiting the dorm manager to obtain resident information. This consumes an enormous amount of time and resources and often results in missing information, since records kept by dorm management (e.g., lease information) typically lack Hispanic origin and detailed race information. Hispanic origin and race data is used to monitor and

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<sup>4</sup> The definition of group quarters is a place where unrelated people live or stay which is normally owned or managed by an entity or organization providing housing and/or services for the residents. One type of group quarters is a "residence hall, dormitory, or fraternity/sorority house for students," defined as residence halls and dormitories owned, leased, or managed by a college, university, or seminary, as well as fraternity and sorority housing recognized by a college or university.

enforce compliance with civil rights laws that govern equal opportunity in employment, voting, housing, mortgage lending, health care services, and education.

**Table 3: Private Dorm NRFU Workload**

Private Dorm	No. of Units in Census's Address File	Units in NRFU	% of Units in NRFU
1	469	469	<b>100</b>
2*	6	6	<b>100</b>
3	194	194	<b>100</b>
4	182	155	85
5	80	35	44
6	107	107	<b>100</b>
<i>Total</i>	<i>1038</i>	<i>966</i>	<i>93</i>

\*This dorm actually contains 90 separate apartments.

Source: Census

concerns about the second dormitory, because records indicated that it only contained six rooms, which seemed unlikely. We called to verify the number of rooms. Census's number is incorrect—the dorm actually has 90 rooms. The 2006 Census Test population counts for these addresses were not available as of August 10, 2006, so we could not determine how many people were counted at the addresses. Treating such facilities as a group quarters would make it more likely that all rooms and their residents are accounted for.

The bureau should reconsider its definitions and examine whether private dorms would be better categorized as group quarters.

**Inconsistent coding of student cooperative housing skews group quarters facility and population counts.** Austin has at least 15 cooperative housing facilities for students. Cooperative housing facilities (co-ops) are non-profit, member-owned facilities used by college/university students to share cooking and cleaning responsibilities. Typically residents have keys to lock their rooms, share bedrooms with one or two other roommates, and receive their mail at the same address as the other co-op residents (i.e., no individual mailboxes).

During the validation operation students living in co-ops identified the residence as:

- an adult (non-correctional) group home
- a residence hall, dormitory
- “none”, meaning that it is a group home that does not fit into any Census bureau group quarters categories,

We identified six private dorms and obtained from the bureau the number of housing unit questionnaires and the number of non-response follow-up cases for each dorm. Four dorms had to be 100 percent enumerated during NRFU. (See Table 3.) Counting students during group quarters enumeration would have been more efficient because it takes place during the school year, which increases the chance of obtaining information from the respondent. In addition, enumerators work with dorm administrators from the start to obtain a list of rooms and collect information about residents no longer residing there. We had



- a private residence, meaning it is not a group quarters

The opportunity to select “none” was new for the 2006 Census test, and will allow Census to discern whether facilities identify themselves within the current group quarters definition. Residents of 6 of the 15 co-ops chose “none” because they considered themselves a group home but did not identify with Census’s group quarters definition types.

The student co-ops in Austin, like the private dormitories, are not owned, leased, or managed by the university. Consequently, they may be counted in another group quarters population, or may be missed entirely if only one questionnaire is sent to the co-op, because one resident might get the document and answer only for himself and not the whole household. In addition, the household questionnaire is not appropriate for groups of unrelated people living together. Similar to private dorms, the bureau needs to consider how co-ops can be categorized as group quarters and redesignate such non-traditional student housing as group quarters.

### ***B. Treatment of large apartment complexes needs to be revisited***

The group quarters validation operation verified 1,778 other living quarters addresses as either a group quarter, a residential housing unit, or a non-residential building. Our review of the other living quarters validation booklets showed 42 percent were residential apartments in five large complexes. These apartment complexes contained individual housing units, per Census’s definitions, and should not have been identified as other living quarters during address canvassing. But since they were on the other living quarters validation list to be verified, hundreds of validation booklets were filled out for apartment units, expending an enormous amount of enumerator time and resources. Although we did not observe the validation operation, we reviewed more than 1,500 validation booklets and interviewed three former group quarters validation listers. One lister described having hundreds of validation booklets to complete for one apartment complex. The listers also said that they spent days sitting at home completing between 35-70 other living quarters validation booklets per day (eventually they were directed to stop answering each question in the booklet and only fill in the final unit designation page).

We visited and spoke with apartment management staff at two complexes, and they confirmed no organization or groups rented units, unless it was a typical roommate situation. Based on our subsequent discussions with local Census office officials, we believe the apartment complexes were misdesignated as other living quarters during the address canvassing operation due to lister error.

According to one of the group quarters validation listers, who also worked on the NRFU operation, Census bureau procedures for apartments are problematic because each apartment address is identified as an individual housing unit. For example, 100 Main St. Unit 1, 100 Main St. Unit 2, and so on, are considered by Census to be individual housing units that are not associated with each other or an overall apartment complex.

Consequently, if there are 60 apartments that need to be verified during the group quarters validation operation, 60 separate OLQ validation questionnaires have to be filled out. During NRFU, if the residents of 60 apartments did not send in their questionnaire, the workload would most likely be assigned to more than one enumerator, potentially causing problems with apartment management staff who may be approached by several enumerators after each has made six interview attempts. It is possible that ten or more enumerators could potentially visit the same apartment complex staff causing confusion and frustration, and reducing the staff's willingness to assist the bureau (see quote in box). At both of the complexes we visited, it was made very clear that Census's process was unsatisfactory. The apartment managers cited problems such as working with multiple enumerators, enumerators coming at different times instead of getting all of the information in one visit, and enumerators arriving at the beginning or end of a month, which is the busiest time at apartment complexes because tenants are moving in and out and paying rent.

"It would be much more customer oriented if 1 or 2 people came [during NRFU] to get information instead of 10 to 12 without any rhyme or reason."

Austin Private Dorm  
Administrator

The processes used to enumerate large apartment complexes appear unwieldy, yet Census has not identified or altered its enumeration procedures for these apartment facilities. Currently, the operations suffer because of (1) the inefficient use of lister and enumerator time, (2) waste of bureau resources such as other living quarters validation questionnaires, and (3) counterproductive processes that rely on busy apartment managers for administrative information.<sup>5</sup>

Census defines *quality control* as statistical methods that validate products or operations and *quality assurance* as a systematic approach that builds accuracy and completeness into a process. While the quality control processes are readily apparent, Census's quality assurance—its ability to identify, quantify, and rectify problems in a timely manner—is lacking. Census needs to review why, with all of its resources devoted to this effort, it has not identified the problems we encountered. As such, examining its quality assurance methods to better identify problems occurring during field operations, and reviewing its procedures, not only for handling operations occurring within apartment complexes, but also for the entire group quarters process, would be beneficial.

### **Recommendations**

#### **The Census Bureau director should ensure that appropriate actions are taken to:**

1. Examine and revise, as necessary, Census's quality assurance methods to identify, quantify, and rectify problems.

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<sup>5</sup> Multiple enumerator visits are also a problem for administrators responsible for two or more group quarters.

2. Designate non-traditional student housing (e.g., private dorms, cooperative housing facilities) as group quarters.
3. Reduce the inefficiencies associated with listing, potentially validating, and enumerating large apartment complexes by (a) better preparing group quarters address canvassing listers with examples of what are and what are not other living quarters, (b) determining if there are better ways to identify multiple units associated with an address to reduce the group quarters validation workload, and (c) efficiently assigning non-response follow-up enumerators to large apartment complexes.



### **Census Response and OIG Comments**

The bureau has already begun work on recommendation 2 and concurred with recommendation 3, however it stated, in its response to recommendation 1 of our draft report, that its quality assurance methods are sufficient to identify and quantify problems. We would appreciate more detailed information about the bureau's relevant quality assurance methods in the action plan.

In addition, Census asserted that headquarters Field Division managers were aware of private dorms in Austin. If so, that knowledge was not well-circulated throughout headquarters based on conversations with Decennial Management Division staff and the Age and Special Populations branch. The bureau also points out that the nonresponse follow-up (NRFU) operation started in April, suggesting that students might not have left yet. We have changed the text to reflect that NRFU enumeration began the last week in April, although we continue to maintain that there was not sufficient time to enumerate college students prior to the semester's end, which was May 3<sup>rd</sup> for one university. The bureau also clarified why four of the six dorms were 100 percent enumerated during NRFU, stating that the compressed test schedule did not allow enough time for the addresses to be included in the housing universe to receive a questionnaire in the mail. The bureau assumes some students would have responded by mail if they had received a questionnaire.

Census also states that the reason why so many enumerators visited private dorms was because the vacant/delete operation was conducted at the same time as NRFU. The bureau has decided that these operations will not occur concurrently in the 2008 dress rehearsal or the 2010 decennial, which would appear to satisfy at least one part of recommendation 3.

We look forward to receiving more detailed information in the bureau's action plan about steps taken or planned by Census to address these recommendations.

### III. The Final Enumeration List Missed Some Group Quarters and Contained Duplicates

Once the Census Bureau compiled a list of all potential group quarters for the 2006 Census Test, it was refined by the group quarters validation operation, resulting in a final list of group quarters to be enumerated. However, we found a number of group quarters that were not on the final enumeration list. We also found duplicates—addresses that appeared on both the enumeration and housing unit lists or group quarters that appeared twice on the enumeration list.

#### A. *Additional research may improve the accuracy and completeness of the group quarters enumeration list*

**The GQE list was incomplete.** After conducting a limited Internet search and speaking with only four group home administrators, we learned there are at least 15 group quarters that were not on the list. In all likelihood, many more were missed given the modest nature of our inquiry. Identifying group quarters is important to those representing the various constituencies in group homes, even if the residents are counted via the housing unit questionnaire or during non-response follow-up operations, because data users want accurate facility and population counts. Moreover, Census officials said that the bureau should facilitate obtaining the best count of the population by using the appropriate operation, such as group quarters enumeration for group quarters. However, group quarters enumeration can only occur if facilities have been correctly identified.

One of the biggest problems in locating small, residential group quarters is that they can blend into otherwise single family neighborhoods. The address canvassing operation was often unable to identify residential dwellings as group quarters, because most residents were not home when the listers visited the address. Below are two such group quarters that we identified that were not on the list. One is a religious quarters and the other is a group home.

**Figure 1: Austin Group Quarters**



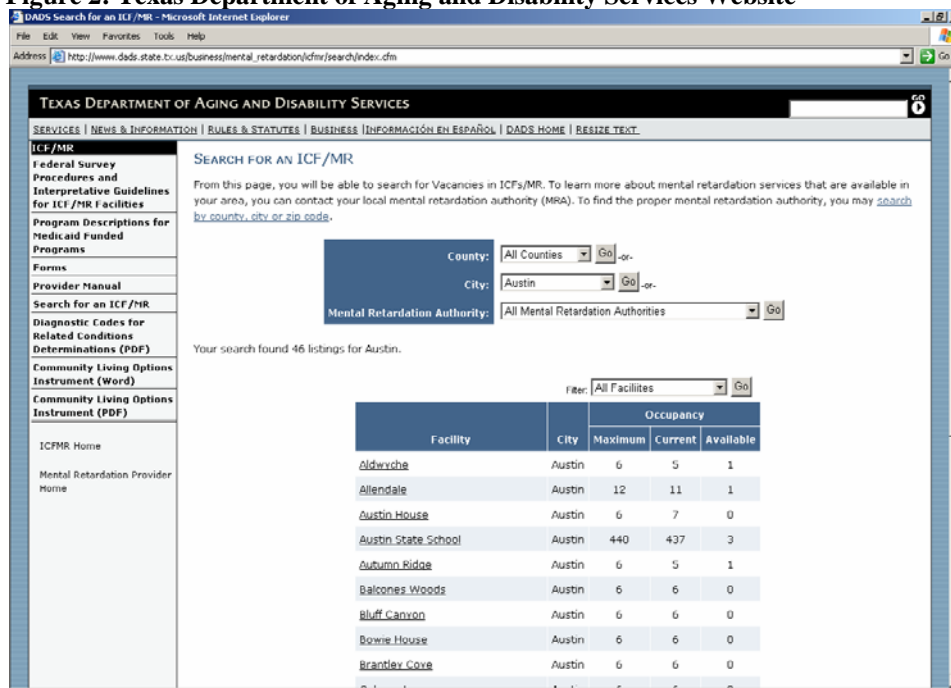
Source: OIG

Excellent internet resources are available to help identify small group homes that are difficult to locate. For example, group home administrators told us they had to be

licensed through the state and, in some cases, they are federally licensed. Using a state of Texas website (see Figure 2), we were able to identify seven group homes located inside the local Census office test area that had not been included on the enumeration list. The website provides a listing of “intermediate care facilities for people with mental retardation,” referred to as ICF/MR facilities,<sup>6</sup> by city, county, or zip code in the state and it also provides occupancy information.

We spoke with a group quarters administrator whose company is responsible for more than 20 group homes of various types in Travis County. The administrator independently validated the website’s accuracy. He confirmed the existence of seven group homes in the local Census office district that we had identified from the website. (Only two of the seven were on Census’s group quarters enumeration list.)

**Figure 2: Texas Department of Aging and Disability Services Website**



Source: [http://www.dads.state.tx.us/business/mental\\_retardation/icfmr/search/index.cfm](http://www.dads.state.tx.us/business/mental_retardation/icfmr/search/index.cfm)

While every state may not have a similar website, Census could work directly with state licensing agencies to ensure that licensed group homes were captured on the group quarters list. Bureau officials suggested the Local Update of Census Addresses (LUCA) might be an appropriate mechanism for working with state and local officials. LUCA is a voluntary program that allows local governments to review Census address lists for accuracy and completeness. However, only 53 percent of the eligible governments participated in 2000, and of those, only 36 percent provided any updates in the form of additions, deletions, or corrections. In addition, state and local officials may not focus on group quarters during the LUCA process. It would be more advantageous for the bureau to target knowledgeable state officials interested in making sure the bureau has an

<sup>6</sup> ICF/MR facilities receive Federal and State funding to provide "active treatment services" to persons with mental retardation or related conditions.

accurate group home list, such as the officials who work with licensing and funding ICF/MR facilities.

In addition, four group quarters were identified during the validation and enumeration operations that were not on the enumeration list. Although these homes would normally have been added during the Census, it raises a concern that they were identified only because group quarters administrators volunteered the information; not because probing questions were asked by the field staff. The only question in the validation questionnaire related to other group quarters is specific to that location not other locations. Additional questions could be asked during operations to identify other group quarter facilities.

**Several facility and group quarter names on the GQE list were inaccurate.** From the state of Texas website in Figure 2 above, we learned that the names of some facilities<sup>7</sup> and group quarters were incorrectly listed. Even such small errors could impact the field staff's ability to identify group quarters, recognize potential duplication, and ultimately obtain an accurate count. We were able to verify 15 group quarters, and their corresponding facility name, on the list using the Texas state web site. But most of those same facilities and group quarters were incorrectly named on Census's group quarters list. Since facility and group quarters names were collected during validation operations, these errors most likely occurred because the individual that the lister spoke to during the validation operation did not have the knowledge to correctly answer the questions. Verifying national, state, or local official records might facilitate obtaining more accurate information.

Both Census and the National Research Council suggested, in separate reports, using the Internet to assist with developing the group quarters list. However, for the 2006 Census Test, the bureau did not try web resources. Given our own success finding group quarters on the Internet in such a short time and the on-going problem identifying small group homes in residential neighborhoods, we suggest the bureau use the Internet and other resources to improve both the completeness and accuracy of the list.

### ***B. Duplication remains problematic***

During Census 2000, there were a significant number of duplicates of individuals within group quarters records, particularly for group homes and other small establishments with average populations of fewer than seven residents. According to the Census Bureau, one reason for this was that many facilities enumerated during the group quarters operation also returned household questionnaires. Census did not solve this problem—it was also evident in the 2006 Census Test.

**GQE and housing unit list duplication.** During our on-site observation of the group quarters enumeration operation, we became aware of two group quarters facilities that also received housing unit questionnaires. We then reviewed 59 group quarters addresses to determine if any matched a housing unit address, which would mean that it also

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<sup>7</sup> In Census 2000, "special places" referred to the larger institution containing the group quarters where people sleep. This information is now collected as "facility name."

received a housing unit questionnaire. Since small group home facilities are located in residential neighborhoods, we focused on whether they were counted as housing units as well as group quarters.

Six of the group quarters addresses that we identified were confirmed by Census bureau staff as having also been listed as housing unit addresses that received housing unit questionnaires, which may have resulted in duplication. Two of the six were inactive residential addresses that were reactivated after the master address file was updated against the U.S. Postal Service's list of all delivery addresses served by postal carriers. Two others were carried over from Census 2000 but were not identified as duplicates during the address canvassing operation (which emphasizes the need to better train listers on detecting duplicates). The remaining two were added during 2006 Census Test operations.

**GQE list duplication.** We also found three instances where a group quarters appeared twice on the group quarters enumeration list. The group quarters validation operation should have identified one of the two addresses as a duplicate. But if a group quarter validation lister does not code one of the two addresses he or she is validating as a duplicate, both will remain on the enumeration list. The crew leader is supposed to review and sign off on the other living quarters validation booklets, but the errors were not identified. Fortunately the three duplicates were caught prior to enumeration in the group quarters enumeration operation. But this again points to the need to better emphasize address duplication problems during training.

The bureau needs to improve its training program and instructions to listers and enumerators on identifying and designating addresses as duplicates. In addition, steps should be taken to ensure that when Census's master address file is updated by the U.S. Postal Service file, the software matching program locates and matches the Postal Service address to the "active" group quarters address as opposed to the "inactive" housing unit address for the same location. According to Census officials, it appears that the match occurred on the first address found in the master address file, which happened to be an inactive address. Furthermore, the address lists used in various Census operations are extracted from the master address file, which contains every address and physical/location description known to the Census Bureau. The bureau should explore changing the definitions used to generate the lists for the address canvassing and group quarters validation operations to reduce the potential for duplication. For example, if a group quarters and housing unit share an identical address, designate only one or both as "other living quarters" addresses to be verified in the group quarters validation operation.

Again, as mentioned in the previous section, Census's quality assurance methods appear lacking because they do not adequately capture the problems associated with the group quarters validation and enumeration lists. Census can, just as we did, access online tools (e.g., state licensing websites) to identify additional group quarters facilities and increase the overall completeness of the lists. Acknowledging that gaps on the list exist, combined with our limited, yet successful search for additional group quarters, should foster a

dialogue at Census to further enhance the methods used to develop and evaluate the group quarters lists.

### **Recommendations**

**The Census Bureau director should ensure that appropriate actions are taken to:**

1. Review and revise, as necessary, the methods used to evaluate the accuracy of the group quarters lists.
2. Conduct additional research to more effectively find small group homes. Research could include (a) targeting knowledgeable state officials to obtain group home licensing lists, (b) conducting more Internet research, and (c) during the group quarters validation operation, asking small group home administrators about the existence of other facilities.
3. Reduce address list duplication by (a) strengthening address canvassing and group quarters validation training and instructions regarding duplicates, (b) ensuring that the master address file software matching program correctly identifies group quarters addresses as opposed to inactive housing unit addresses when updated by the U.S. Postal Service file, and (c) explore modifying how potential duplicate addresses are filtered from the master address file for the address canvassing and group quarters validation operation.



### **Census Response and OIG Comments**

In its response to recommendations 1 and 3 above, the bureau states that it will consider part of the recommendation to assure a more complete list of the small GQs, and to reduce duplication of the lists. The action plan needs to address exactly what Census is agreeing or disagreeing to, and what actions it is taking.

With respect to recommendation 2, Census only agrees with conducting more internet research to more effectively identify small group homes and will not pursue targeting knowledgeable state officials or asking small group home administrators about the existence of other facilities. Census stated that in 2000, asking such questions caused more confusion and duplication. Previously in its response, the bureau pointed out differences between the 2000 and 2006 Census Test process. In 2000, the procedures were to validate at the special place level and enumerate at the group quarters level. Now both activities occur at the group quarters level. Consequently the problems experienced in 2000 may not be applicable. Moreover, how the questions were asked and how the information was treated may have contributed to the Census 2000 “confusion and duplication” problems. We request that Census address this in its action plan.



The bureau also requested that the OIG clarify whether group quarters facilities that were misidentified as housing units were enumerated during the 2006 Census Test. In those instances, the group quarters were included in the census as a housing unit. However, as we stated in the report, even if group quarters residents are accurately counted via the housing unit questionnaire or during the non-response follow-up operation, group quarters data users still want accurate facility and population counts.

Census stated that our recommendation to use the Internet and other resources to improve both the completeness and accuracy of the list was a good suggestion, however it took exception to our assumption that administrative documentation from national, state, or local officials may be more accurate than respondent information. While official records may not always be more accurate, we maintain that information collected for licensing purposes in all likelihood is more accurate than a self-proclaimed “most knowledgeable respondent.”

With regard to duplication, the bureau admits that some duplication still occurs but believes the current amount of duplication is much smaller and that the integrated approach of group quarters and housing unit address files should reduce the number of duplicate addresses. The bureau stated, in response to our recommendation, that it would consider part of the recommendation. We request that Census provide more detail in the action plan as to what parts of the recommendation it agrees or disagrees with, and describe actions taken or planned.

#### **IV. New Methods for Improving Student Enumeration Need Consideration and Evaluation**

Travis County was a good choice of location for testing group quarters enumeration of college/university students because four universities lie within the boundaries set for the 2006 Census Test. Enumerating these universities' group quarters proved particularly challenging.

##### ***A. Enumerating fraternities and sororities was difficult***

College students are a unique group to enumerate because of their variable schedules and transient living arrangements in and around campus. During the 2006 Census Test, students living in fraternity and sorority houses were one of the most difficult groups on college/university campuses to enumerate. Although local Census office officials told us that enumerating fraternities and sororities went well, the field staff who actually conducted the operation told us they encountered a lot of resistance.

Typically group quarters enumerators obtain a list of names and room numbers from the fraternity or sorority contact person, prepare and leave ICRs in envelopes for distribution, and schedule a future pick-up date and time. But enumerators cited a number of common problems in dealing with fraternity and sorority members including:

- a. difficulty scheduling appointments (in at least one case there was no main number at the fraternity house because all members had cell phones),
- b. no-shows at prescheduled meetings,
- c. incomplete returns of ICRs (for example, if 25 ICRs were left, only 17 would be returned), and
- d. rude behavior towards enumerators.

Although some fraternities and sororities were cooperative, it took a significant amount of time, resources, and effort to enumerate the residents of those that were not. Enumerators often ended up asking students or a knowledgeable resident to provide enough information to answer the required minimum of three out of the first five questions on the ICR form. Bureau officials said this practice should only be used as a last resort because a fully completed ICR provides the most comprehensive data.

Census headquarters officials said such difficulties are standard when dealing with college students. However, we called one of the universities and easily found a Greek Life and Education Office, which maintains listings of students affiliated with fraternities and sororities. As a possible alternative, enumerators could have worked from an administrative list built from information easily obtained from that office.

Developing a more effective strategy to work with the college and university fraternity and sorority oversight organizations will be important for better enumeration during Census 2010. The bureau should begin now to develop ways to work more closely with local and national college or university-based fraternity and sorority organizations.

### ***B. Use of the Internet for student populations warrants exploration***

Local Census office staff expected more than 6,700 ICRs to be returned from the dormitories at one of the universities in Austin. But only 719 (11 percent) were actually returned. The low questionnaire return rate may indicate student indifference, or it may be that students never received the ICR. Census may want to evaluate its distribution methods to see if this contributed to the low return rate. Because so many ICRs were not returned, enumerators were faced with manually filling out the remaining 6,000 forms using administrative records. The files obtained by the local Census office from the university contained student and dorm room information.

We believe that Census should explore non-traditional strategies to obtain better response rates from the student population. By doing this, the bureau would not have to rely on incomplete data from administrative lists, which would result in better source information and potentially free up bureau time and resources for other aspects of group quarters enumeration. Even though a July 19, 2006, decision memo officially eliminates the Internet response option for the 2010 decennial census, the bureau should reconsider this decision and in view of the fact that today's generation of students is an Internet generation and explore ways to effectively use the Internet for enumeration of college and university students. Most colleges and universities provide e-mail addresses and have local housing information for students living in university or college housing. Consequently student e-mail addresses can be associated with current campus addresses. In our discussions with Census officials, they adamantly opposed online enumeration. Concerns cited include: Internet security, the potential for negative publicity if a security breach occurs, and lack of monetary savings due to the increased cost of secure online systems. They also cited low response rates in the 2000 census and in several subsequent tests of the Internet response option.

### **Recommendations**

**The Census Bureau director should ensure that appropriate actions are taken to:**

1. Consider using campus resources, such as a student Greek life office, in order to obtain administrative records for fraternity/sorority students.
2. Explore using the Internet as a possible response option for the enumeration of college/university students living in group quarters.



### **Census Response and OIG Comments**

Census stated, in its response to recommendation 1 above, that using administrative records is already part of its process and that it is mandated to first make an attempt to contact the group quarters resident. The point of this recommendation was for the bureau

to expand its resource base and not solely depend on one source, for either initial publicity efforts or administrative records.

The bureau disagrees with using the Internet to enumerate students, stating that it would not be cost-beneficial or secure to do so. We are disappointed that Census is not exploring the potential of using the Internet for a limited, Internet-savvy population. In its response the bureau stated that it has studied using the Internet for 2010. The 2010 Decennial Census Program Decision Memorandum No. 14: *Rationale for the Decision to Eliminate the Internet Option from the DRIS Contract*, dated July 19, 2006, is not a study as Census' response implies. Such a decision to not consider using the Internet should be supported by serious and thorough study. Please provide copies of the evaluations or studies conducted to support this bureau decision—regarding Internet response option usage and costs as well as security—with the action plan.

## V. Some Additional Group Quarters Processes and Procedures Warrant Management Attention

We found some group quarters enumeration processes and procedures that could be improved upon in preparation for the 2008 dress rehearsal and the 2010 decennial. For example, the double scanning of each group quarters ICR form that enters the local Census office appears to be redundant and an inefficient use of clerk time. Our review also identified complicated ICR forms and questions that hindered operations. Improvements in these areas would be beneficial for group quarters operations in the 2008 dress rehearsal and 2010 decennial.

### A. Double scanning all ICRs for check-in/out appears unnecessary

Once a group quarters has been enumerated, the local Census office prepares the forms for shipping to the Jeffersonville, Indiana, processing facility. The local Census office clerk scans the barcode label on each batch envelope of forms in the check-in box, then scans the barcode of each individual record in the envelope. The barcodes link the forms and batch envelopes, so if an ICR is somehow separated from its batch, a problem that occurred during Census 2000, it can be easily re-connected to a specific group quarters enumeration. (See Figure 3.)

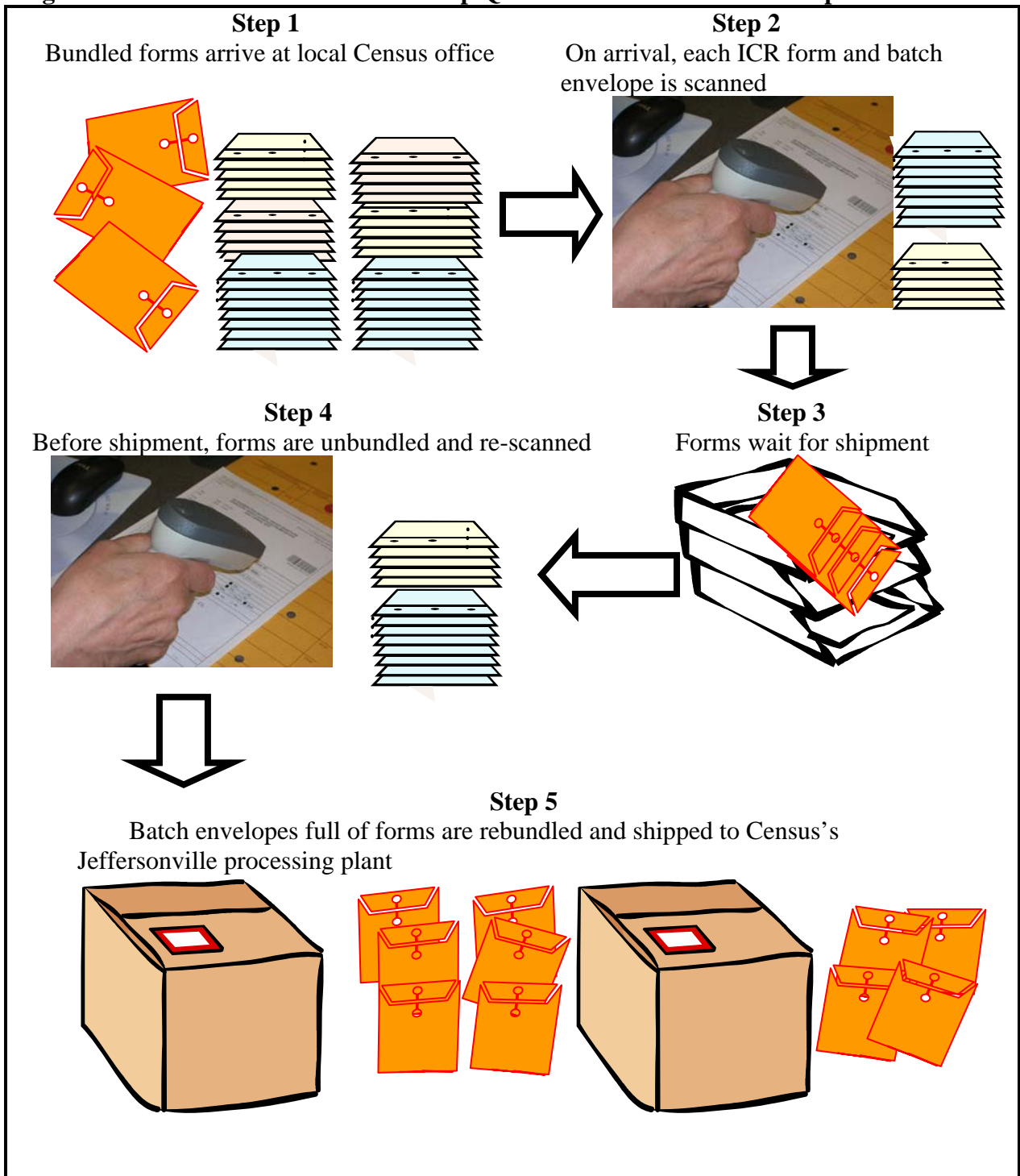
**Figure 3: Batch Envelopes at the LCO**



Source: OIG

According to local Census office officials, Census uses a database program to select every 10<sup>th</sup> group quarters for a quality check reinterview, in which a quality control clerk opens a selected batch envelope and subsequently telephones to confirm that an enumerator went to the group quarters and to verify the population of the facility. Batch envelopes not checked for quality are placed in a check-out box. Then the envelopes and records within are rescanned and shipped out to Jeffersonville, Indiana. (See Figure 4.)

Figure 4: Check In/Out Process of Group Quarters Individual Census Reports<sup>8</sup>



Source: OIG and Census

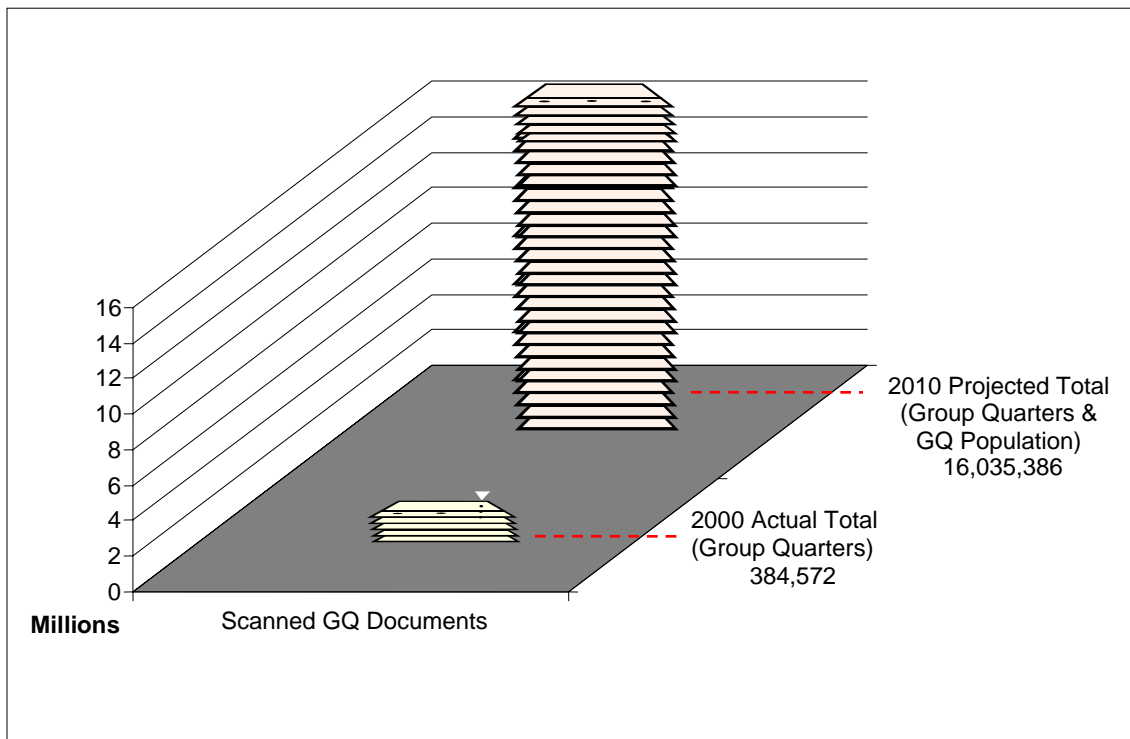
<sup>8</sup> For group quarters not selected for the quality control reinterview.

Scanning ICR forms is a new process. During Census 2000 only batch envelope labels were scanned in and out, but that caused problems identifying missing forms and matching found forms that had been misplaced with the correct group quarters.

Linking the ICR forms to the correct group quarters is a necessary step to ensure complete, accurate data. However, scanning all batch envelopes and all the ICR forms inside, instead of scanning only the envelopes opened for reinterview, means that in 2010 an additional 15 million ICR barcodes would have to be scanned over what was scanned in Census 2000 (using Census 2000 group quarters population count; see Figure 5).

The bureau's attempt to improve the old process has unintentionally created redundancy and results in an inefficient use of local Census office clerk time. For example, according to one clerk responsible for scanning forms during the 2006 Census Test, when the workload was at its peak, ICRs were removed from envelopes, scanned in, and then immediately scanned out for shipping. Scanning the forms twice is really only necessary for those from the batch envelopes that have been opened for the quality control process.

**Figure 5: Projected Increase in Scanned ICRs from 2000 to 2010<sup>9</sup>**



Source: OIG and Census

<sup>9</sup> In 2000, only group quarters facility labels were scanned in and out. According to: *Group Quarters Enumeration - Final Report*. Census 2000 Evaluation E.5, Revision 1. 08/06/03, there were 192,286 group quarters facilities enumerated in 2000. Doubling those facility labels (representing scanning in/out) results in the 2000 Actual Total of 384,572. To calculate the projected increase in scanned documents for 2010, the number of group quarters facility labels in 2000 was again doubled (representing scanned in/out facility labels), and added to the total group quarters population from 2000, 7,825,407, doubled to 15,650,814 (representing scanning in/out of ICRs) resulting in the 2010 Projected Total of 16,035,386.

When we discussed this issue with bureau officials, they disagreed, claiming double scanning is necessary to reduce the possibility of errors and lost forms. No ICRs were scanned in 2000, but all are to be scanned in 2010, which increases both the cost and time that the office clerks must devote to scanning. It occurs to us that this process may increase errors during Census 2010 when volumes will be huge and the pace will be brisk.

Census identified a problem with lost forms in 2000, and as an improvement to the quality control process, the scan-in/scan-out of all ICR forms should help identify any forms separated from their group quarters batch. However, tracking ICRs can be accomplished through a much less time-consuming and lower cost alternative.

For example, instead of rescanning unopened batch envelopes for check-out, envelopes could be sealed using a stamp, sticker, or label. After batches have been scanned in and the envelopes sealed, those not selected for reinterview would be ready to ship. An envelope with all the forms inside only needs to be rescanned before shipping if the seal has been broken, which can easily be determined with a glance.

***B. Sections of the ICR and other forms used for group quarters enumeration were complicated and confusing***

Testing new questions and forms is an important part of the operational Census tests leading up to the 2010 decennial. The 2006 Census Test included new wording for some questions on the form to gauge how people would respond. Census will decide which changes to implement for the 2010 decennial based on the data returned in the tests. However, we found that some of the forms used in the 2006 Census Test hindered enumerator efficiency and should be revised.

**Repetition of responses to ICR test questions indicates respondent confusion.** The 2006 group quarters ICR form is testing new or variations of the wording in several questions. For example, question No. 8, “Do you live or stay in this facility *most of the time?*” and question No. 9, “What is the full address of the place where you live or stay *most of the time?*” are variations of the same questions in 2000. These questions provide respondents with the option of listing an alternative address and also help with identifying potential duplication. However, some dormitory residents were confused and relisted the dorm address for question No. 9 when they had already answered yes for question No. 8. Students also wrote a variety of addresses—dorm, mailbox, room, home, and even a phone number—in the box labeled “Number” for street number. Census officials said they did not intend for respondents to repeat the address already referred to as “this facility” in question No. 8.

An appropriate method to address this, and eliminate the confusion, is the use of “skip patterns.” Skip patterns direct a respondent to skip a question if the answer to a previous question meets certain guidelines, and in fact, the ICR used in Census 2000 contained a number of “skips.” However, cognitive testing conducted after the 2000 decennial



determined that skip patterns are confusing, so they were eliminated for the 2006 Census Test.

Nevertheless, it appears that a limited number of skip patterns might help reduce confusion and errors, such as those the students made. For example, if a respondent answered “Yes” to question No. 8 (he or she lives or stays at the dorm most of the time), they would be directed to skip question No. 9 and go to the end of the form. If a respondent answered “No” to question No. 8, then he or she would go on to answer question No. 9. Bureau officials told us they will evaluate the effect of the changes on the form, although that will not be part of one of the official assessments of the overall 2006 Census Test.

**Crew leaders lacked sufficient information to effectively make enumerator assignments.** The *Master Assignment Report for Enumeration Records* (DD-201E GQE) is used by crew leaders to record enumerator assignments, but this form only contains the assignment area number, case identification number, and group quarters name; it does not provide address information. The form is used to track and assign workload throughout the operation. Once an assignment area is designated, the enumerator receives additional information, such as the address and gender of group quarters residents (e.g., all male, all female, both). But since crew leaders lacked address information when assigning enumerators, they were unable to identify and assign group quarters locations in close proximity to an enumerator’s home or even to each other. Efficient assignment of enumerators reduces travel time and hourly costs for the group quarters operation.

The crew leader manual assumes that crew leaders are provided all of the materials related to their district, including address information. However, local Census office officials said providing all assignment area materials to the crew leaders was not specified in the manual, and they decided to distribute materials, which included address information, after assignments were made. When we discussed this with Census headquarters officials, they responded that the master assignment report is arranged by assignment area number, so all areas are geographically next to one another. None of the crew leaders that we observed used assignment area numbers to make enumerator assignments. This is likely due to the fact that assignment areas can encompass relatively large geographic areas consisting of several blocks. Moreover, associating a specific address in an assignment area is not intuitive and to do so would be time-consuming and inefficient. Crew leaders should be provided with adequate information to allow them to make assignments that better maximize enumerator efficiency.

Figure 6: Group Quarters Listing Sheet

Room/Bed number	Name (B)	Person number (C)	Checked in Mark (X) if received (D)	Mark (X) one (E) Incomplete Complete
00				
2R		25		
M022B		26		
2R		27		
M023A		27		
2R		28		
M024A		28		
2R		29		
M025A		29		
2R		30		
M026B		30		
2R		31		
M027A		31		
2R		32		
M028B		32		
2R		33		
M029A		33		
2R		34		
M030B		34		
2R		35		
M031A		35		
2R		36		
M032B		36		
2R		37		
M033A		37		
2R		38		
M034B		38		
2R		39		
M035A		39		
2R		40		
M036B		40		
2R		41		
M037A		41		
2R		42		
M038B		42		
2R		43		
M039A		43		
2R		44		
M040B		44		
2R		45		
M041A		45		
2R		46		
M042B		46		
2R		47		
M043A		47		
2R		48		
M044B		48		

26 A

B

**The Group Quarters Listing Sheet (DD-116) format caused problems.** The DD-116 *Group Quarters Listing Sheet* is used by enumerators to summarize respondent information. As shown in Figure 6, the form is designed with rounded corners (A arrow) on the exterior border, which made the final box in the first column at the bottom of the page too small to hand write the necessary information, so some enumerators did not fill the box in. However, there is a middle column (B arrow) that was to be used to sequentially tally the number the respondents. Since some enumerators did not use the last row on the form, the final totals of respondents often did not correspond with the actual number of residents in the Room/Bed Number and Name columns.

Unfortunately, this problem was not detected until after a large number of DD-116s had been erroneously filled out. Correcting the forms caused a significant loss of time. The DD-116 form should be redesigned to eliminate this problem.

### **Recommendations**

**The Census Bureau director should ensure that appropriate actions are taken to:**

1. Evaluate the costs and benefits of the ICR scanning process to determine if the intended goal to track ICRs could be achieved more efficiently, such as using a sealed envelope system.
2. Assess the effectiveness of the new/newly worded ICR form questions and consider limited use of “skip” patterns to avoid respondent confusion that leads to redundant answers.
3. Provide crew leaders with adequate information so that they can more efficiently and effectively assign work to group quarters enumerators.
4. Redesign the DD-116 *Group Quarters Listing Sheet* to ensure that it does not inadvertently confuse enumerators and create rework.



### **Census Response and OIG Comments**

Census disagreed with the first recommendation and concurs with the remaining three.

Census disagrees that double scanning all ICRs for check-in/out appears unnecessary, stating that it is a standard procedure for all paper operations and that they desire a set of procedures applicable to all operations. In its response the bureau stated that the use of sealed envelopes would not address the problems identified in Census 2000. We are not suggesting a change to the current procedure to scan all incoming ICRs. Therefore, the Census 2000 problem of a questionnaire becoming detached from the envelope and thus prohibiting identification of the appropriate group quarters to which it belongs becomes irrelevant. The sealed envelope label is useful for identifying ICR forms from group

quarters selected for the quality control reinterview process, and will need to be scanned again to ensure that no ICRs were separated from their group quarters during this process. Once an ICR is scanned in, the barcode would always be associated with the appropriate envelope and group quarters.

In response to recommendation 2, Census said it is looking at revisions to the ICR to incorporate skip patterns as appropriate. Census also stated in its response to recommendation 3 that crew leaders had the information to assign enumerators close to where they live, but the bureau said it will provide better training on how to use the information. The bureau did not address why the *Master Assignment Sheet*, used by crew leaders to make enumerator assignments, lacked addresses. If addresses were included, additional training may not be necessary. Census should address this in its action plan.

## **SUMMARY OF RECOMMENDATIONS**

**The Census Bureau director should ensure that appropriate actions are taken to:**

1. Examine and revise, as necessary, Census's quality assurance methods to identify, quantify, and rectify problems. (See page 8.)
2. Designate non-traditional student housing (e.g., private dorms, cooperative housing facilities) as group quarters. (See page 8.)
3. Reduce the inefficiencies associated with listing, potentially validating, and enumerating large apartment complexes by (a) better preparing group quarters address canvassing listers with examples of what are and what are not other living quarters, (b) determining if there are better ways to identify multiple units associated with an address to reduce the group quarters validation workload, and (c) efficiently assigning non-response follow-up enumerators to large apartment complexes. (See page 10.)
4. Review and revise, as necessary, the methods used to evaluate the accuracy of the group quarters lists. (See page 13.)
5. Conduct additional research to more effectively find small group homes. Research could include (a) targeting knowledgeable state officials to obtain group home licensing lists, (b) conducting more Internet research, and (c) during the group quarters validation operation, asking small group home administrators about the existence of other facilities. (See page 13.)
6. Reduce address list duplication by (a) strengthening address canvassing and group quarters validation training and instructions regarding duplicates, (b) ensuring that the master address file software matching program correctly identifies group quarters addresses as opposed to inactive housing unit addresses when updated by the U.S. Postal Service file, and (c) explore modifying how potential duplicate addresses are filtered from the master address file for the address canvassing and group quarters validation operation. (See page 15.)
7. Consider using campus resources, such as a student Greek life office, in order to obtain administrative records for fraternity/sorority students. (See page 19.)
8. Explore using the Internet as a possible response option for the enumeration of college/university students living in group quarters. (See page 20.)
9. Evaluate the costs and benefits of the ICR scanning process to determine if the intended goal to track ICRs could be achieved more efficiently, such as using a sealed envelope system. (See page 22.)

10. Assess the effectiveness of the new/newly worded ICR form questions and consider limited use of “skip” patterns to avoid respondent confusion that leads to redundant answers. (See page 25.)
11. Provide crew leaders with adequate information so that they can more efficiently and effectively assign work to group quarters enumerators. (See page 25.)
12. Redesign the DD-116 *Group Quarters Listing Sheet* to ensure that it does not inadvertently confuse enumerators and create rework. (See page 25.)



**2006 Census Test Group Quarters "Individual Census Report"**  
**Back**

**8. Do you live or stay in this facility MOST OF THE TIME?**

- Yes  
 No

**9. What is the full address of the place where you live or stay MOST OF THE TIME?**

*Please complete all that apply.*

Number

Street name

Apartment number

Rural route type and number

Rural route box number

PO box number

City

County

State or foreign country

ZIP Code

The Census Bureau estimates that, for the average respondent, this form will take about 5 minutes to complete, including the time for reviewing the instructions and answers. Send comments regarding this burden estimate or any other aspect of this burden to: Paperwork Reduction Project 0607-0919, U.S. Census Bureau, 4700 Silver Hill Road, Stop 1500, Washington, DC 20233-1500. You may e-mail comments to: Paperwork@census.gov; use "Paperwork Project 0607-0919" as the subject.

Respondents are not required to respond to any information collection unless it displays a valid approval number from the Office of Management and Budget.

**FOR OFFICIAL USE ONLY**

GQ

A. PN

B. JIC1

C. JIC2

060502



***Thank you for completing your official  
2006 Census Test form.***

## APPENDIX B: 2006 Census Test Group Quarters Definitions

DD-1028.4(GQV) (6-24-2005)	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU
<b>OTHER LIVING QUARTERS FLASHCARD 2006 Census Test</b>	
<b>Side 1 – DEFINITIONS OF PLACES PEOPLE LIVE OR STAY AND THE SERVICES PROVIDED</b>	
<ol style="list-style-type: none"><li><b>1. Correctional facility for adults or juveniles</b> Prisons, jails, detention centers, halfway houses operated for correctional purposes, residential training schools and farms, reception and diagnostic centers, group homes operated by or for correctional authorities, and boot camps for juvenile delinquents.</li><li><b>2. Group home (non-correctional) or residential treatment center (non-correctional)</b> Group living arrangements in the community providing room, board, and supportive services, such as assistance with daily living skills, and social, psychological or behavioral programs. Or, residential facilities that provide treatment on-site in a highly structured live-in environment for the treatment of drug/alcohol abuse, mental illness, and emotional/behavioral disorders.</li><li><b>3. Health care facility</b> Skilled nursing facility or nursing home providing long-term 24 hour care with licensed nurses for non-acute medical care. Hospitals and free standing hospice units.</li><li><b>4. Hotel, motel, single room occupancy units, inn, resort, lodge or bed &amp; breakfast</b> All types of lodging facilities that may include permanent housing for some clients and/or housing for people experiencing homelessness.</li><li><b>5. Independent living or assisted living facility</b> Facilities that provide housing for the elderly and coordinates personal support services, 24 hour supervision and assistance to meet needs in a way that promotes maximum dignity and independence for each resident. These facilities are designed for people who need regular help with the activities of daily living but do not necessarily require skilled medical care. These facilities may contain a skilled nursing unit or nursing home.</li><li><b>6. Recreational Vehicle (RV) park, campground, marina or racetrack</b> Includes both commercial and private</li><li><b>7. Religious group living quarters</b> Facilities owned or operated by religious organizations that are intended to house their members in a group living situation such as convents, monasteries or abbeys. (Seminary students living in group quarters are classified as college student housing not religious group quarters.)</li><li><b>8. Residence hall, dormitory, or fraternity/sorority house for students</b> Group housing for colleges, universities and seminaries.</li><li><b>9. School for people with disabilities (residential) e.g. blind, deaf and the developmentally disabled</b> Group housing for students at schools for students with disabilities.</li><li><b>10. Shelter or soup kitchen for people experiencing homelessness</b> Emergency and transitional shelters are places where people experiencing homelessness stay at least overnight. Examples are missions, shelters for runaway children, and locations run by private groups or local governments. These are not shelters that operate only in the event of a natural disaster. <i>Soup Kitchens provide meals primarily to people experiencing homelessness</i></li><li><b>11. Worker's Group Living Quarters or Job Corps centers</b> Migratory farm worker camps, ranch workers housing, vocational training facilities, and all group housing for staff in separate buildings or wings.</li></ol>	

(Side 2 of the flash card provides descriptions of adult correctional facilities)



## **APPENDIX C: Census 2000 Evaluations of Group Quarters Operations**

U.S. Census Bureau, September 2005. *Group Quarters Validation Evaluation*, 2010 Census Test Memoranda Series No. 44, 2004 Census Test Evaluation Report #10, Washington, D.C.: Census Bureau.

U.S. Census Bureau, February 2004. *Special Place/Group Quarters Enumeration*, Census 2000 Topic Report No. 5: Census 2000 Testing, Experimentation, and Evaluation Program. Washington, D.C.: U.S. Census Bureau.

U.S. Census Bureau, August 6, 2003. *Group Quarters Enumeration*, Census 2000 Evaluation E.5, Revision 1. Washington, D.C.: U.S. Census Bureau.

National Research Council, 2004. *Reengineering the 2010 Census, Risks and Challenges*. Panel on Research on Future Census Methods. Daniel L. Cork, Michael L. Cohen, and Benjamin F. King, eds. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, D.C.: The National Academies Press.

U.S. Government Accountability Office, January 2005. *2010 Census: Basic Design Has Potential, but Remaining Challenges Need Prompt Resolution*, GAO-05-661. Washington, D.C.: GAO.

U.S. Government Accountability Office, July 2003. *Decennial Census: Lessons Learned for Locating and Counting Migrant and Seasonal Farm Workers*, GAO-03-605. Washington, D.C.: GAO.

Office of Inspector General, September 2004. *Improving Our Measure of America: What the 2004 Census Test Can Teach Us in Planning for the 2010 Decennial Census*, Report No. OIG-16949. Washington, D.C.: OIG.


APPENDIX D: Census's Response

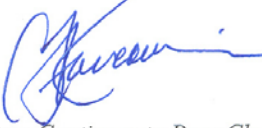


UNITED STATES DEPARTMENT OF COMMERCE  
Economics and Statistics Administration  
U.S. Census Bureau  
Washington, DC 20233-0001  
OFFICE OF THE DIRECTOR

SEP 20 2006

MEMORANDUM FOR Jill Gross  
Assistant Inspector General for Inspections  
and Program Evaluations

Through: E.R. Anderson   
Acting Deputy Under Secretary  
for Economic Affairs

From: Charles Louis Kincannon   
Director

Subject: *Enumerating Group Quarters Continues to Pose Challenges*  
Draft Inspection Report No. IPE-18046/September 2006

The attached is in response to your memorandum of September 8, 2006, requesting comments on the subject draft report. We appreciate the opportunity to review this report prior to publication.

Attachment

cc: US/EA

U.S. Census Bureau Comments on  
*Enumerating Group Quarters Continues to Pose Challenges*  
Draft Inspection Report No. IPE-18046/September 2006

General Comments

- *Overall* - This document should reference the 2006 Census Test rather than the 2006 test, Local Census Office (LCO).
- There are Title 13 confidentiality concerns with identifying the group quarters (GQ) in the report (see pages 17 and 18). We suggest the actual names of the GQs be stricken from this report.

Specific Comments

*Page 2* - “Enumerating group quarters in the 2006 test consisted of ....” We initially develop a “potential list of GQs.” A firm list is made only after the GQ has confirmed that it will be open and available to participate.

*Page 2 - Development of the Group Quarters List:* The footnote in this paragraph should indicate association with “ongoing surveys” rather than just the American Community Survey. We also suggest that you indicate that other living quarters were identified through the address canvassing operation.

*Page 2 - Validation of the Group Quarters List:* Throughout this paragraph, reference should be made to “other living quarters or OLQs” rather than potential group quarters. You noted that the 35-page validation questionnaire requires residents to identify their facility type and give a contact name and phone number. This is only done after they have first identified their “type of living quarters,” e.g., housing unit (HU) or GQ. If it is determined to be a GQ, then residents are next asked to identify their facility type and provide a contact name and phone number. The questionnaire does ask for the contact name before determining the type of OLQ, (Q.3). The phone number is asked only if the OLQ is possibly a GQ; however, if it is a hospital or assisted-living facility that has no qualified GQs, the phone number is collected before that is learned.

Through a series of questions, using the other living quarter validations (OLQV) questionnaire, the contact person was guided through the steps necessary to validate the type of living quarters at the OLQ address. Once an address was identified as a GQ, the interviewer then asked the respondent to self-identify the type of GQ. This OLQV questionnaire also captured the contact name and phone number for each GQ.

*Page 3 - Table 1: Summary of GQ Operations:* The description for Address Canvassing should read: “Identify potential Other Living Quarters (OLQs)” since this is

one of the objectives of the Address Canvassing operation. The two items in the description of GQ Validation/Advance Visit should be reversed since the GQ administrators are contacted only after the listers have visited the OLQs. The chart should be noted that listers not only visited OLQs in Austin, but in Cheyenne River Reservation, as well.

**Page 5 - Table 2: Summary of Group Quarters Recommendations:** The recommendation “Track individual forms from enumeration through data capture” was made by the National Research Council of the National Academy of Sciences in its 2004 report and should be reflected in the chart.

**Pages 5-6 - Improve the Group Quarters list and reduce list duplication:** In addition to identifying potential group quarters during the 2004 and 2006 Census Tests, we also identified complex living arrangements and transient locations. Addresses deemed potential GQs were designated as OLQs and “validated” rather than verified to ensure they were GQs during a separate Group Quarters Validation operation.

**Page 6 - Count people where they sleep (versus where records are kept):** We attempted to try a new method in the 2006 Census Test. For instance, we conducted validation and enumeration operations at the actual GQ locations. In 2000, enumeration was at the GQ level. Validation and Facility Questionnaire was done at the Special Place level.

**Page 7 - “In addition, when we received...and supplies.”** We do not agree with this statement. Past experience has shown that we must account line-by-line for each address on the Master Address File. Large apartment complexes were validated as HUs in the Group Quarters Validation operation.

**Page 7 - Enumerating private dormitories as group quarters would be cheaper and increase Census accuracy:** We disagree with this assertion. There is no evidence that this will be cheaper or increase accuracy. GQ enumeration would still require a personal visit, which is not cheaper than nonresponse follow-ups (NRFU). We may need to use administrative records to complete the Individual Census Reports (ICRs). Your statement “During our April 2006 visit, ...officials were unaware of the high number of private dorms...to their attention” is incorrect. Managers in the Field Division at Headquarters were indeed aware of the private dorms in Austin at the time the operation was being conducted.

**Page 7 -** You state that the nonresponse follow-up operation began in May. It actually started in April. Therefore, your assumption that students might have already left [the dorm] and enumerators would have used valuable time and resources to unsuccessfully attempt six times to contact the resident to complete the questionnaire should be stricken.

**Page 8 - Table 3: Private Dorm NRFU Workload:** We would like to clarify the reason why four of the six dorms were 100 percent enumerated during NRFU. The compressed test schedule did not allow enough time for these addresses to be included in

the HU universe to receive a questionnaire prior to NRFU. Because of this, all addresses were included in NRFU. Some would have responded by mail had we mailed the questionnaire.

*Page 8* - We agree that the Census Bureau should reconsider its definitions and examine whether private dorms would be better categorized as GQs. We are considering this change; work is currently underway.

*Page 8* - We agree with your statement that we need to consider how co-ops can be categorized as GQs and redesignate such non-traditional student housing as GQs, but keep in mind that other unrelated groups live together as well, not just students.

*Pages 9-10* - **Treatment of large apartment complexes needs to be revisited:** The problem having nearly a dozen listers visit the private dorm rather than one or two of them was caused by the vacant/delete operation that was done for the first time during the 2006 Census Test concurrently with the NRFU as cases were identified. This was one of the six test objectives. We have since decided that we will not do the vacant/delete concurrently with NRFU in 2008 or 2010.

*Page 10* - In the matter of quality control and assurance, you state that the Census Bureau needs to review why it had not identified the problems that OIG encountered. The purpose for conducting this test was to identify problems encountered during implementation. Final evaluation results are not available, but Census Bureau staff were made aware of these problems through debriefings and actual observations at the LCO.

*Pages 12-13* - **The GQE list was incomplete:** We seek clarification of your statement "The website provides a listing of 'intermediate care facilities for people with mental retardation,' referred to...occupancy information." Were these addresses included in the census as a HU? It is important to say they were not missed in the census.

*Page 14* - "...four group quarters were identified during the validation and enumeration operations that were not on the enumeration list. Although these homes would normally have been added during the Census, it raises concern...not because probing questions were asked by the field staff." The Field Division managers were aware of the additions, but we did not add GQs in 2006 Census Test. We will have a process to add GQs in the 2008 Census Dress Rehearsal. Further the report states, "The only question in the validation questionnaire related to other group quarters is specific to that location not other locations." These other GQs may be on another list assigned to another lister.

*Page 14* - "Additional questions could be asked during operations to identify other group quarter facilities." We implemented this in Census 2000, and it caused more confusion and duplication.

*Page 14* - **Several facility and group quarter names on the GQE list were inaccurate:** The OIG reports that some facilities and group quarters names were incorrectly named on the Census' group quarters list most likely because the GQV lister did not speak to the

most knowledgeable respondent to correctly answer the questions. We take exception to this statement. In GQV, we ask the name of the GQ, and we record what the respondent reports. Additionally, we ask to speak to a knowledgeable respondent to complete the interview. Your suggestion that the Census Bureau use the Internet and other resources to improve both the completeness and accuracy of the list is a good one. The Census Bureau's National Processing Center conducted a test using the Internet to identify shelters and soup kitchens. The results of that test are currently being evaluated. On the other hand, one should not assume that any list created by national, state, or local officials is any more accurate than respondent-reported information.

**Page 14 - Duplication remains problematic:** The OIG states that the Census Bureau has not resolved the problem with duplicates of individuals within group quarters records. Although we still experience some duplication in the GQs records, we believe the level of duplication is now much smaller since we have improved upon it after Census 2000. Our integrated approach of GQs and HUs address files should reduce the number of duplicate addresses.

**Page 18 - Use of the Internet for student populations warrants exploration:** The Census Bureau has studied using the Internet for the 2010 Census and has concluded that it would not be cost-beneficial or secure in doing so.

**Page 19 - Double scanning all ICRs for check-in/out appears unnecessary:** We disagree with this assumption. This is standard procedure for all paper operations. We check-in/check-out questionnaires. It might appear to be redundant in an office where we will not be doing all operations, but in over 400 LCOs, anything can happen...more operations; chances of questionnaires being misplaced, or confusion with other operations. We desire to have a set procedure applicable to all operations.

**Page 21 - Figure 5: Projected Increase in Scanned ICRs from 2000 to 2010:** Please clarify how you arrived at 384,572 as the 2000 Actual Total for GQs. The actual GQs population number in Census 2000 was around 7.8 million. You further assert that double scanning is unnecessary and will increase both cost and time that office clerks must devote to the process that may increase errors during the 2010 Census. We continue to disagree with this statement. As in Census 2000, this could cause major problems during data capture. By data capture time, we would be unable to resolve the problems easily. Our process reduces the error of lost forms and lost coverage in the census.

**Page 22 -** We disagree with your suggestion to track ICRs through the use of sealed envelopes and stamps or labels. If this approach is adopted, we cannot address problems that arise at the data capture center as in Census 2000. Further, if the envelope was lost, we would not know if it was lost in the office or if an empty envelope was mailed to us mistakenly. This would require two different check-out procedures.

**Page 22 - Repetition of responses to ICR test questions indicates respondent confusion:** We acknowledge there is some confusion. We are currently looking at revisions to the ICR to incorporate skip patterns as appropriate.

**Page 23 - Crew leaders lacked sufficient information to effectively make enumerator assignments:** We disagree with the statement: “But since crew leaders lacked address information when assigning enumerators, they were unable to identify and assign group quarters locations in close proximity to an enumerator’s home...” Crew leaders are actually provided address information for each address to be visited in various formats, such as maps and assignment directory listings. Increased automation in the 2010 Census should help facilitate making assignments to enumerators. We do, however, agree that an enumerator should work in neighborhoods close to home. That is the premise that we use to promote Census Bureau jobs. We want to hire employees indigenously; that is, hire those to work in the neighborhoods where they live. Our work assignments are based on block information, which provides input to closest proximity to an enumerator’s home. There may be occasions where an enumerator might be asked to work in a neighboring assignment area, but for the most part, employees are assigned to their own neighborhoods.

**Page 23 - The Group Quarters Listing Sheet (DD-116) format caused problems:** The purpose of the GQs Listing Sheet is not to summarize respondent information but to keep track of ICRs returned or not returned, and to track whether they are complete or missing information. Column B is used for recording the Person Number, not to sequentially tally the number of respondents.

Comments on Recommendations (Pages 25-26)

*1. Examine and revise, as necessary, Census’s quality assurance methods to identify, quantify, and rectify problems. (See page 7.)*

Comment: We believe our quality assurance methods are sufficient to identify and quantify problems.

*2. Designate non-traditional student housing (e.g., private dorms, cooperative housing facilities) as group quarters. (See page 7.)*

Comment: Work is underway on this topic.

*3. Reduce the inefficiencies associated with listing, potentially validating, and enumerating large apartment complexes by (a) better preparing group quarters address canvassing listers with examples of what are and what are not other living quarters, (b) determining if there are better ways to identify multiple units associated with an address to reduce the group quarters validation workload, and (c) efficiently assigning non-response follow-up enumerators to large apartment complexes. (See page 9.)*

Comment: We concur with this recommendation.

4. *Review and revise, as necessary, the methods used to evaluate the accuracy of the group quarters lists. (See page 12.)*

Comment: We will consider part of the recommendation to assure a more complete list of the small GQs, such as group homes, and to reduce duplication of the lists.

5. *Conduct additional research to more effectively find small group homes. Research could include (a) targeting knowledgeable state officials to obtain group home licensing lists, (b) conducting more Internet research, and (c) during the group quarters validation operation, asking small group home administrators about the existence of other facilities. (See page 12.)*

Comment: We concur with your recommendation to conduct more Internet research. The National Processing Center conducted a test using the Internet to identify shelters and soup kitchens. The results are currently being evaluated. We do not agree with items (a) and (c); therefore we will not be pursuing these.

6. *Reduce address list duplication by (a) strengthening address canvassing and group quarters validation training and instructions regarding duplicates, (b) ensuring that the master address file software matching program correctly identifies group quarters addresses as opposed to inactive housing unit addresses when updated by the U.S. Postal Service file, and (c) explore modifying how potential duplicate addresses are filtered from the master address file for the address canvassing and group quarters validation operation. (See page 14.)*

Comment: See response to Recommendation 4 above.

7. *Consider using campus resources, such as a student Greek life office, in order to obtain administrative records for fraternity/sorority students. (See page 17.)*

Comment: Using administrative records is already a part of our process. We are mandated to first attempt to get the GQ resident, and then use administrative records when that is not possible.

8. *Explore using the Internet as a possible response option for the enumeration of college/university students living in group quarters. (See page 18.)*

Comment: We disagree with this recommendation. Reference our 2010 Decennial Census Program Decision Memorandum No. 14: *Rationale for the Decision to Eliminate the Internet Option from the DRIS Contract*, dated July 19, 2006.

9. *Evaluate the costs and benefits of the ICR scanning process to determine if the intended goal to track ICRs could be achieved more efficiently, such as using a sealed envelope system. (See page 19.)*



Comment: We disagree with this recommendation. This approach will not allow us to address problems that arise at the data capture centers as was done in Census 2000, and could possibly require more than one check-out procedure.

*10. Assess the effectiveness of the new/newly worded ICR form questions and consider limited use of “skip” patterns to avoid respondent confusion that leads to redundant answers. (See page 22.)*

Comment: We concur with this recommendation and are currently working on this topic.

*11. Provide crew leaders with adequate information so that they can more efficiently and effectively assign work to group quarters enumerators. (See page 22.)*

Comment: We concur with this recommendation. Our crew leaders already have the information. We will work on providing them better training on how to use the information.

*12. Redesign the DD-116 Group Quarters Listing Sheet to ensure that it does not inadvertently confuse enumerators and create rework. (See page 22.)*

Comment: We concur with this recommendation.