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# **American Community Survey Design and Methodology (January 2014)**

## **Chapter 8: Data Collection and Capture for Group Quarters**



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## **Chapter 8: Data Collection and Capture for Group Quarters**

### **8.1 Overview**

All living quarters are classified as either housing units (HUs) or group quarters (GQ). An HU is a house, an apartment, a mobile home, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other people in the building and that are directly accessible from outside the building or through a common hall.

GQs are places where people live or stay, in a group living arrangement that is owned or managed by an entity or organization providing housing and/or services for the residents. These services may include custodial or medical care, as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in GQs usually are not related to each other. GQs include such places as college/university student housing, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, workers' group living quarters and Job Corps centers, and emergency and transitional shelters. GQs are defined according to the housing and/or services provided to residents, and are identified by census GQ type codes.

In January 2006, the American Community Survey (ACS) was expanded to include the population living in GQ facilities. The ACS GQ sample encompasses 12 independent samples; like the HU sample, a new GQ sample is introduced each month. Data collection for each monthly sample lasts six weeks and does not include a formal nonresponse follow-up operation. The GQ data collection operation is conducted in two phases. First, U.S. Census Bureau Field Representatives (FRs) conduct interviews with the GQ facility contact person or the administrator of the selected GQ (referred to as the GQ level interview), and second, the FR conducts interviews with a sample of individuals from the facility (referred to as the person- or resident-level interview).

The GQ-level data collection instrument is an automated Group Quarters Facility Questionnaire (GQFQ). Information collected by the FR using the GQFQ during the GQ-level interview is used to determine or verify the type of facility, population size, and to draw a random sample of residents to be interviewed. FRs conduct GQ-level data collection at approximately 20,000 individual GQ facilities each year.

During the person-level phase, an FR uses a Computer-Assisted Personal Interview (CAPI) automated instrument to collect detailed information for each sampled resident. FRs also have the option to distribute a bilingual (English/Spanish) questionnaire to residents for self-response if unable to complete a CAPI interview. FRs collect data from approximately 195,000 GQ sample residents each year. All of the methods described in this chapter apply to the ACS GQ operation in both the United States and Puerto Rico, where the survey is called the Puerto Rico Community Survey (PRCS). Samples of all forms and materials used in GQ data collection can

be found at:

[http://www.census.gov/acs/www/about\\_the\\_survey/forms\\_and\\_instructions/#ACSGQ](http://www.census.gov/acs/www/about_the_survey/forms_and_instructions/#ACSGQ)

## **Preparation**

Outside vendors print most GQ data collection materials, such as the questionnaires, the questionnaire information guide booklet, brochures, the information card booklet, and Privacy Act notices. Trained quality control staff from NPC monitor the work as the contractors print the materials. The NPC rejects batches of work if they do not meet contractual quality standards. On a monthly basis, the Census Bureau headquarters provides label/address files for GQ materials to the NPC. The NPC receives the files approximately eight weeks prior to the sample months, and is responsible for using these files to assemble GQ and resident-level packages. Each GQ level package contains questionnaire labels, the FAQ brochure, the Survey Package Control List for Special Sworn Status (SSS) Individuals, an Instruction Manual for SSS Individuals, a listing sheet, Thank You letter, and a copy of the Introductory Letter mailed to the GQ. Each resident-level package includes a questionnaire, resident level Introductory Letters, FAQ Brochure, and a Thank You letter. The NPC delivers both packages and other materials to the ROs two weeks before the start of each survey monthly panel.

## **8.2 Group Quarters (Facility-Level Phase)**

The GQ data collection operation is primarily completed through FR personal interviews. FRs obtain the facility information by conducting a personal visit interview with the GQ contact. Each FR is assigned approximately two sample GQ facilities each month, and interviews are conducted over a period of six weeks.

During the GQ-level interviews, FRs verify sample GQ information such as the name, address, and GQ type. FRs also obtain a roster of residents currently living at the GQ. The GQFQ randomly selects residents for person-level interviews. The information obtained from GQ interviews is transmitted nightly to Census Bureau headquarters through a secure file transfer.

### **Previsit Mailings**

This section provides details about the materials mailed to each GQ facility before the FR makes any contact.

**GQ Introductory Letter.** Approximately two weeks before the FRs begin each monthly GQ assignment, the Census Bureau's National Processing Center (NPC) mails an introductory letter to the sampled GQ facility. The letter explains that the FR will visit the facility to conduct GQ- and person-level data collection. It describes the information that will be asked by the FR during the visit, the uses of the data, the Internet address where they can find more information about the ACS, and Regional Office (RO) contact information. This letter is printed at the NPC using print-on-demand technology, which merges the letter text and the sample GQ name and address.

There are special letters for administrators at college/university student housing and health care facilities because these are some of the most challenging GQ types to interview.

**GQ Frequently Asked Questions (FAQ) Brochure.** This brochure contains FAQs about the ACS and GQ facilities, and is mailed to the sample GQ facility along with the GQ introductory letter. Examples of the FAQs are “What is the American Community Survey?,” “Do I have to answer the questions on the American Community Survey?,” and “Will the Census Bureau keep my information confidential?” Similar brochures are sent to sample GQ facilities in Puerto Rico and Remote Alaska.

**GQ State and Local Correctional Facilities Letter.** FRs may mail another letter to selected correctional facilities after the GQ introductory letter is sent, but before calling to schedule an appointment to visit. This letter was developed to assist FRs in gaining access to state and local correctional facilities, although the GQ operation does not require FRs to send the letter. The letter asks for the name and title of a person with the authority to schedule FR visits and to coordinate the GQ data collection. It also provides information about the ACS and the dual nature of the FR visit to the facility, and includes a form to return to the RO with the contact name, title, and phone number of a designated GQ contact.

### **Initial Contact with GQ Facility**

In order to conduct the GQ-level interviews for the assigned facility, the FR is instructed to try first to make the initial contact by telephone. If successful in reaching the GQ contact (usually the facility administrator), the FR uses the automated GQFQ, which is available in both English and Spanish to collect information about the facility (such as verifying the name and address of the facility) and to schedule an appointment to visit and complete the GQ-level data collection phase.

If the GQ contact refuses to schedule an appointment for a visit, the FR notifies the RO and the RO staff try to gain the GQ contact’s cooperation. If this attempt at scheduling an appointment is unsuccessful, the FR then visits the GQ facility to try to get the information needed to generate the sample of residents and to conduct the person-level interviews. If still unsuccessful, the RO or FR explains the mandatory nature of the survey, what the FR is attempting to do at the facility, and why. The ACS Group Quarters Branch may also contact the GQ to explain the nature of the survey and try to gain cooperation.

## **Visiting the GQ Facility**

Upon arrival at the facility, the FR updates or verifies the GQ name, mailing and physical address, facility telephone number, contact name(s), and telephone number(s). Using a flashcard, the FR asks the GQ administrator to indicate which GQ-type code best describes the GQ facility. Depending on the size of the facility, either a sample or all of the residents will be interviewed.

After determining that the GQ facility is in scope for GQ data collection, the FR asks for a roster of names and/or bed locations for everyone that is living or staying at the sample GQ facility on the day of the visit. This roster is used to generate the sample of residents to be interviewed. If a register is not available, the FR creates one using a GQ listing sheet.

The GQFQ instrument proceeds automatically to the beginning of the sampling component after the FR has entered all required facility information and the GQ contact person verifies that there are people living or staying there at the time of the visit. If there are no residents living or staying at the GQ facility at that time, the FR completes the GQ-level interview to update the GQ information, but does not conduct person-level interviews.

The sample of GQ residents to be interviewed is generated from the GQFQ instrument through a systematic sample selection. (See Section 8.3 for information about data collection from individuals.) The FR matches the line numbers generated for the person sample to the register of current residents. A grid up to 15 lines long appears on the GQFQ laptop screen, along with the line number corresponding to the register, a place for name, the sample person location description, a telephone number, and a GQ control number (assigned by the GQFQ sampling program). To complete the sampling process, the FR enters information into the GQFQ that specifically identifies the location of each sample person.

An interim or final outcome is assigned to each GQ-level interview, and reasons for GQ refusals or noninterviews are also specified. The GQFQ assigns an interim GQ-level interview status reason to allow closure of a case and subsequent reentry. From a list in the GQFQ, the FR selects the appropriate reason for exiting an interview and the GQFQ assigns an outcome code that reflects the current interview status.

There are several reasons why GQ-level data collection may not be completed, such as the FR being unable to locate a facility, finding that there are no residents living or staying at the sample GQ facility during the data collection period, determining that there are now only housing units at the sample GQ facility, or finding that the facility no longer exists.

All information collected during the GQ-level phase is transmitted nightly from each FR to the Census Bureau through secure electronic file transfer.

### 8.3 Person-Level Phase

This section describes person-level interviews at sample GQ facilities. During this phase, the FR collects data for up to 15 sample residents at each assigned GQ facility using a Computer-Assisted Personal Interviewing (CAPI) automated instrument.

#### Person-Level Survey Instruments and Materials

This section provides details about the materials needed to conduct ACS GQ person-level interviews.

**Introductory Letter for the Sample Resident.** The FR gives each sampled person an introductory letter at the time of the person-level interview. It provides information about the ACS, describes why it is important that they complete the GQ questionnaire, describes uses of ACS data, stresses the confidentiality of their individual responses, and includes the Internet address for the ACS Web site.

**Computer Assisted Personal Interviewing (CAPI) Questionnaire Instrument (QI).** The CAPI QI is the preferred method of data collection. FRs use the CAPI QI to conduct face-to-face interviews with sample GQ residents. Interviews can be conducted in both English and Spanish. The GQ QI instrument is designed to record detailed population information for one person. It does not include housing questions except for the food stamp benefit question. The QI contains skip patterns based on GQ type. For example, sample residents living in nursing facilities and correctional facilities are not asked the journey-to-work questions.

**ACS GQ Paper Questionnaire.** The FR distributes a paper GQ questionnaire to residents for self-response when a face-to-face CAPI interview cannot be conducted. This questionnaire is a bilingual, 16 page, two-color, flip-style booklet. Eight blue pages make up the English language GQ questionnaire and, when flipped over, eight green pages make up the Spanish language version. Like the QI, the GQ paper questionnaire is designed to record detailed population information for one person. It does not include housing questions except for the food stamp benefit question. The paper questionnaire does not have skip patterns based on GQ type.

**GQ Questionnaire Instruction Guide.** The FR provides a copy of the questionnaire Instruction Guide to sample residents when a personal interview cannot be conducted, and the resident is completing the questionnaire him/herself. This guide provides respondents with detailed information about how to complete the GQ questionnaire. It explains each question, with expanded instructions and examples, and instructs the respondent on how to mark the check boxes and record write-in responses.

**GQ Frequently Asked Question Brochure.** Every sample GQ resident is given a FAQ brochure. This brochure provides answers to questions about the ACS GQ program.

**GQ Return Envelopes.** The GQ envelopes are used to return completed paper questionnaires to the FR or sworn GQ contact. These envelopes are not designed for delivery through the U.S. Postal Service.

### **Completing the GQ CAPI Automated Questionnaire Instrument (QI) or Paper Questionnaire**

There are several ways for an FR to obtain a completed interview. The preferred method is for the FR to conduct a face-to-face interview with the sampled resident using the CAPI Questionnaire Instrument (QI); however, other data collection methods may be necessary. The FR may conduct a telephone interview with the sample resident using CAPI QI, conduct a face-to-face CAPI proxy interview with a relative, guardian, or GQ contact; or leave a paper questionnaire with the resident to complete; or leave the questionnaires with the GQ contact to distribute to sampled residents and collect them when completed. If the questionnaires are left with sample residents to complete, the FR arranges with the resident or GQ contact to return and pick up the completed questionnaire(s) within two days. The FR must be certain that sample residents are physically and mentally able to understand and complete the questionnaires on their own.

Before a GQ contact or a GQ employee obtains access to the names of the sample residents and the sample residents' answers to the GQ questionnaire, they must take an oath to maintain the confidential information about GQ residents. By taking this oath, one attains Special Sworn Status (SSS). Generally, an SSS individual is needed when the sample person is not physically or mentally able to answer the questions. An FR must swear in social workers, administrators, or GQ employees under Title 13, United States Code (U.S.C.) if these individuals need to see a sampled resident's responses. In taking the Oath of Nondisclosure, SSS individuals agree to abide by the same rules that apply to other Census Bureau employees regarding safeguarding of Title 13 respondent information and other protected materials, and acknowledge that they are subject to the same penalties for unauthorized disclosure. Relatives or legal guardians do not need to be sworn as SSS individuals. If the sample person gives a GQ employee permission to answer questions or help to answer on their behalf, the GQ employee does not need to be sworn in.

### **Questionnaire Review**

When a CAPI interview is conducted, the QI contains automated edit checks within the instrument to ensure the quality of the interview and to determine the final outcome of the interview (completed, sufficient partial, or insufficient partial interview). When paper questionnaires are used for self-response, the edit screen in the CAPI instrument is used by FRs to verify that all responses are legible and that the write-in entries and check boxes contain appropriate responses according to the skip patterns on the questionnaire. The FRs also determine whether the self-response questionnaire is a completed interview, a sufficient partial,

or an incomplete interview. The FR records the final outcome code for each self-response paper questionnaire on the Census Use Only page on the questionnaire.

An interview is considered complete when all or most of the questions have been answered, and a sufficient partial when enough questions have been answered to define the basic characteristics of the sample person. A case is classified as a noninterview when the answers do not meet the criteria of a complete or sufficient partial interview.

The FR conducts a GQ-level assignment review. This review is necessary to ensure that all CAPI interviews have been conducted, and that all self-response questionnaires dropped off have been accounted for.

FRs ship paper questionnaires to the RO on a flow basis throughout each 6-week data collection period. The ROs conduct a final review of the questionnaires prior to sending completed questionnaires to NPC for keying. CAPI interviews are transmitted from laptops to ACSO processing staff on a nightly basis.

## **8.4 Check-In and Data Capture**

CAPI QI interview data is transmitted nightly via automated procedures to Census Bureau headquarters. Based on the final outcome code recorded for each paper questionnaire, the RO separates blank questionnaires from those with data. Only questionnaires that contain completed, or sufficient partial data are shipped each week to NPC for check-in and keying. The forms are sorted according to the sample month and location (United States or Puerto Rico).

### **Check-In**

The NPC check-in staff are given three days to check in a form, although they usually check in all the forms they receive within one day. The check-in process results in batches of 50 questionnaires for data capture.

The NPC accepts completed questionnaires shipped from the RO on a weekly basis, for a period of six weeks from the start of the sample month. Each RO closes out the sample month GQ assignments and accounts for all questionnaires. The NPC completes the sample month check-in within seven days of receipt of the final shipment from each RO. Each questionnaire contains a unique bar code that is scanned; this permits forms to be sorted according to monthly sample panel and within each panel, by location. The forms for the United States and Puerto Rico contain slightly different formatting and are keyed in separate batches.

Clerks review each page of every returned ACS GQ questionnaire. They look for correspondence, which they forward to headquarters if necessary. They then scan each bar code to officially check in the form, retain the English or Spanish pages of the questionnaire, and organize the forms into batches of 50 questionnaires.

## **Data Capture**

After the questionnaires have been checked in and batched, they move to the keying unit where the questionnaires are keyed using Key-From-Image (KFI) technology. NPC clerical staff key the data from the questionnaires and transmit data files to Census Bureau headquarters each night. Keyers have approximately two months to complete the keying for a given interview panel.

### **8.5 Special Procedures**

Some exceptions to the data collection procedures are necessary to collect data efficiently from all GQ facilities, such as those in remote geographic locations or those with GQ security requirements.

Since 2007, there have been concerns about the coverage/data from college dorms during the summer months, identified as May-August. Fewer students live in dorms during the summer months compared with other months of the year, which causes a large increase in the number of noninterviews during this period. Beginning January 2013, the ACS collected data at college dorms in only the nonsummer months of January-April, and from September-December of each data collection year. By reallocating dorms from the summer months into nonsummer months we expect that we will improve GQ data in several ways. For example, we expect to have better data from which to impute responses. In addition, this change will reduce data collection costs because fewer FRs will be sent to college dorms that are largely vacant in summer months.

#### **Biannual Data Collection in Remote Alaska**

FRs conduct data collection at sample GQ facilities in Remote Alaska during two separate periods each survey year; they visit a sample of GQ facilities from January through mid-April, and from September through mid-January. This exception is needed because of difficulties in accessing these areas at certain times of the year. The two time periods designated for GQ interviewing are the same as those used for ACS data collection from sample housing units in Remote Alaska. Chapter 7, Section 7.4 provides additional information about data collection in Remote Alaska.

#### **Annual Data Collection Restrictions in Correctional and Military Facilities**

Once each survey year, the FRs conduct all data collection at state prisons, local jails, halfway houses military disciplinary barracks, and correctional institutions. These GQ types, when selected for the sample multiple times throughout the survey year, have each instance of selection clustered into one random month for data collection. (The Census Bureau agreed to a Department of Justice request to conduct data collection at each sampled state prison and local jail only once a year.)

When these GQ types are selected for the sample more than once in a year, the FR (or group of FRs) makes one visit and conducts all interviews at the GQ facilities during one randomly assigned month. The GQFQ automatically takes the FR to the person-level sample selection screen for each multiple sample occurrence of the GQ facility.

### **Survey Period and Security Restrictions in Federal Correctional Facilities**

Person-level data collection for the BoP operation is during a 4-month period (September through December) for selected federal prisons and detention centers. The BoP provides the Census Bureau with a file containing all federal prisons and detention centers and a full roster list of inmates for each federal facility. The Census Bureau updates the GQ-level information and generates the person-level samples for these GQ facilities.