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## INTRODUCTION

Residence rules play a crucial role in planning and taking a decennial census. They provide a basis for determining where to count persons in the census. Carefully defined residence rules not only contribute to the goal of obtaining an accurate count but also critically affect the whole array of decennial census data.

To meet the 1990 goal of providing accurate counts at all geographic levels, the Census Bureau has reexamined the residence rules to ensure that they are carefully defined, clearly elucidated, and easily understood by the population at large. Rules that are not easily understood or consistently interpreted clearly do not contribute to the goal of the census.

The discussion in this paper will focus on the rationale for the residence rules planned for the 1990 census and where applicable, the special processing operations designed to ensure that certain groups are counted in the correct place based on those residence rules.
HISTORICAL AND LEGAL PERSPECTIVE
Following ratification of the U.S. Constitution, a decennial enumeration committee prepared an enumeration act during the First Session of Congress in 1789 (Scott, 1968). Among the many issues addressed by the enumeration committee was the question of where to count a person in the census. In addressing this issue, the committee adopted the following rules for determining where to count a person: Be it enacted, that every person whose usual place of abode shall be in any family on the aforesaid first Monday in August next, shall be returned as of such family . . . every person . . . without a settled place of residence shall be inserted in the column of the aforesaid schedule, . . . in that division where he or she shall be on the said first Monday in August next, and every person occasionally absent at the time of enumeration, as belonging to that place in which he usually resides in the United States.
Thus, the Census Act of 1790 established the concept of usual residence as the overriding criterion for determining where to count a person
in the census. Recognizing that not all persons would have a settled place of residence during the census, the first Census Act also established the practice of counting such persons where found on Census Day. Finally, it required the counting of persons away from their usual residence on Census Day at the place where they usually reside.

By the end of the 19th century, the historical precedence for enumerating the population by use of a few basic residence rules was well established (Clemence, 1986). While the Census Bureau has modified the residence rules from census to census, the overriding consideration has been whether or not a particular rule contributes to the goal of obtaining accurate counts.

To a certain extent, the legal basis for the residence rules is implied in their historical evolution and acceptance throughout the past 20 decennial censuses. Except for constitutional issues, the Congress historically has delegated the details of the census process to the census Bureau. There are examples from case law in which plaintiffs have challenged particular residence rules in the courts. However, the courts usually have based their decisions in these cases on the fact that, except for constitutional issues, the Census Bureau has discretion with respect to the residence rules as long as these rules are reasonable and consistent with the tradition of counting persons at their usual residence.
BASIC 1990 RESIDENCE RULE
In adopting the concept of usual residence as the overriding criterion for determining where to count a person, the Census Bureau is following a tradition that is practical as well as ancient. From ancient to modern times the main purposes of taking a census have been to assess military strength, measure wealth, collect taxes, and only recently, to obtain general knowledge of persons. For raising armies and collecting taxes, it is practical to count people where they usually live. Similarly, counting persons where they usually live has been practical in American censuses given the unique political purpose for which the census was mandated (that is, apportionment of the House of Representatives), the length of the enumeration period, and other social factors (clemence, 1986). An enumeration based on some other criteria, such as legal residence, voting residence, or simply counting
people where found on Census Day would not assure the same degree of accuracy, fairness, and political equity from census to census.

While the usual residence concept is the main criterion that the Census Bureau will use to determine where to count a person in the 1990 census, there will be exceptions to this procedure. The exceptions discussed in this paper are justified on the basis of ensuring more accurate counts.

The key component to the process of correctly defining household composition is the census questionnaire item which asks the respondent to list household members.
(Figure 1 is the proposed item for both the 1988 Dress Rehearsal and the 1990 census.)

Pape 1
The 1988 census must count every person at his or her "usual residence." This means the place where the person lives and sleeps most of the time.

1a. What is the name of each person living here on Sunday, March 20, including all persons staying here who have no other home? If NO ONE staying here on March $\mathbf{2 0}$ usually lives here, list the name of each person staying here temporarily.

Include

- Everyone who usually lives here such as family members, housemates and roommates, foster children, roomers, boarders, and live-in employees
- Persons who are temporarily away on a business trip, on vacation, or in a general hospital
- College students who stay here while attending college
- Persons in the Armed Forces who live here
- Newborn babies still in the hospital
- Children in boarding schools below the college level
- Persons who stay here most of the week while working even if they have a home somewhere else
- Persons with no other home who were staying here on March 20

Do NOT include

- Persons who usually live somewhere else (except if EVERYONE is staying here temporarily)
- Persons who are away in an institution such as a prison, mental hospital, or a home for the aged
- College students who live somewhere else while attending college
- Persons in the Armed Forces who are stationed somewhere else
- Persons who stay somewhere else most of the week while working

Begin with the household member (or one of the household members) in whose name the home is owned, being bought, or rented. Enter last name, first name, and middle initial for each person.

| $\frac{1}{2}$ | $\frac{7}{8}$ |
| :--- | :--- |
| $\frac{3}{4}$ | $\frac{9}{9}$ |
| $\frac{10}{5}$ | $\frac{11}{12}$ |
| 6 |  |

16. If EVERYONE listed above is staying here only temporarily
and usually lives somewhere else, please fill this circle $\longrightarrow 0$ and enter the address of the usual home below.

| Houme number | Street of road/Rural route and box number | Apartient number |
| :---: | :---: | :---: |
| Cuy | Stan | 2 Cl Code |

NOW PLEASE OPEN THE FLAP TO PAGE 2 AND ANSWER ALL QUESTIONS FOR THE
FIRST 7 PEOPLE LSSTED. If more than 7 people are listed, a cencus taker will contact you.

Figure l. Proposed 1988 Household Membership Question and Instructions

The household membership question and instructions reflect several
improvements over the question and instructions used in the 1980 census.

For most of the population, application of and adherence to the usual residence concept is straightforward. The Census Bureau contacts persons at their usual residence and counts them there. However, the application of this concept is not straightforward for the entire population. Persons in institutions, those in the military, crews of vessels, persons with more than one residence, and children who divide time between their relatives' residences are all examples of persons for whom the concept of usual residence is ambiguous. In addition, to ensure the goal of obtaining accurate counts, the Census Bureau has adopted various coverage improvement procedures which necessarily involve contacting some persons away from their usual residence. The census Bureau develops search/match procedures to ensure that these persons are in fact counted at their usual residence.
"Search/match" refers to the process of finding the usual residence address in the census enumeration records and ensuring that the person is counted at that address.

## Ambiguous Groups, NO Search/Match

 RequiredSpecial residence rules are required for some groups, such as college students, to avoid the possibility of double counting. In recent censuses, the Census Bureau has not conducted search/match procedures for such groups since it is believed that the respondent and enumerator instructions are such that double counting is minimized. Most of these groups appear in the examples of persons to include or exclude in response to the household membership question. The particular groups that define this category include the following:

## College Students

Since the 1950 census, the Census Bureau has counted college students where they are living while attending college; before 1950, we counted them at the parental home.

The Census Bureau changed the policy in 1950 based on the fact that we did not count many college students at either their parental home or at their college residence. Following the 1970 census, the Borough of Bethel Park, Pennsylvania challenged this
policy but the U.S. District
Court that heard the suit ruled that the Census Bureau's policy for enumerating college students was "reasonable" since most students eat, sleep, and work for most of the year in the area where the college is located (Census Bureau, 1985a).

Adherence to the usual residence concept requires the Census Bureau to count college students in the 1990 census at the place where they are living while attending college.
Boarding school students The Census Bureau
traditionally counted boarding school students below the college level at their parental home. Given this traditional practice of enumerating boarding school students at the parental home as well as the small numbers involved, the Census Bureau plans to count boarding school students at the parental home in 1990.
Institutionalized Persons
The institutionalized population consists of persons living under formally
authorized, supervised care or custody. The facilities that house this population include correctional schools, penitentiaries, wards for juveniles, specialized hospitals, nursing homes for the elderly, and homes for the physically and mentally handicapped (Census Bureau, 1985b). For the 1990 census, the Census Bureau plans to differentiate between long-term and short-term facilities. The Census Bureau will count persons residing in long-term facilities (for example, penitentiaries and mental hospitals) as residents of the institution. We will count persons residing in short-term facilities (for example, county jails and general hospitals) at their usual residence. This practice is consistent with the practices of recent censuses in applying the usual residence concept to persons residing in such facilities.

## Persons With Multiple

## Residences

Examples of persons with multiple residences include those who live for substantial
amounts of time at a residence other than their primary residence (for example, "snowbirds" who migrate to the South or Southwest for the winter months), children who spend time at each parental home, and working couples in which the husband and wife maintain residences in separate cities. There are two options available to the Census Bureau for enumerating persons with multiple
residences. The Census Bureau can allow such persons to choose one residence as the primary residence, or the Census Bureau can assign usual residence on the basis of some objective criteria. As in past censuses, the option chosen by the Census Bureau is to allow respondents with multiple residences to select one as the primary residence based on the definitions and examples provided on the questionnaire.

## Persons with No Permanent Residence

Persons without a permanent residence include those living temporarily in housing units with friends or relatives, those living in transient quarters (motels, missions, shelters, and so forth) who have no home elsewhere, and the homeless. Since 1790, the Census Bureau has counted such persons as residents of the area where they are contacted. For 1990, the Census Bureau again plans to count persons without a permanent residence in the area where they are contacted.

To obtain as accurate a count as possible of persons without a permanent residence, the Census Bureau plans to conduct a special enumeration of transient persons without permanent shelter. This special enumeration will include a pre-Census Day identification of shelters, public parks, city blocks, and so forth, where the homeless are known to congregate. The Census Bureau will work with local officials and local organizations who have knowledge of the homeless for assistance in identifying these places. Finally, the Census Bureau will use teams of enumerators to visit these places during a special
"S-Night" for the purpose of enumerating persons found
living or staying in them. Ambiguous and Coverage Improvement Groups, Search/Match Required

Some of the special residence rules planned for the 1990 census require the Census Bureau to conduct search/match procedures to ensure that the persons in the affected groups are counted at their usual residence. In general, since persons in these groups tend to be more peripatetic than persons in the groups discussed above, the Census Bureau conducts search/match procedures to ensure accurate data and correct enumeration.

The search/match operation planned for the 1990 search/match is essentially a post Census Day clerical procedure which the Census Bureau will conduct in the eleven decennial Processing Offices (POS). These are the temporary offices at which the Census Bureau will process the 1990 census questionnaires. The basic operational flow is relatively straightforward. We forward a questionnaire completed for a person away from his or her usual residence to one of the eleven POs for data capture. During check-in at the po we flag the questionnaire, either because of the type or because of other indicators, as a search questionnaire. We hold all search questionnaires in the PO until the end of data capture for non-search questionnaires. We then assign census geographic codes to the search questionnaires based on the usual residence address. Clerks in the PO locate the questionnaire, if any, for the usual residence address and determine if the person or persons on the search questionnaire were already counted. We transcribe persons from the search questionnaire to the usual residence questionnaire if they are not already entered there.

[^1]staying on Census Day but asks them to provide the address of their usual residence so that we can count them at that address.

For search/match purposes, persons temporarily away from their usual residence on Census Day are of two types: (1) individuals living in motels, and hotels, and so forth, for whom an Individual Census Report (ICR) is prepared (the ICR is a version of the standard census questionnaire which contains only population questions), and (2) whole households identified on a standard census questionnaire who maintain a usual residence elsewhere. We will use the search/match procedure to ensure that we count these persons at their usual residence.

## Movers

Although persons who move on or near Census Day are part of the resident population of interest, obtaining accurate counts of this group has been operationally difficult in censuses. The basic problem with respect to movers is the application of the usual residence concept.

Theoretically, the Census Bureau could count persons who move on or near Census Day at their old residence, at their new residence, or at a temporary residence. Thus, the operational problem is one of ensuring that we contact movers at one of the three possible locations but count them at the right one. To accomplish this, the Census Bureau will ask for the Census Day address of persons who are found to have moved on or near Census Day and who report that they were not counted at their Census Day address. The Census Bureau will use a search/match procedure to ensure correct enumeration of these households.

## Migrant Workers

Before the 1980 census, the Census Bureau counted residents of migrant worker camps at the locality that contained the camp, the justification being that camps have shifting populations composed mostly of persons with no fixed residence.

Research subsequent to 1970 showed that many migrant workers did in fact have a place they considered their usual residence. Thus, in the 1980 census, the Census Bureau gave residents of migrant worker camps the option of designating a usual residence other than at the camp where they were contacted. We counted those who did not designate a usual residence at that place (Census Bureau, 1985b).

For the 1990 census, the Census Bureau plans to continue the practice of allowing residents of migrant labor camps to designate a usual residence other than the camp. The Census Bureau will use the search/match procedure to ensure that it counts those who do claim a usual residence other than the camp at that usual residence.
Landed-Based Military Personnel

The Census Bureau traditionally has counted landed-based members of the Armed Forces, including the U.S. Coast Guard, at the area where they are permanently stationed, provided it is within the United States or the U.S. territories. The use of usual residence to account for members of the Armed Forces is consistent with the criterion used to account for the civilian population. Thus, the Census Bureau will use the usual residence concept to count the landed-based military, including those assigned to a temporary duty station, in the 1990 census.

To ensure that we count military personnel at their usual residence, the census Bureau will use a search/match procedure. For coverage and security purposes, the census Bureau requests each military base to prepare a Military Census Report (MCR) for each assigned military personnel, regardless of whether they live on or off base. Since some military personnel may maintain a usual residence off base, the Census Bureau uses a search/match procedure to ensure correct enumeration. Crews of Military Ships Before the 1970 census, the criterion used to determine
where to count crews of military ships, including the U.S. Coast Guard, that were not deployed was the actual location of the ship on Census Day. In the 1970 and 1980 censuses, the Census Bureau counted the crews of such ships at the ship's homeport, regardless of where the ship was located on Census Day, unless it was deployed to the 6 th or 7 th Fleet. There were exceptions to this policy, however, in the 1980 census. If the ship's homeport contained total military shipboard strength of 1,000 or more, the Census Bureau searched/matched crew members to a reported usual residence, provided it was within a fifty mile radius of the homeport.

For the 1990 census, the Census Bureau plans to use the usual residence rule to determine where to count crew members of military ships that are not deployed to the 6th or 7th Fleet. If the crew member's usual residence is the ship, the Census Bureau will count that person at the homeport location. In situations where the homeport includes more than one jurisdiction, the Census Bureau will count the crew at the jurisdiction where the ship is actually docked. The Census Bureau will allow crew members to report a usual residence ashore, regardless of the afloat strength of the homeport. We will
search/match Shipboard Census Reports (SCR) to ensure that we count crew members at their usual residence.
Crews of Merchant Vessels
In previous censuses, the Census Bureau counted crew members aboard U.S.
ocean-going, coastal, and Great Lakes vessels at the port where the ship was berthed on Census Day. If the ship was not berthed in a U.S. port but was in territorial waters, the Census Bureau counted the crew at the port of destination, provided that port was inside the United States or its territories. in territorial waters and headed overseas, the census Bureau counted the crew at the homeport. If the ship was not in territorial waters, the

Census Bureau did not count the crew. The Census Bureau also made no attempt to count persons aboard various other types of vessels such as those on inland waterways, fishing vessels, or oil rigs, since it was assumed that such ships were deployed for relatively short periods of time and hence the crew members were reported and counted at their usual residences.

The Census Bureau plans to repeat these enumeration procedures in the 1990 census for canneries, freezer ships and tuna ships as well as ocean-going vessels. Unlike 1980, for the 1990 census the Census Bureau will allow the crew members of these types of vessels to report a usual residence on shore. The Census Bureau will search/match the SCRs for these vessels.

## CONCLUSION

The residence rules and search/match processing operations planned for the 1990 census are designed to meet the goal of providing the most accurate counts possible for all geographic areas. The concept of usual residence was established for the first census, has been followed in all subsequent censuses, and is the conceptual basis for determining where to count persons in the 1990 census. By using the special residence rules as well as the search/match procedures for ensuring the correct enumeration of certain groups, the Census Bureau is determined to make the 1990 census the most accurate census in our nation's history.

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1985a 1990 Research Paper on Enumeration and Residence Rules, Washington, D.C.: U.S. Government Printing Office.
1985b 1990 Census Committee on Special Enumeration Practices, Final Report, Washington, D.C.: U.S. Government Printing office. FOOTNOTE
$1_{\text {This }}$ paper reports the general results of research undertaken by census Bureau staff. The views expressed are attributable to the authors and do not necessarily reflect those of the census Bureau.


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[^1]:    Persons Away from Their Usual Residence on Census Day The Census Act of 1790 provides for the enumeration of persons temporarily absent from their usual place of residence at that place. This practice has continued for all subsequent censuses and will be repeated for the 1990 census. To improve coverage, the Census Bureau contacts these people where they are

