

DIFFICULTIES WITH COLLECTING ADDRESS INFORMATION FROM PEOPLE AT MOBILE FOOD VAN STOPS

Richard A. Smiley, U.S. Bureau of the Census
CSMR, Room 3127-4, Washington, DC 20233

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Introduction

In Census 2000, the Census Bureau will make special efforts to reach people who do not have a usual place of residence. As part of Service-Based Enumeration (SBE) operations, enumerations of the clients of regularly scheduled food vans will be conducted on a specified date. After the enumerations are completed and responses are collected, the data will be checked for internal and external duplication.

Since many of the clients using food van services will have a usual place of residence, it will be necessary to collect address information from them to facilitate unduplication. However, for clients without a usual place of residence, a request for address information could be very confusing¹ and may slow down the time-sensitive data collection process.

This paper explores the circumstances under which asking for address information is appropriate. It focuses on the responses given on a self-administered questionnaire by the clients of two New York City food van runs to "place where you stay" and address questions. The data show that the "place where you stay" question can be used as a screen for determining when to ask the address question.

SBE Procedural Test

The data for this research are taken from a test of SBE procedures conducted in New York City on two evenings in September of 1996 (Gerber, et al. 1997). The test included a soup kitchen and two mobile food van runs having multiple stops.² On the first evening, the soup kitchen was enumerated by a team of ten people. This team consisted of a team leader, a helper, and eight listers. On the following evening, the team was split in

half to enumerate the van runs. One team consisted of a team leader, a helper, and three listers. The other team consisted of a team leader and four listers.

At every stop, each lister was assigned a subset of the service-using population to enumerate and was instructed to enumerate everyone in that group -- including those who claimed to have been enumerated at a different time and those who claimed to "not usually use" the services of the food van. The lister wrote down (*listed*) the client's name (as well as the client's race and sex) on a separate line on the "listing sheet" and handed out a one-page "1996 Individual Census Questionnaire" (*ICQ*) which asked for name, sex, age, Hispanic origin, race, "place where you stay", address, soup kitchen / food van usage, shelter usage, and whether the respondent had already filled out a census form. The questionnaires were collected when the service providers were finished distributing meals at that stop and returned to the local Census Office. The data from these questionnaires were coded into a SAS data set by Census Bureau staff.

Study Questions

For a person to be enumerated in the census, he or she needs to be assigned to a specific geographic location (*geocoded*). On the 1996 ICQ, two questions were asked with the intent of securing the greatest amount of detail about where the respondent was staying in order that the person would be successfully geocoded. The first question (*Question 7*) requested information about the type of location that the respondent stayed at most often:

7. Which ONE of the following places best describes where you stay overnight MOST OF THE TIME?

An apartment or house you own or rent

Someone else's apartment or house

Hotel or motel

Shelter (Print name of shelter)

On the street (Print names of nearest streets or roads)

Other type of place (Please describe)

¹ See Gerber and Wellens (1994).

² The soup kitchen (from where both van runs originated) functionally served as the first van run stop. Therefore, the data presented in this paper include this site.

The second question (*Question 8*) requested a complete street address:

8. Please print the address of the place described in Question 7, where you stay overnight MOST OF THE TIME.

Building Name

House Number Street or road name

Apartment Number

City State Zip Code

The data collected during the New York test on these two questions are the focus of this paper.

Test Data -- Univariate Distributions

All together, 421 people were listed at the soup kitchen and van run stops in the New York test. Out of those 421 people, 271 (64.4 percent) returned a questionnaire. The quality of their responses to the two address questions varied widely.³ Although physical address data provided by the respondents usually were placed in the proper answer fields in Question 8, this was not always the case: some street addresses appeared in Question 7 write-in spaces and some of the address data were placed incorrectly in the Question 8 fields. More general descriptions of living locations (such as cross streets, names of buildings, landmarks, ...) could be found in any of the Question 7 write-in spaces, in any of the Question 8 address fields, or in both places.

In order to interpret this data, the issue of whether or not the address and location information was placed in the proper spaces was not considered.⁴ Rather, all address and location information found in Questions 7 and 8 was combined and classified in the following way:

Geocodable Address Information

-- If a physical address (house number, street, and city) was provided, it was assumed to be valid and the respondent was classified as *Address Provided*

³ Factors which may have affected the quality and completeness of the answers to Questions 7 and 8 include: poor street lighting, low respondent reading skills, the hurried data collection environment, and the separation of Question 8 from Question 7 on the ICQ.

⁴ Note that for Census 2000, the SBE food van operations will use an interviewer-administered questionnaire which should greatly reduce the amount of this type of error.

Geocodable Location Information

-- If a physical address was not provided, but the name of an identifiable building (such as the name of a shelter) was given, the respondent was classified as *Name Of Building Provided*

-- If no physical address or building name was provided, but the respondent provided the names of two intersecting streets (or the name of a unique physical location such as "Columbus Circle"), the respondent was classified as *Cross Streets Provided*

Non-Geocodable Information

-- If more than one physical address was provided, the respondent was classified as *More Than One Address Provided*

-- If the information provided was not specific (such as "street", "park", or "subway"), illegible, or contained only a single street name with no number or intersecting street, the respondent was classified as *Information Provided Not Geocodable*

-- If no address information was provided, the respondent was classified as *Address Fields Blank*

Table 1: 1996 New York City SBE Test -- Distribution of Type of Address Information Collected on Returned Questionnaires

Address Classification	Number of Respondents	Percent
Address Given	58	21.4
Geocodable -- Building	23	8.5
Geocodable -- Cross Streets	39	14.4
More Than One Address	6	2.2
Information Not Geocodable	68	25.1
Address Fields Blank	77 ⁵	28.4
Total	271	100.0

⁵ 56 out of the 77 people (72.7 percent) who left all address fields blank also left Question 7 blank -- it is likely that they never made it this far into the questionnaire.

Table 1 shows the distribution of the combined address classification codes across the 271 people who returned a questionnaire. Less than half of the respondents (44.3 percent) provided information sufficient for geocoding. Only a fifth of the respondents (21.4 percent) actually provided a single geocodable address. Obtaining an actual address is important, as the resources for converting location information into geographic codes may be limited. This distribution therefore suggested that the questions needed to be changed.

Table 2: 1996 New York City SBE Test Distribution of the Check Box Responses to Question 7

Question 7 Response	Number of Respondents	Percent
No Box Checked	116 ⁶	42.8
<i>Own or Rent</i>	30	11.1
<i>Someone Else's Place</i>	18	6.7
<i>Hotel or Motel</i>	12	4.4
<i>Shelter</i>	21	7.7
<i>On the Street</i>	65	24.0
<i>Other</i>	9	3.3
Total	271	100.0

Table 2 shows the distribution of the "check box" responses to Question 7 across the 271 people who returned a questionnaire. Over 40 percent of the respondents did not check any of the boxes⁷. Among those who did check a box, over 40 percent identified themselves as living "on the street". As the following tables will show, the address information collected from those marking "on the street" was not very detailed. Therefore, this distribution also suggested that the questions needed to be changed.

⁶ About half of these respondents (48.3 percent) also left the address fields in Questions 7 and 8 blank -- it is likely that they never made it this far into the questionnaire.

⁷ Note that out of the 155 respondents who did check a box in Question #7, 8 (5.2 percent) checked a second box.

Test Data -- Bivariate Distributions

The bivariate distribution of the address information type with the Question 7 check box revealed that there were differences in the amount and type of geographic information collected depending upon which box had been checked. Tables 3 and 4 highlight different features of this bivariate distribution. Since the "own or rent" and "someone else's place" categories behaved in the same way (and both refer to living in an identifiable household residence), they were collapsed into a single category for the tables. Likewise, the "hotel or motel" category was collapsed with the "shelter" category (both referring to living in some kind of group structure) and the "on the street" category was collapsed with the "other" category. Since it is anticipated that the shift to an interviewer-based questionnaire in Census 2000 will reduce the nonresponse to Question 7, the "no box checked" category was dropped from the tables.

Table 3: 1996 New York City SBE Test -- Percent of Respondents Providing an Address or Geocodable Information by Question 7 Response Category

Question 7 Response	Percent Geocodable	Percent with Address
<i>"Own or Rent" / "Someone Else"</i>	75.0	70.8
<i>"Hotel or Motel" / "Shelter"</i>	72.7	30.3
<i>"On the Street" / "Other"</i>	47.3	2.7

Table 3 shows that geocodable information of some type was obtained for about three quarters of the people who indicated that they stayed at a residential address or in a group living structure. For people identifying themselves as living "on the street" or at some other non-permanent location, geocodable information was provided about half of the time. For those who indicated that they lived at a residential address, an actual address was provided over 70 percent of the time. For those who indicated that they lived in a group setting, an address was provided less than a third of the time. People who indicated that they lived "on the street" hardly ever provided an address. Thus, this table indicates that the amount and quality of the address information provided by respondents is associated with what box they checked in Question 7.

Table 4: 1996 New York City SBE Test -- Number of Respondents Providing Geocodable Information by Question 7 Response Category

Question 7 Response Categories	Geocodable Information		
	Address Provided	Name of Building	Cross Streets
"Own or Rent" / "Someone Else"	34	0	2
"Hotel or Motel" / "Shelter"	10	11	3
"On the Street" / "Other"	2	4	29

Table 4 focuses on the 95 respondents who checked a box in Question 7 and provided some type of geocodable address information. Again, the type of geocodable information provided is seen to be strongly associated with which Question 7 box was checked. Almost all of the people who claim to be living in a residential unit were able to provide an address, while almost all of the people claiming to live on the street were only able to provide names of cross streets. For those claiming to live in a group living environment, an address was given about half of the time. In those cases, the address provided was the address of the hotel or shelter.

Conclusion -- Revised Questions

The information in the above tables strongly suggests that nothing was gained by asking for address information from respondents who identified themselves as living "on the street". It also suggests that capturing the name of the shelter was equivalent to capturing address information for those who identified themselves as living in a shelter or hotel. By not asking these respondents for a street address, time could be saved in the enumeration process which could allow for more clients to be enumerated.

These considerations were incorporated into the ICQ which was used during the Census 2000 Dress Rehearsal conducted in April of 1998. The changeover from a self-administered to an interviewer-administered questionnaire allowed for a skip pattern to be built into Question 7 which ensured that only those answering "an apartment or house" would go on to be asked for an actual address. The ICQ address questions were revised as follows:

7. Do you stay overnight **MOST OF THE TIME** at an apartment or house, at a shelter, on the street, or at some other type of place?

- An apartment or house
- A Shelter -- What is the name of the shelter?
 _____ > Skip
 _____ > to 9
- On the street --> Skip to 9
- Other place --> Skip to 9

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

- House Number

- Street or road name

- Apartment Number

- City

- County

- State or foreign country

- Zip Code

References

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* This paper reports the results of research and analysis undertaken by Census Bureau staff. It has undergone a more limited review than official Census Bureau publications. This report is released to inform interested parties of research and to encourage discussion.