RESEARCH REPORT SERIES

(Survey Methodology #2007-20)

New Roster Procedures and Probes to Improve Coverage in the Survey of Income and Program Participation

Anna Y. Chan

Statistical Research Division U.S. Census Bureau Washington, DC 20233

Report Issued: June 13, 2007

Disclaimer: This report is released to inform interested parties of research and to encourage discussion. The views expressed are those of the author and not necessarily those of the U.S. Census Bureau.

New Roster Procedures and Probes to Improve Coverage in the Survey of Income and Program Participation Anna Y. Chan¹

U.S. Census Bureau, Statistical Research Division, Washington DC 20233-9100

Key words: coverage, roster procedures, roster probes

Introduction and Overview

Undercoverage is an important source of non-sampling error (Fay 1989; Kalton 1998), and has been a continuing problem for U.S. government demographic survey programs (Shapiro and Kostanich 1988). In 1996, for example (the most recent year for which data are available), the average undercoverage rate in the Survey of Income and Program Participation (SIPP) was about 10%, with substantial variation among various race, age and sex subgroups (Kalton 1998). The two general types of survey undercoverage are whole-household and within-household omissions. The former refers to the fact that entire addresses B and everyone who lives at those addresses B can be missed if the address lists used to select a survey sample are incomplete, or if interviewers erroneously record the address as vacant.

Within-household undercoverage refers to the omission of some persons within otherwise interviewed households. Based on March 1980 Current Population Survey data, Shapiro, Diffendal and Cantor (1993) estimate that within-household omissions account for the majority of undercoverage in the Bureau's demographic surveys B approximately 60 to 70 percent. The causes of within-household undercoverage are varied, but two general causes are omissions due to the deliberate withholding of certain household members' names (de la Puente 1993), or omissions due to misapplication of residence rules (Martin and Griffin 1994). Errors in compiling a complete household roster can result from misinterpretation of rostering rules which can be complicated and non-intuitive to both interviewers and respondents, especially for people with complex and/or marginal attachments to sampled households (Cantor and Edwards 1992; Kearney, Tourangeau, Shapiro and Ernst 1993; de la Puente 1993; Shapiro et al. 1993; Tourangeau, Shapiro, Kearney and Ernst 1993).

Unlike, perhaps, the other types of undercoverage, errors due to problems in the application of rules and definitions would seem to offer some fertile ground for coverage improvements based on improved questionnaire design. And, in fact, prior roster research

has demonstrated the important role of questionnaire design in reducing such coverage error (Martin and Griffin 1994; Sweet 1994). Results from the Census Bureau's Living Situation Survey provide evidence that well-designed roster probes can improve the completeness of household rosters by adding people who often tend to be missed using traditional roster methods (Martin and Griffin 1994; Martin 1996; Sweet 1994). Other procedural improvements B for example, better communication of the instructions and rules of whom to list on a household roster B may also assist in more accurate and complete enumeration.

This paper highlights the changes that will be implemented in the 2004 SIPP Panel, assesses and summarizes the effectiveness of the new roster procedure and the probes in identifying otherwise-missed persons (due to misapplication of residence rules and or unclear roster instructions) and discusses their likely impact on future SIPP estimates.

The organization of the rest of the paper is as follows: the next section presents a very brief description of the SIPP survey in general and the SIPP Methods Panel project in which the roster experiment was embedded. The Methods Section describes the roster screening procedures which are the focus of this paper, and provides more details on the design of the field experiment in which those procedures were tested. The Result Section summarizes the findings and discusses the impact of the new roster procedure and new probes on the interviewing process, in identifying otherwise-missed persons, and the completeness and accuracy of roster. Finally, it presents analyses of interviewers' perceptions of the new questions. The final section summarizes the findings and offers conclusions about them.

Background

SIPP is a complex longitudinal survey conducted by the U.S. Census Bureau. It is designed to provide data on the distribution of income, wealth and poverty in the United States, and other topics such as government program participation and eligibility, and health insurance coverage. Results from the survey have farreaching implications for national policy.

¹ This report is released to inform interested parties of ongoing research and to encourage discussion of work in progress. The views expressed are those of the authors and not necessarily those of the U. S. Census Bureau.

Currently, SIPP consists of 9 waves, or rounds of interviewing, with each wave administered every 4 months to a nationally-representative sample of the civilian, noninstitutionalized population. Interviewing for each wave is distributed over 4 successive calendar months to create a stable production workload for field It is primarily a person-based survey, administering a battery of questions to each person age 15 or older (or a proxy) in interviewed households. The SIPP instrument is long and complex, collecting information about the structure of households, and, for each "adult" household member, labor force participation and concomitant earnings, participation in and income public-assistance-type transfer programs, ownership of income-producing property, school enrollment, and health insurance coverage. instrument consists of a core section which is repeated each wave, and topical modules which vary in content from wave to wave. The current reference period for most questions is the four months before the interview month. See U.S. Census Bureau (2001) for a more detailed description of the SIPP program.

The SIPP Methods Panel (MP)

In 1996, the Census Bureau established the Continuous Instrument Improvement Group (CIIG), consisting of staff from numerous Census Bureau technical, program, and subject-area research divisions, and led by survey methodologists. CIIG's task was to review the SIPP core instrument and recommend changes to improve the instrument and reduce burden. The need for thorough and rigorous testing led CIIG to recommend the creation of a "methods panel", separate from and parallel to the production SIPP survey. The centerpiece of the Methods Panel project is a series of field experiments designed to support rigorous testing of the proposed new, alternative instrumentation with the intention that the third field test contains the final version of the revised and improved instrument.

The Methods Panel project carried out its initial field test on the Wave 1 core instrument in August and September of 2000 (MP2000). The two subsequent field tests also included a Wave 2 interview conducted four months after the Wave 1 interview; these tests were carried out in July/August and November/December of 2001 (MP2001),and in June/July October/November of 2002 (MP2002). Each field test drew a representative sample of households in six of the Census Bureau's twelve regional offices: Philadelphia, Kansas City, Seattle, Charlotte, Atlanta and Dallas, with each selected case randomly assigned either to a test group or a control group. Each household in the test group received a modified SIPP instrument containing experimental questions redesigned according to CIIG's recommendations. Each household in the control group received the standard 2001 SIPP Panel instrument. Interviewers who conducted the MP interviews were all experienced SIPP interviewers who received special training on the new, experimental questions and procedures. See Doyle, Martin and Moore (1999) for a more detailed description of the Methods Panel project as a whole.

The outcomes for the treatment and control groups were quite similar, and we found no significant differences between the two treatments in any of the main indicators of overall completeness of response B i.e., household response rate, household refusal rate, person interview rate or major demographics of the respondents (results not shown).

Methods

Rostering Procedures. Obtaining an accurate roster of household members is a difficult and complex task for SIPP due to the complexity and non-intuitive nature of some of the survey's residence rules, and the marginality and transiency of some persons. As a result, interviewers and respondents sometimes have difficulty constructing rosters which are consistent with the rules. One of the main goals of the Methods Panel field tests was to test and refine new and improved methods for enumerating persons in sample households. The "new and improved methods" consisted primarily of a newly designed 'catch-all' initial roster screen and revised follow-up "roster probes" and other appropriate followup questions. The new roster screen and roster probes questions were designed to better communicate household membership rules, and to improve the identification of tenuously-attached household members and other persons likely to be undercounted, including commuter workers, live-in employees, and people who are often absent or highly mobile.

Initial Roster. The control instrument (SIPP 2001 Panel instrument) creates its initial household roster using a person-based format where first, middle and last name of each person is collected on separate lines on one screen, followed by a series of questions on sex and usual residency for the person of interest. The instrument will then repeat the roster, sex and residency questions for the next household member; making the rostering process more tedious, repetitious and unnatural than it needs to be.

The MP Test instrument added clear instructions to respondents to include everyone who lives and stays in the household and even people who they are uncertain about. The new catch-all one screen household roster facilitates the interviewing process by allowing respondents to report names of household members all at once and in a more natural way where the first, middle and last name and other volunteered information such as the person=s relationship to the respondent are collected and listed on one line of a roster matrix, and such information for the entire household is listed on one computer screen (See Table 1). Note that both the MP control and test instruments first gather an initial roster, and then try to supplement it and make it more complete through some additional roster probes.

[Insert Table 1 here]

Roster Probes. After completing the initial roster, we administer roster probes primarily directed at identifying persons with marginal or tenuous attachment to the household. In the MP control instrument, the probes were asked after the followup residency questions. We made refinements and improvements on the MP roster probes between each tests based on the efficacy of each roster probe after each field test. In the first two field tests, there were five and three roster probes respectively in the MP Test instrument, and each probe was asked on a separate screen. In our final test, there were three probes asked all at once, on one screen in the test instrument. (See Appendix 1). The 2002 test kept one of the original probes from the SIPP 2001 Panel instrument (about lodgers, boarders or employees living in the household, >MLODGE<), and added two new probes that are much more elaborate and specific, focusing on (and following up about) people with uncertain residency status, such as:

- 1) people staying at the household until they find a place to live; (see Appendix 1 >MSNGSTAY<)
- 2) people who may not be defined as "usually" living there (but who in fact spend most of their time at the household (i.e., during a typical week over the last month have spent four or more nights a week there); (See >MSNGOTH< and >NITESTAY<)

Other follow-up questions. We asked other appropriate follow-up questions intended to communicate explicitly some of the more obscure instructions and residency rules and to decide whether all listed members belong to the household based on the SIPP rules. The goal is to include all household members who usually live in the household or who have ambiguous living situations but belong there. These include questions intended for:

- 1) people who do not "usually" live there but have no other residence where they usually live; and
- 2) non-married college students who are away attending school but whose permanent residence is held at the

household; (>AWAYSCH<)or permanent residents who are away traveling for work, on vacation or in a hospital (>AWAYTRV<).

We were realistic that with the small sample size in the Methods Panel (less than 2000 households for both treatment and control groups in each test), it is unlikely that the new procedures will have a huge positive impact on coverage or that any observed difference will be statistically significant. However, we do expect that the new procedures will do a comparable job in generating a complete household roster and will have no negative impact on coverage. We tested the new procedures in three MP field tests which compared roster outcomes under the new procedures against the standard procedures currently employed in SIPP 2001 Panel instrument (as well as other Census Bureau surveys).

Results

Impact of New Roster Procedures and Probes. Together, the new roster and probes seem to mostly generate a comparable household roster where the average household size of the MP Test instrument does not differ significantly from the Control instrument (see Table 2). Although there is no clear evidence that the new MP roster procedures and probes did better than the SIPP 2001 Panel instrument, it is important to note that the new roster procedures have no negative impact on our data quality.

There is evidence that the initial, all-in-one roster procedures in the MP Test instrument do a better job capturing "regular" members with its basic rostering procedures, and truly tenuous people with its probes, and, correspondingly, that the Control instrument=s oneat-a-time roster procedures occasionally miss "regular" household members who are then picked up in the current instrument's roster probes. For instance, in all three field tests, about 2% to 2.6% of households interviewed using the SIPP 2001Panel instrument, have household members missed using the initial roster. Detailed qualitative analyses indicated that the majority of the persons who were picked up by the SIPP 2001 Panel instrument=s roster probes were core family members (children, spouse or parent of respondents) who were usual residents in the households who should have been captured by the initial roster. In some households, multiple core family members were left out on the initial roster. In contrast, in all three field tests, only about 0.3 to 1.2% of households interviewed using the new instrument have household members missed The new catch-all roster using the initial roster. procedure is clearly more efficient in creating a more complete initial roster. The difference was statistically

significant in the second and third tests (see Table 2). Due to the small number of household members identified by roster probes as usual members in the MP Test instrument (2 to 13 in various test), we were unable to perform meaningful statistical tests to compare the SIPP 2001 Panel and MP Test instruments.

Characteristics of household with people added by probes. In both MP Control and Test instruments, the roster probes identified potentially omitted persons who were similar to the known profile for people who tend to be missed. Figure 1 shows the basic demographic characteristics of persons identified as usual household members by the standard control and new probes in our three tests. Many of them were young, single and residing in minority households. Our new instrument also collects new information on nativity and citizenship. Almost 30% of the probes identified members who were residing in households with foreignborn members and 20% of them were non-U.S. citizens. On the other hand, there is no uniformity on any The almost-missed were men/women, variable. white/minority. voung/old. citizen/non-citizen. married/not married which suggests that withinhousehold omission due to complexity of circumstances can occur to anyone. So, while the marginal or tenuously attached tend to resemble the types of people most often missed in censuses and surveys, marginality/tenuousness is not restricted to those groups.

Improved Interviewing Process and Efficiency. By allowing our interviewers to capture volunteered information provided by our respondents (the relationship with respondent information and sex of household members), our test instrument was able to skip these questions later in the interview, thus improving the interviewing process and efficiency. For example, in MP2001, only 3% of all household members were administered the relationship with the reference person question, "What is [Name]'s relationship to [reference person]?", as compared to the current procedure in SIPP

2001 Panel instrument which asks the question of all such people. Reducing unnecessary questions makes the interviewing process less tedious and repetitious.

Efficacy of Individual Probes. Table 3 lists new probes used during rostering in MP2002 test treatment households (also to be used in the SIPP 2004 instrument) and summarizes their efficacy in identifying additional people. Three aspects of these results are worthy of note. First, these questions are rather efficient in identifying tenuously attached members. That is, 100% (13/13) of the original "yes" replies to the probes resulted in an actual addition to the roster. Second,

while the small numbers make comparisons among the items quite risky and speculative, it appears that the new probes MSNGSTAY AND MSNGOTH, for example, may be more efficient than the probe MSNGLODGE which was retained from the original standard probes. And finally we note that all three probes yielded at least one additional name. Again, the numbers are very small, but this suggests that all three are at least somewhat ontrack with regard to real coverage problems.

[insert Table 3 here]

Interviewers' Perceptions and Data Quality. We collected interviewers' opinions concerning the Test and Control instruments via a debriefing survey administered to all interviewers at the end of each field test, and, also during in-person interviewer debriefing sessions after the MP2001 and MP2002 Wave1 field tests. Of relevance to this paper, the debriefing survey sought interviewers' perceptions concerning each instrument's roster procedures in terms of respondents' ease in providing the roster information, interviewers' ease in administering the questions, and the accuracy of the resulting data.

In our first field test (MP2000), interviewers did not react positively to the MP instrument's new roster procedures. In fact, they viewed the roster procedures in the SIPP 2001 Panel instrument as significantly superior to the MP Test instrument on all three counts B easier for respondents to answer, easier for them to administer, and more likely to produce a complete and accurate roster. However, after controlling for interviewers' years of SIPP experience, it became clear that experienced interviewers were significantly more likely to favor the SIPP 2001 Panel instrument than less experienced interviewers on all measures. Among interviewers with less SIPP experience (4 years or less), the SIPP 2001 Panel instrument was reported as significantly easier for them to administer (p<.05), but they did not differ in their opinions on other measures, whereas experienced interviewers viewed the SIPP 2001 Panel instrument as more superior on all counts (p<.0005). experienced interviewers -those most familiar with and comfortable with the standard roster followups - were not convinced of the value of the new procedures. Another important reason is that in MP2000, each of the five roster probes was asked on a separate screen, and many interviewers find it >invasive= and somewhat >excessive= to ask five probes, particularly in cases where it was clear that no one else lives in the interviewed household. In MP2001 and MP2002, we try to balance the survey's coverage quality against interviewers' perceived burden by revising and reducing the five probes to three probes and we asked them in an

all-on-one-screen format in our final test. With the modifications, the MP instrument was reported by interviewers as more superior on all three counts in regard to the new roster format in our second and third field tests (MP2001 and MP2002).

Results from the FR debriefing questionnaires and debriefing sessions indicate that they perceive the new roster procedure (which collects multiple initial roster names all at once, on one screen, and allows the recording of volunteered information about sex and relationship) to be easier for respondents to answer, and easier, smoother and more efficient for interviewers to administer, and also that the new roster probes probably produce a more complete and accurate roster.

Conclusions

We conclude that the experimental roster procedure worked as desired, which demonstrates that the main initial roster efficiently collects a more complete initial roster than the SIPP 2001 Panel instrument=s roster procedures. The new catch-all roster creates a household roster in a more natural way, collects often-volunteered information efficiently, and reduces tedious and unnecessary questions in the interview. The SIPP 2001 Panel instrument=s standard one-at-a-time roster procedure interrupts reporting and increases the likelihood of respondents losing track and forgetting to report core family members, particularly in large households. We do not have clear evidence that our revised roster probes and followup questions have addressed within-household undercoverage problems since the number of new people included in the survey who would otherwise have been missed is quite small. We noted that the final new probes are efficient, but some probes are more efficient than others. Preliminary analysis using Wave 2 field tests data indicated that our revised probes used in the test treatment instrument (not used in SIPP 2001 Panel instrument) continued to identify household members otherwise missed by our initial roster suggesting that we may have made important inroads regarding the identification of tenuous people.

Two final research questions, of particular interest to a longitudinal survey such as SIPP, have to do with subsequent survey waves. Do the procedures need to be modified for administration after the initial survey wave, and if so, how? What are the long-term prospects for continued survey participation for probe-identified people? Currently, SIPP revisits sample households 9 times over 3 years. What's the best way to continue to probe for this category of likely-to-be-missed persons in the eight followup survey waves? How do we balance

the survey's coverage quality against respondent burden? What happens to the Wave 1 probe-identified people in later waves of the survey? Do they remain "in" (according to SIPP definitions) the households where we first identified them, or do they move out with some frequency, or even come and go? If they later exhibit substantial movement in and out of sample households, identification of marginally/tenuously attached people in Wave 1 is definitely a mixed blessing (at best) in terms of field administration, since following and preventing attrition among "movers" presents costly and difficult challenges to SIPP already. Answers to these questions have major implications for the future design of the SIPP interview.

References

- Butler, D. (1993), "SIPP '88, '89, '90 and '91 Coverage Ratios." Internal Census Bureau Memorandum, October 14.
- Cantor, D., and Edwards, C. (1992), "A testing Alternative Household Roster Questions for the Survey of Income and Program Participation." SIPP Working Paper No. 9203, US Bureau of Census.
- de la Puente, M. (1993), "Why Are People Missed or Erroneously Included by the Census: A Summary of Findings from Ethnographic Coverage Reports," Report prepared for the Advisory Committee for the Design of the Year 2000 Census, March 5. Washington, D.C: U.S. Census Bureau.
- Doyle, P., Martin, E.A., and Moore, J. (1999), "The Survey of Income and Program Participation (SIPP) Methods PanelBImproving Income Measurement," paper presented at the Federal Committee on Statistical Methodology Research Conference, November.
- Doyle, P., and Moore, J. (2001), "Methods Panel to Improve Income Measurement Analysis of an Experimental SIPP Instrument," paper to be presented at American Statistical Association Conference, August.
- Kalton, G. (1998), "The Survey of Income and Program Participation Quality Profile," SIPP Working Paper Number 230. U.S. Census Bureau.
- Kearney, A., Tourangeau, R., Shapiro, G. M., and Ernst, L. (1993), "Coverage Improvement From Experimental Residence Question," in *American Statistical Association Proceedings of the Survey Research Methods Section*, pp.162-167.
- Fay, R. (1989), "An Analysis of Within-Household Undercoverage in the Current Population Survey,"

- in *Annual Research Conference Proceedings*, Washington, D.C.: U.S. Census Bureau.
- Martin, E.A., and Griffin, D.H. (1994), "The Role of Questionnaire Design in Reducing Census CoverageError," In *American Statistical Association of the Survey Research Methods Section*, pp. 736-741.
- Martin, E. A. (1996), "Household Attachment and Survey Coverage," in *American Statistical* Association Proceedings of the Survey Research Methods Section, pp.526-531.
- Shapiro, G. M., and Kostanich, D. (1988), "High Response Error and Poor Coverage are Severely Hurting the Value of Household Survey Data," Census Authors' Paper: 3627.
- Shapiro, G. M. (1992), "Whole Household Undercoverage vs. Within Household Undercoverage," Internal Census Bureau Memorandum to Coverage Research Committee, February 27th.
- Shapiro, G. M., Diffendal, G., and Cantor, D. (1993), "Survey Undercoverage: Major Causes and New Estimates of Magnitude," Internal Census Bureau Memorandum.
- Sweet, E. (1994). "Roster Research Results from the Living Situation Survey," in *Annual Research Conference Proceedings*, Washington, D.C.: U.S. Census Bureau.
- Tourangeau, R. Shapiro, G. M., Kearney, A., and Ernst, L. (1993), "Who Lives Here? Survey Undercoverage and Household Roster Questions," Contractor report prepared by NORC for Census Bureau.
- U.S. Census Bureau (1995). "Pretesting Policy and Options: Demographic Surveys at the Census Bureau," Washington DC: U.S. Census Bureau.

 (2001). "The SIPP Users'
 - Guide," Washington DC: U.S. Census Bureau, 2001.

Table 1 Initial Roster Screen

Table 1. II	nitial Roster Screen					
Wave 1	Main Roster					
SIPP 2001 Panel	What are the names of all the people living or staying here? Start with the name of the person, or one of the people, who owns or rents this home. Please include middle and maiden names. FIRST NAME Mary MIDDLE NAME A LAST NAME Smith MAIDEN NAME Johnson					
SIPP 2004 Panel	First I need to make a list of all the people who live or stay here at this address. Don't forget to include: - People who stay here only some of the time, - non-relatives who live here, - and of course any babies and small children. Please mention someone even if you're not sure they should be included. Let's start with you. What is your name? Please give me the names of everyone else who lives or stays here most of the time. Anyone else? First Middle Last Maiden/Other Sex Rel to Ayou@ Mary A. Smith Johnson F 0 (self) Joe K Smith M 1 (spouse)					

Table 3. Efficacy of Individual Probes

Screen Name	Number				
>MSNG< (ALL on one screen) We know we sometimes miss people when it=s not totally clear where they live. Just to make sure, have I missed					
>MSNGSTAY <anyone a="" find="" here="" is="" live?<="" place="" staying="" td="" they="" to="" until="" who=""><td>8</td></anyone>	8				
>MSNGLODGE<(Have I missed) Any lodgers, boarders or persons you employ who live here?	1				
>MSNGOTH<(Have I missed) Anyone who may have another place to live, but who stays here often or has some space or a room here?	4				
Total	13				

Table 2. Number and Percentages of People Identified and Added to Final Roster by Main Roster Screen and Roster Probes

	Control 2000	Test 2000	Control 2001	Test 2001	Control 2002	Test 2002
Final number of people in interviewed households	2122	2170	2519	2266	3126	3019
Total number of eligible households	842	854	950	870	1182	1182
Mean number of HH member	2.52	2.54	2.65	2.60	2.64	2.55
Weighted Mean number of HH member	2.52	2.54	2.65	2.60	2.60	2.55

Initia	1 N	Jain	\mathbf{R}_{0}	ctore
ппппа	1 1	паш	NU	ster:

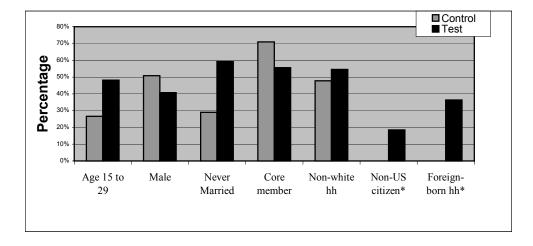
Household member enumerated by main roster	99.1%	99.5%	99%	99.9%*	97.7%	99.6%
	t=21		T=-3.44*			t=-6.7**

Roster probes:

Number & % of new people added by probes	20	11	25	3	79	13
	(0.9%)	(0.5%)	(1%)	(0.1%)	(2.3%)	(0.4%)
Number & Percentage of households with new people added	19	10	18	3	31	9
	(2.3%)	(1.2%)	(2%)	(0.3%)	(2.6%)	(0.8%)

^{**}p<.0001 *p<.001

Figure 1. Demographic Characteristics of the Residents Identified by Probes from All Three Field Tests *Information were collected in Test instrument only



Appendix 1. Roster Probes and Other Follow-Up Questions

	SIPP 2001 Panel Instrument	SIPP 2004 Panel Instrument
Roster Probes	>MSNGPRSN< (ALL on one screen) I have listed: ROSTER NAMES I need to be certain that I have listed everyone who usually lives at this address, so just to double check, let me ask you, have I missedMCHILD- Any babies or small children? -MLODGE- Any lodgers, boarders or persons you employ who live here? -MAWAY- Anyone who usually lives here but is away now, traveling for work or business, on vacation, or at school or in a hospital?	>MSNG< (ALL on one screen) We know we sometimes miss people when it=s not totally clear where they live. Just to make sure, have I missed >MSNGSTAY <anyone a="" find="" here="" is="" live?="" place="" staying="" they="" to="" until="" who="">MSNGLODGE<(Have I missed) Any lodgers, boarders or persons you employ who live here? >MSNGOTH<(Have I missed) Anyone who may have another place to live, but who stays here often or has some space or a room here?</anyone>
Followup Probes *	>USUAL< (The following was asked before probes) Does NAME usually live here? If yes>usual residents, else ask next question	>USUAL< Is this where NAME lives and sleeps most of the time? If yes>usual residents, else ask next question.
		>NITESTAY< During a typical week over the last month or so, how many nights did NAME stay overnight, or was there no usual pattern? If 4 or more nights>usual residents, else ask next question.
	>ASKURE< (Asked before roster probes) Does NAME have some other place where he/she usually lives?	>ASKURE< Is there another place where NAME lives and sleeps most of the time? If no other place to live> usual residents, else ask next question.
		>AWAYSCH< ASK IF NECESSARY Is NAME a non-married student away attending school whose living quarters are held here? If yes>usual residents, else ask next question.
		>AWAYTRV< Does NAME usually live here but is away traveling for work, or on vacation, or in a hospital?

^{*}probes /screens applying residence rules to determine residency