## Who is left off household survey rosters, but picked up by probing?

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### Background

Household surveys typically begin with the creation of a household roster, which is a list of household members. Creating an accurate list of all household members is a straightforward task in most living situations. However, for some unique living arrangements this becomes more difficult.

To minimize coverage error, the American Community Survey (ACS) uses four probing questions in the survey's automated modes.

Using response data and paradata from 2015 ACS Internet returns this research:

- Explores the characteristics of the individuals added as a result of the coverage questions
- Evaluates respondent behavior and perceived burden relating to the coverage questions

**Coverage error**: Error in estimates due to exclusion of people (undercoverage) and/or erroneously including people (overcoverage)

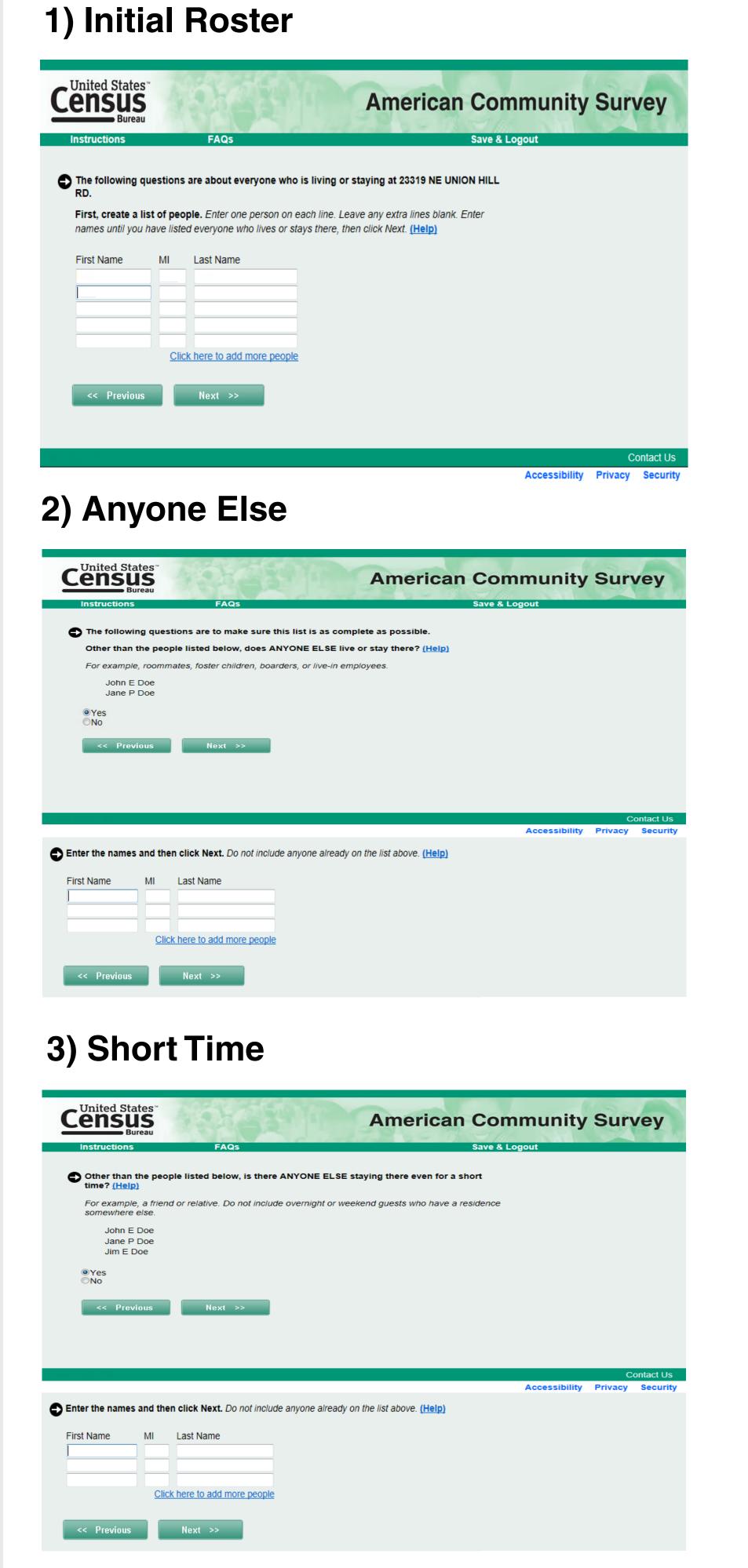
ACS residence rule: Living or staying at the address during the time of the interview and for a period of at least 2 months

Net adds: Those added to the household roster via anyone else and short time questions, excluding those deleted via the away now or another home questions

**Respondent burden**: The effort required to answer questions. Measured in terms of time spent and perceived confusion/difficulty with questions (response behavior in navigation, breakoffs, missing responses)

For more information on the American Community Survey, visit www.census.gov/acs

#### **Initial Roster & Coverage Questions**

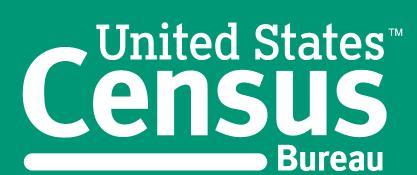


#### 4) Away Now

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#### Results

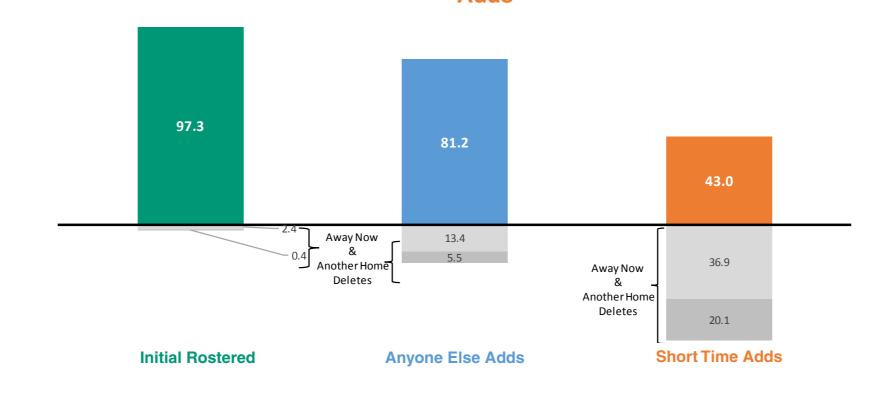
#### 1) How many people are added to and deleted from household rosters via Internet?

Using the Internet mode, the ACS captured a weighted total of over 104 million people. 98.8% via Initial Roster and 1.2% via Anyone Else and Short Time. Away Now and Another Home were used to address overcoverage error.

Weighted Counts by Question: Internet Mode			
Question	Count		
Initial rostered	106,023,614		
Away now delete	2,498,089		
Another home delete	379,434		
Net initial rostered	103,146,091		
Anyone else add	893,994		
Away now delete	119,693		
Another home delete	48,798		
Net anyone else adds	725,503		
Short time add	1,283,712		
Away now delete	473,240		
Another home delete	257,916		
Net short time adds	552,556		
Net total rostered	104,424,150		

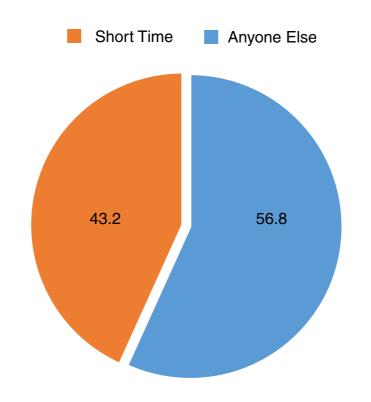
2) What percentage of those added via the "initial roster," "anyone else," and "short time" questions are ultimately included on the household roster?

97.3% of Initial Rostered, 81.2% of Anyone Else Adds, and only 43.0% of Short Time



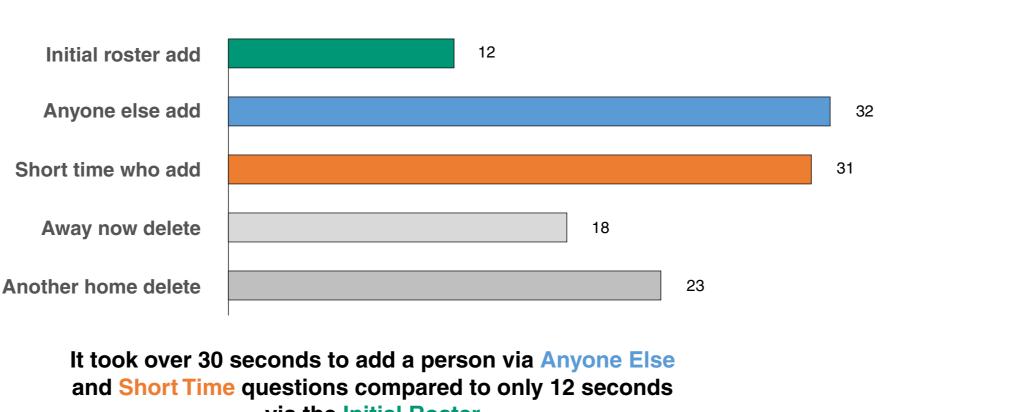
#### 3) Which of the undercoverge questions results in more net adds to the household roster?

The Anyone Else question, at 56.8%, accounted for more net adds than the Short Time question.



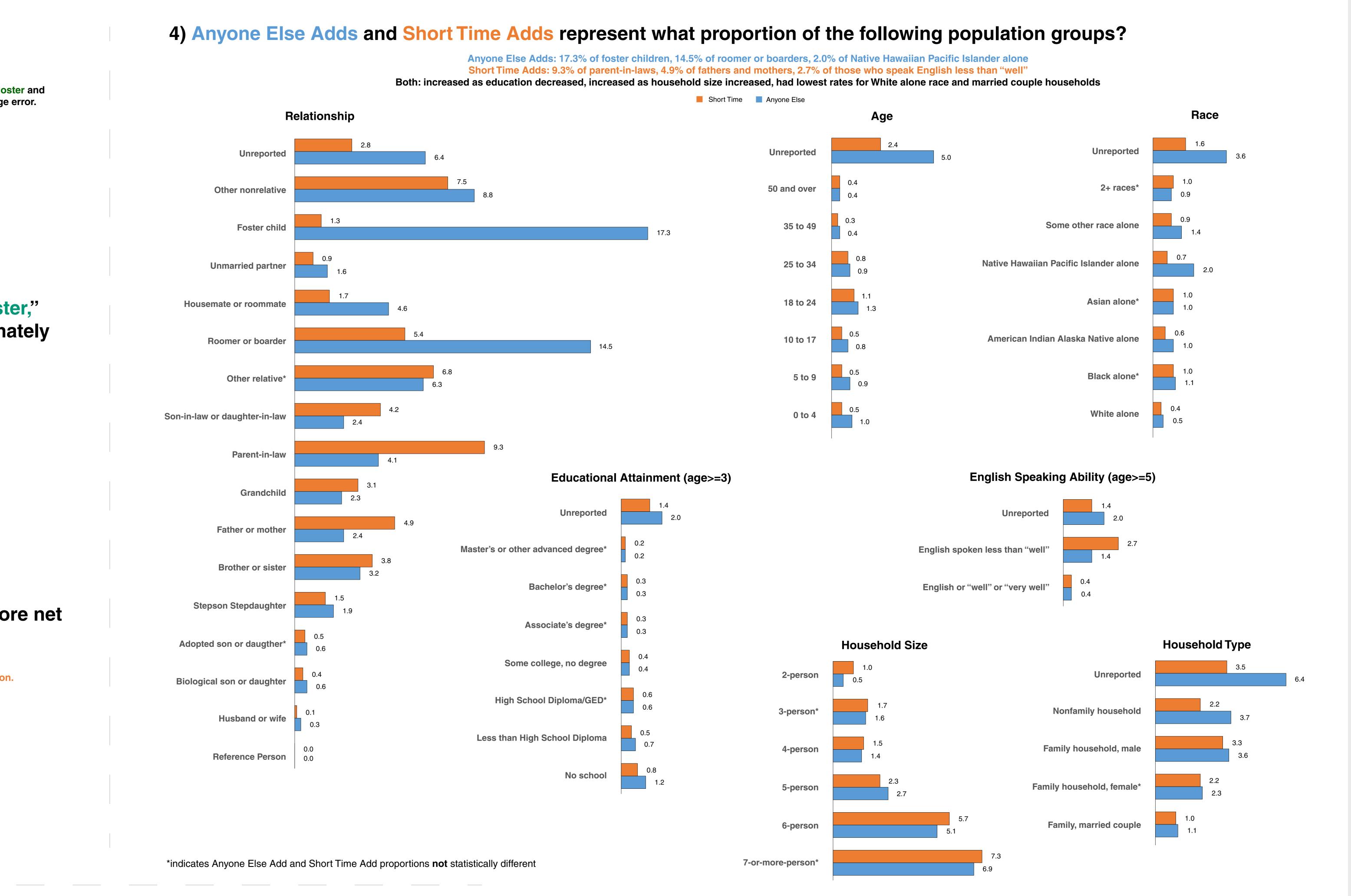
#### 5) Is there evidence of respondent burden surrounding coverage questions?

Time spent to add/delete a person (median in seconds)



via the Initial Roster

Source: 2015 American Community Survey Data from Internet Returns For more information see: https://www.census.gov/library/working-papers/2017/acs/2017\_Clark\_01.html



Perceived confusion/difficulty with the questions in roster section

- 11.1% of Internet households used the previous button and 60.3% changed answers
- 3.7% of Internet households broke-off in the roster section
- Following percent did NOT provide a name in write-in follow-up:

Anyone Else			67
Short Time		13	67% of boucebolds with "Vee" to Apyone Elec filter
Away Now	5		67% of households with "Yes" to Anyone Else filter question, did not provide a name in the follow-up write-in question
Another Home		15	

- groups such as:

### Conclusions

- The coverage questions were used to add and delete people to household rosters and reduce coverage error for
- Foster children
- Roomers and boarders
- Younger age groups
- Some non-White race groups
- Larger households
- The Anyone Else Question appears to capture more nonrelatives, while the Short Time Question appears to capture more relatives
- Over half of those added via Short Time Question were deleted through overcoverage questions, resulting in more net adds via Anyone Else Question
- Reducing coverage error appears to comes at the expensive of increased respondent burden, in terms of time spent and perceived confusion/difficulty with the questions. We found:
- High percentage of names missing from follow-up write-in fields
- Substantial use of previous button to change answers
- Longer time to add people using coverage questions than initial roster

This poster is released to inform interested parties of ongoing research and to encourage discussion. Any views expressed are those of the author and not necessarily those of the U.S. Census Bureau.