

What's Missing? Analysis of NCVS missed crimes results 2012 to 2017

Alan Peterson

Quality Assurance and Measurement Error
Demographic Statistical Methods Division
United States Census Bureau

JSM 2018

NCVS Goal

- National Crime Victimization Survey (NCVS) – household survey conducted to provide national/subnational personal and property victimization crime rates
- Data gathered during interview includes:
 - Type of crime
 - Monetary loss/physical injury
 - Reported or not reported to police

Reinterview

Reinterview (RI) is a second interview conducted at a household to determine if an interviewer actually conducted an interview and if the interviewer conducted it in accordance with established interview procedures. Goals of RI include...

Overall:

- Maintain the quality of survey data
- Monitor Interviewer performance and adherence to procedures

NCVS:

- Re-ask crime screener questions to estimate missed crimes

Reinterview Sampling Methodology

- Random Reinterview involves selection of 3-4 percent of cases to check all interviewers over course of cycle.
- Interviewer experience is a stratification variable for sampling
 - Experienced vs inexperienced cutoff
 - Supervisors with > 2 months experience
 - Interviewers with > 5 years experience
 - Experienced interviewers, all supervisors potentially selected for random RI once a year; Inexperienced interviewers twice a year.
 - Select sample of cases (6 for experienced, 5 for inexperienced)

Missed Crimes

- Crimes not reported during NCVS interview then reported in NCVS RI.
- Missed crimes estimated using response to crime screener questions as a proxy for reported crimes.



Missed Crimes Measures

- Missed Crime Estimate
 - Weighted average of number of missed crimes by experienced and inexperienced interviewers.
- Households with Missed Crimes
 - Weighted average of number of households with missed crimes by experienced and inexperienced interviewers.

Missed Crimes Measures

- Proportion of Missed Crimes
 - Ratio of # of missed crimes (RI) to (number of crimes (original interview) + number of missed crimes (RI))

- Proportion of Households with Missed Crimes
 - Ratio of households with missed crimes (RI) to number of households in original interview

Limitations

- Need both completed interview and reinterview
- Reinterview asks single person in household about person crimes not all persons
- Changes in reinterview instrument over timeframe 2012-2017 (content, data collection)

Evaluation Measures

- Missed crime measures over time (2012-2017)
- Missed crimes by interviewer experience
- Missed crimes by household characteristics

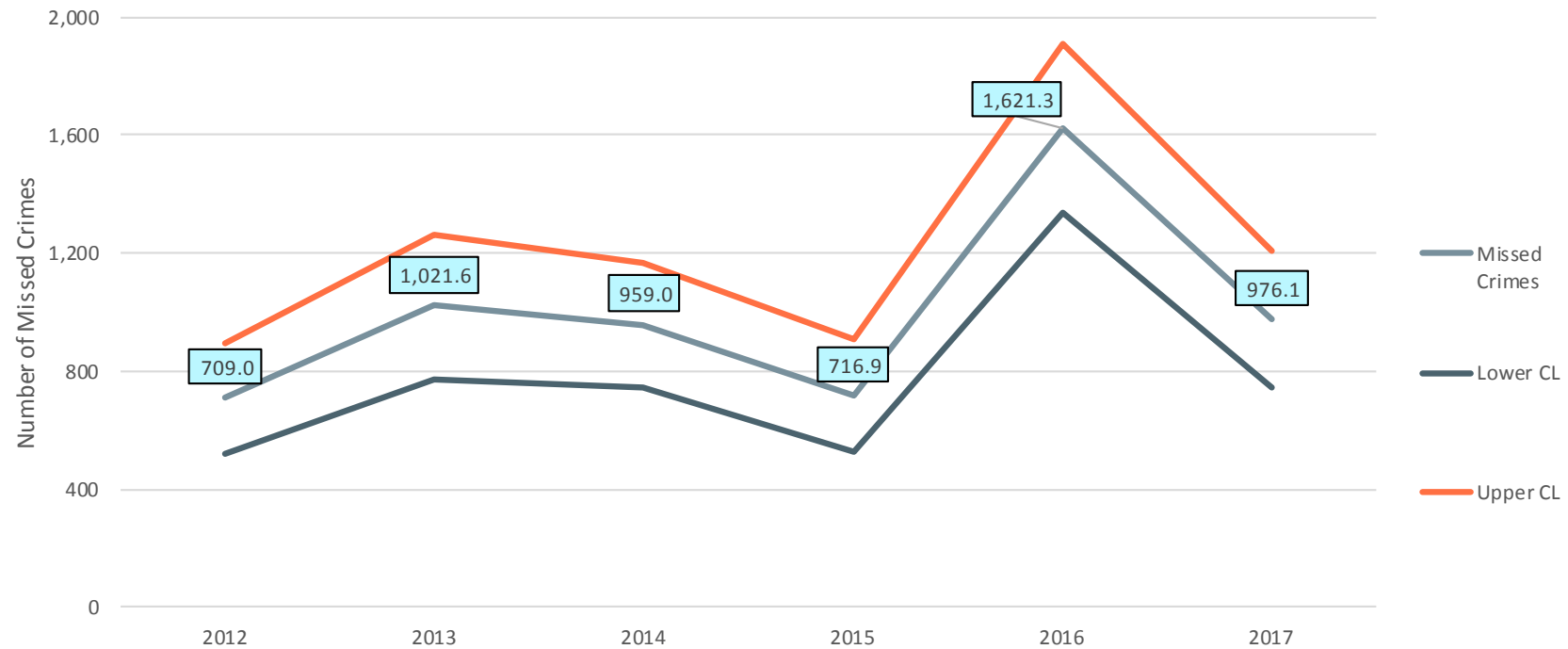
Missed crimes: 2012 - 2017

| Missed Crimes and Households with Missed Crimes | | | | |
|---|----------------------------------|----------------------------|--------------------------------|--|
| Year | Missed Crimes | Percent of Crimes Missing | Households with Missed Crimes | Percent of Households with Missed Crimes |
| 2012 | 709.00 (522.78, 895.21) | 7.90% (5.99%, 9.81%) | 513.29 (355.46, 671.12) | 7.99% (5.73%, 10.25%) |
| 2013 | 1,021.63 (777.61, 1,265.65) | 12.41% (9.82%, 15.01%) | 645.40 (453.59, 837.21) | 10.99% (8.08%, 13.90%) |
| 2014 | 959.03 (747.35, 1,170.71) | 12.60% (10.17%, 15.03%) | 638.63 (466.75, 810.51) | 11.79% (8.99%, 14.59%) |
| 2015 | 716.86 (527.69, 906.03) | 8.65% (6.57%, 10.74%) | 580.04 (413.84, 746.25) | 9.53% (7.06%, 12.00%) |
| 2016 | 1,621.33 (1,336.14, 1,906.52) | 10.56% (8.89%, 12.22%) | 1,150.87 (912.29, 1,389.46) | 10.58% (8.62%, 12.54%) |
| 2017 | 976.10 (742.87, 1,209.33) | 7.75% (6.04%, 9.46%) | 751.40 (547.99, 954.82) | 8.10% (6.09%, 10.12%) |

Source: United States Census Bureau 2012-2017 National Crime Victimization Survey (NCVS) Quality Control Reports

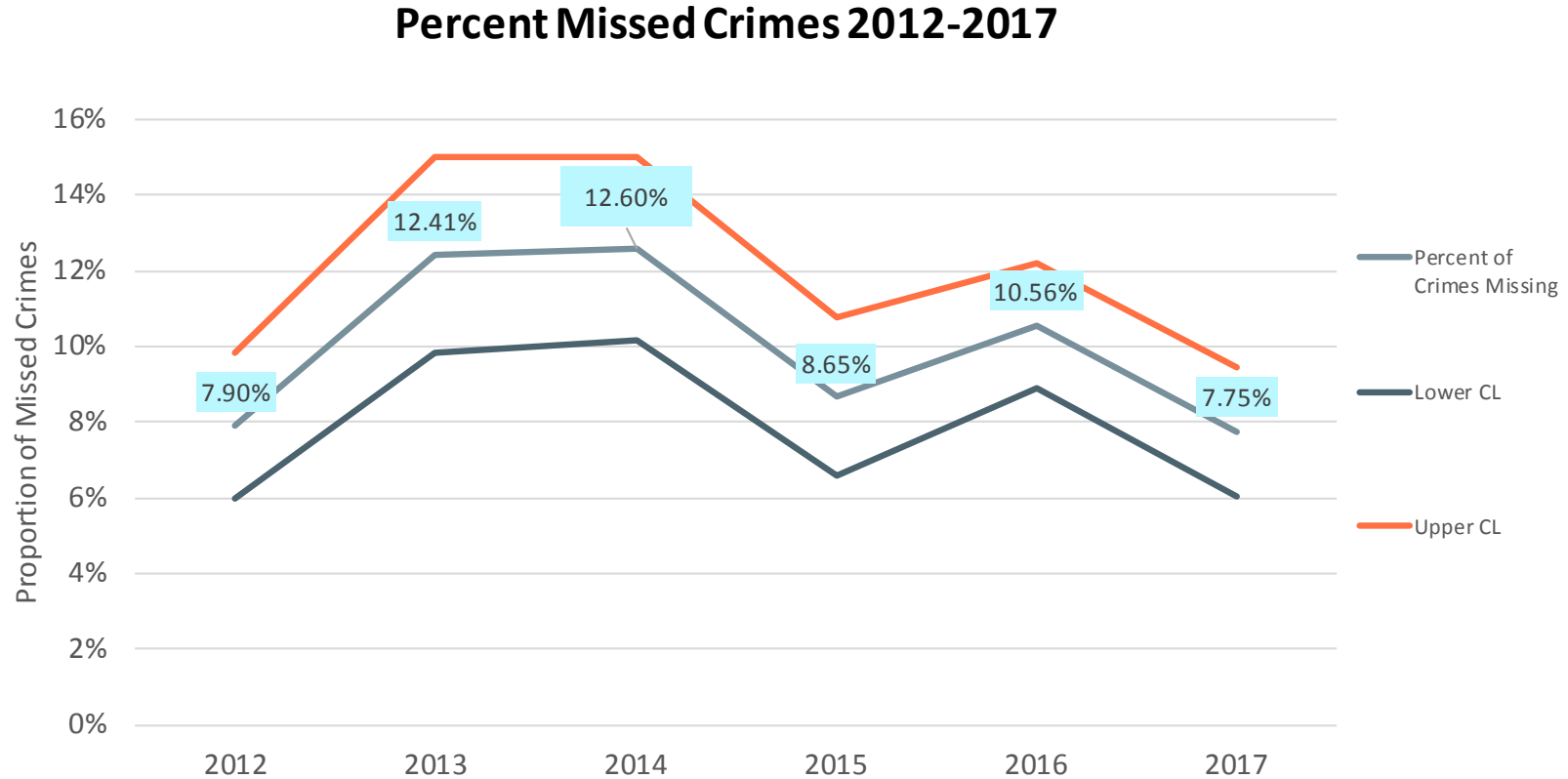
Missed crimes: 2012 - 2017

Missed Crime Estimates 2012-2017



Source: United States Census Bureau 2012-2017 National Crime Victimization Survey (NCVS) Quality Control Reports

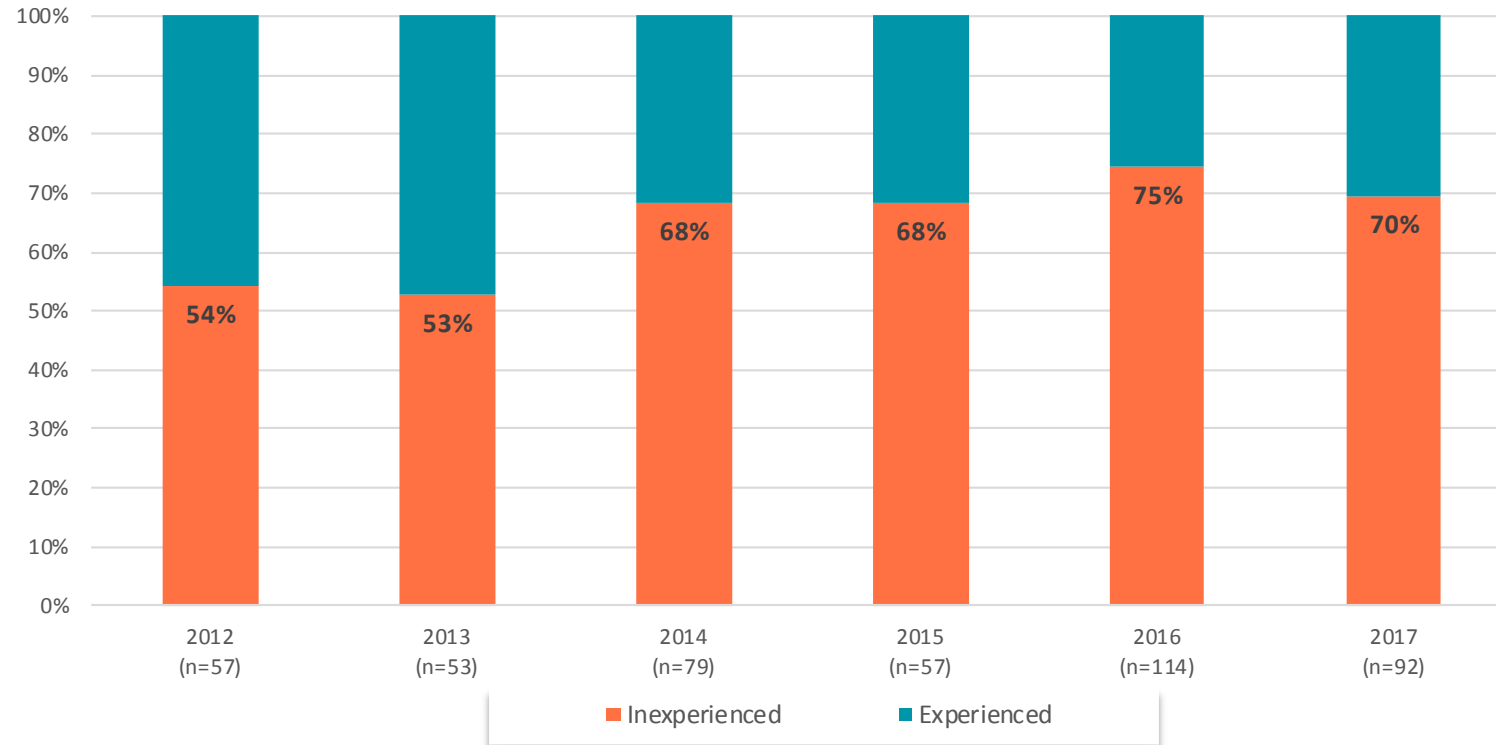
Missed crimes: 2012 - 2017



Source: United States Census Bureau 2012-2017 National Crime Victimization Survey (NCVS) Quality Control Reports

Interviewer Comparisons

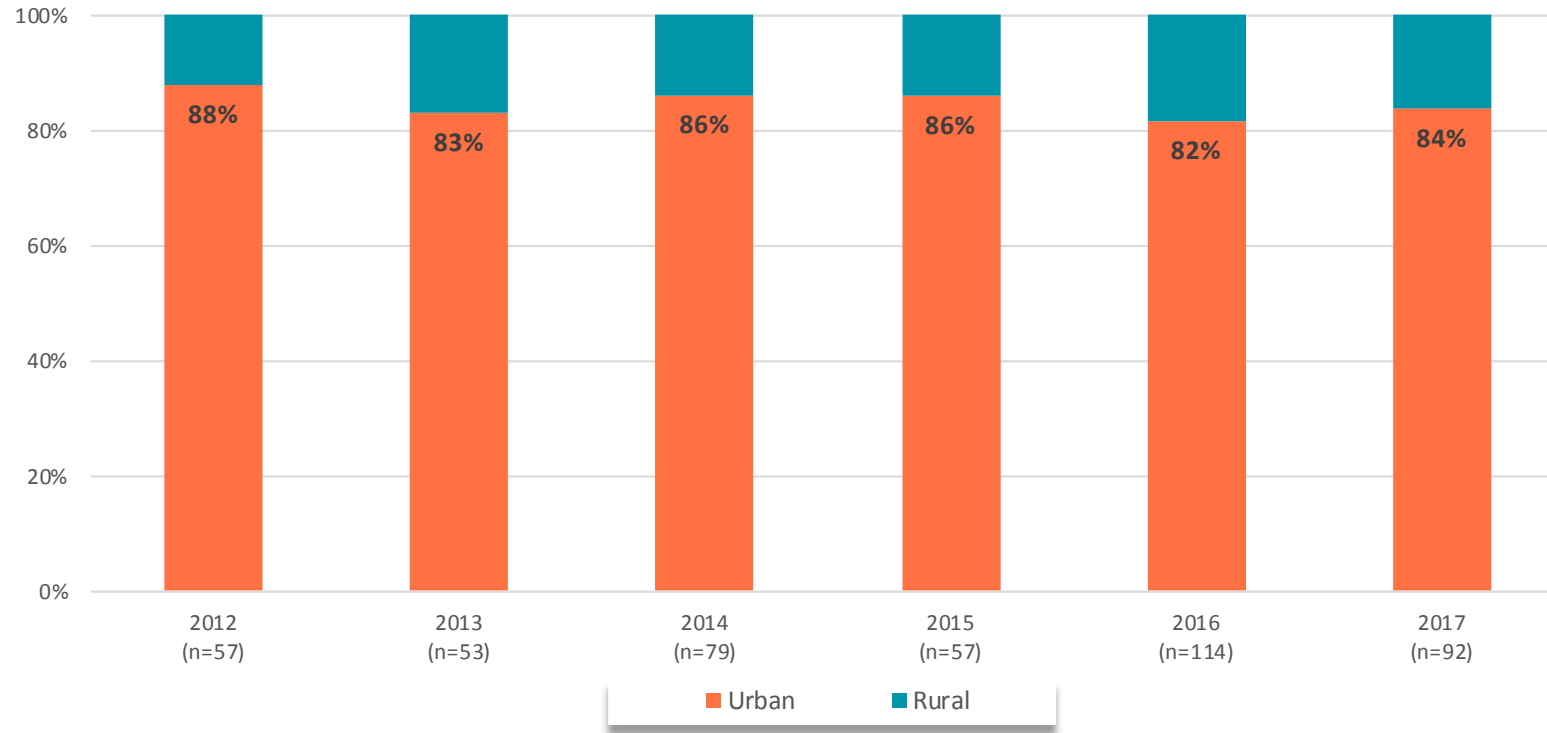
FR Experience Level Distribution 2012-17 Households with missed property/personal crimes



Source: United States Census Bureau National Crime Victimization Survey (NCVS) Production and Reinterview Results Files

Household Comparisons

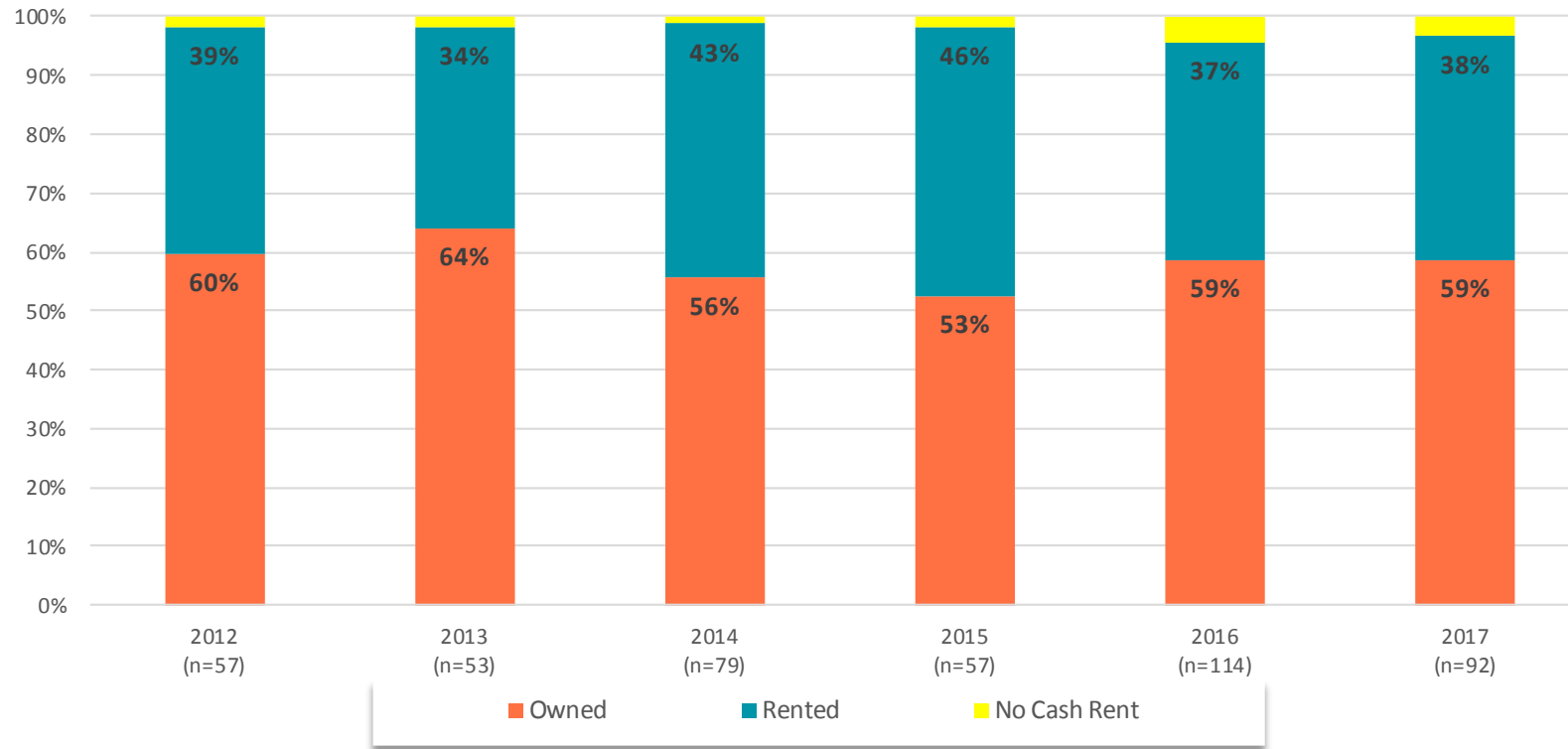
Urban/Rural Distribution 2012-17 Households with missed property/personal crimes



Source: United States Census Bureau National Crime Victimization Survey (NCVS) Production and Reinterview Results Files

Household Comparisons

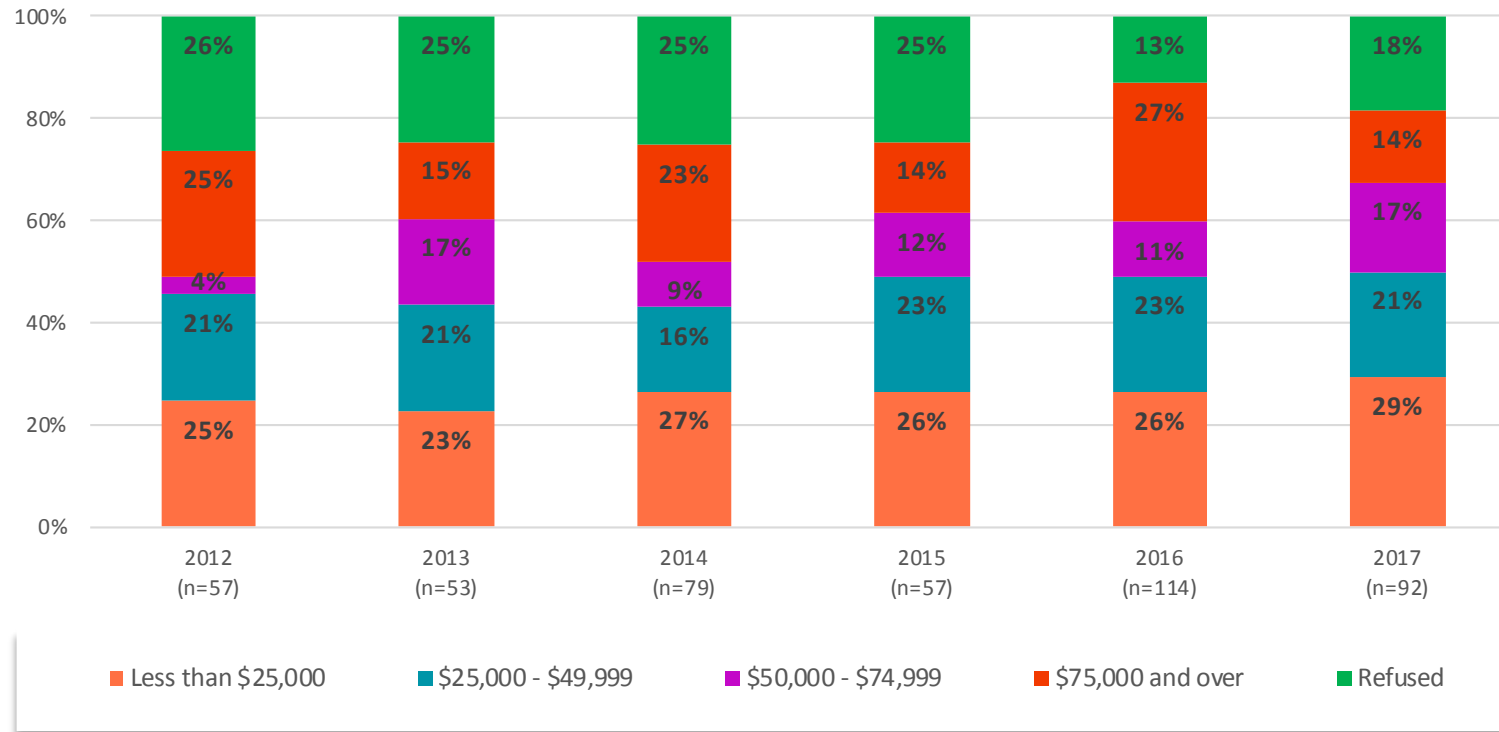
Tenure Distribution 2012-17 Households with missed property/personal crimes



Source: United States Census Bureau National Crime Victimization Survey (NCVS) Production and Reinterview Results Files

Household Comparisons

Household Income Distribution 2012-17 Households with missed property/personal crimes



Source: United States Census Bureau National Crime Victimization Survey (NCVS) Production and Reinterview Results Files

Conclusions

- Inexperienced FRs make up larger proportion of missed crime households in 2016 & 2017 than in prior years.
- Household tenure and Urban/Rural breakdowns of missed crime households appear consistent over time.
- Household income distributions of missed crime households vary across timeframe. Still consistent when collapsing income categories.

Alan Peterson
Quality Assurance and Measurement Error
Demographic Statistical Methods Division
U.S. Census Bureau

alan.k.peterson@census.gov