

This report was prepared by Westat using federal funding provided by the Bureau of Justice Statistics (BJS). Michael Planty (formerly of BJS) and Grace Kena were the Project Officers.

Document Title: National Crime Victimization Survey Local-Area Crime Survey: Field Test Methodology Report

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Document No.: 254519

Publication Date: April 2, 2020

Award No.: This project was supported by award number 2010-NV-CX-K077.

Abstract:

This report describes the methodology and results of the field test of the Local-Area Crime Survey (LACS), which was adapted from the National Crime Victimization Survey (NCVS) as part of BJS's efforts to build a program to estimate victimization at subnational levels. The report discusses the sample design, methods of data collection, response rates, and estimation procedures. It also compares survey results across versions of the LACS instrument and with the NCVS and the Uniform Crime Reporting Program. The survey was administered in 2015 and 2016 to residents in the 40 largest metropolitan areas in the United States. It collected data on residents' experience with victimization and on their perceptions of police and community safety. It is available for potential use by states, municipalities, and other jurisdictions.

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April 2020

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1. Introduction

The National Crime Victimization Survey (NCVS), a rotating panel survey conducted by the U.S. Census Bureau for the Bureau of Justice Statistics (BJS), is the nation's only source of information on victimizations not reported to police. The core NCVS methodology includes a mix of in-person and telephone interviews with household members age 12 or older selected from an area probability sample to produce reliable national-level estimates.

Beginning in 2008, BJS has engaged in a series of discussions on the needs and desires for information on crime and victimization with various stakeholders, including the Federal Committee on Statistical Methodology, representatives from state statistical analysis centers, state and local law enforcement agencies, the Office of Management and Budget (OMB), and congressional staff. These discussions resulted in the proposal and implementation of new research projects to assess and improve the core NCVS methodology. One important topic that emerged from the discussions was the desire for subnational estimates. The challenges of and potential methods for providing such estimates were also identified.

Westat, in collaboration with BJS, proposed a way to develop and evaluate a cost-effective subnational Local-Area Crime Survey (LACS) of victimization as one piece of the subnational estimate program. The goals for the LACS were to (1) develop and test a relatively inexpensive survey design that (2) can be administered by local jurisdictions or their vendors to (3) produce cross-jurisdiction estimates and estimates of change over time within jurisdictions that may be compared with similar estimates using NCVS data.

The LACS design evolved as evidence from tests was obtained and the needs of local areas were more clearly identified. The first approach attempted to replicate the NCVS to the extent possible with telephone interviews, but this approach proved infeasible. A pilot test of this design is discussed briefly in Section 1.1 below. A separate report presents results in more detail.

However, some promising aspects of the telephone pilot test suggested a new approach using only mail data collection with a household informant, described in Section 1.2. A small national pretest of this approach was very promising. Consequently, a large two-wave Field Test was undertaken, as summarized in Section 1.3. The goals of the Field Test were to (1) assess the feasibility of meeting

the objectives above with a mail survey and (2) evaluate different approaches for data collection within the general framework. To meet the latter goal, the Field Test included several methodological experiments.

The remainder of this report describes the implementation and methodological results of the LACS Field Test, including the sample design, data collection methods, response rates, and estimation procedures (Chapters 2-5). Chapters 6 and 7 compare survey results across instrument versions and with external sources.

1.1 Pilot Test with Telephone Interviewing

In the first phase of the LACS research, Westat developed and pilot-tested an address-based sampling (ABS) design using the existing NCVS instruments adapted to a computer-assisted telephone interview (CATI). The ABS design was chosen because the response rates, coverage, and costs associated with random digit dialing, the sampling method that would have been used a decade earlier, are all so unfavorable. The ABS design allowed for coverage of virtually the entire population of a specific geographic area.

The CATI questionnaire included much of the core NCVS content, including all items necessary to elicit and code all types of crime using Census Bureau procedures, as well as important correlates of victimization. One simplification to limit burden was to restrict within-household sampling to no more than two adults; the design also excluded adolescents because of the complications of getting parental consent.

Telephone numbers are typically available from directory services for fewer than half of addresses sampled from an ABS frame. Beginning in late May 2012, a brief mail screener requesting a telephone number was sent to sampled addresses without matched numbers. A subsample of those with matched numbers was also sent the mail screener. The mail screener also included a few questions on victimizations that the household may have experienced. All households with telephone numbers were then called to attempt to complete the survey.

Pilot test results led to several conclusions. First and perhaps most importantly, it is extremely difficult, if not impossible, to replicate NCVS estimates of victimization rates using this methodology. The NCVS is a large and complex survey with many potential sources of relative bias.

Replicating the NCVS would be difficult even if the only change were a different data collection organization. The other sources of error associated with an alternative data collection approach, such as nonresponse, mode effects, other response effects, and processing effects, make this type of replication virtually impossible. NCVS victimization estimates are very sensitive to many of these factors, so estimates may change substantially when even small deviations occur in the survey process. It appears infeasible to control for all these differences in a low-cost survey administration, regardless of the sample design or data collection mode(s).

Another important finding was that the response rate for the 2012 pilot was lower than anticipated and lower than acceptable for the LACS's intended purposes. The low response rate was due in part to a low telephone match rate for sampled addresses and in part to a sizable number of households that never answered calls. Telephone contact, whether using random digit dialing or ABS designs, is no longer effective for soliciting survey participation. Low response rates may increase the risk of nonresponse bias and definitely increase costs.

Given these conclusions, the telephone approach was abandoned. But the relative success of the mail screener was encouraging for the LACS.

1.2 A New Design with Modified Objectives

The response rate to the telephone-pilot mail screener approached 40 percent, and the resulting data indicated that a self-administered mail survey about crime might be feasible. However, a mail survey and the outcomes of the telephone pilot prompted some revisions to the general instrument design. Specifically—

- The design would allow one informant to respond for the household as within-household sampling is not reliable in a mail survey.
- The mail questionnaire would cover only up to four adults in each household.
- The content of the mail questionnaire was simplified and combined because it could not support the complexity of the NCVS instrument. The questionnaire would support estimates for a collapsed set of type-of-crime codes and for fewer correlates of victimization.

The third of the previously described LACS goals was redefined, so the new goals were to—

1. use a relatively inexpensive design and methodology
2. create a survey design that can be administered by local jurisdictions or their vendors
3. produce estimates of value to local areas that correlate with similar estimates available from the NCVS.

Estimating trends within jurisdictions that parallel national NCVS data trends was of particular interest. Local areas generally have their own data on victimizations, but these are almost always limited to crimes reported to police. Like the NCVS, the LACS was intended to widen this scope to include all crimes of specified types. But given the complexity of the NCVS, the goal was to have LACS data correlate with NCVS estimates rather than reproduce them. If this could be accomplished, then the LACS could support estimating changes over time at a local level and cross-sectional comparisons within or across jurisdictions. Such comparisons are impossible with currently available data because practices and reporting procedures vary widely, even within large cities. Finally, as the LACS approach was being developed, BJS identified increased demand for local-area data about public perceptions of policing and enforcement. Thus, providing this kind of data became an additional project goal.

Westat and BJS developed and tested two mail survey instruments to meet the revised requirements, with different potential strengths and weaknesses and both with attitudinal questions on enforcement and neighborhood safety:

- The **incident-level survey (ILS)** retains the core NCVS approach of using victimization probes followed by questions about reported incidents, although with less detail than the NCVS. The response structure is to ask about incidents and link them to the adults in the household who experienced them. This design can support incident-, person-, and household-level estimates of victimization. The ILS instrument does not capture all the incidents a victim experiences as the NCVS does, so data from the ILS and incident-level data from the core NCVS are not comparable.
- The **person-level survey (PLS)** asks about the victimizations each adult has experienced, changing the focus from the incident to the person. The PLS approach begins with property crime at the household level and then asks about each adult's victimization experiences. The PLS crime questions include sufficient detail to assess whether the household or the individual adult experienced victimization in the 12-month reference period.

Because neither the ILS nor the PLS supports estimates of crime incidence (e.g., the number of aggravated assaults per 1,000 adults), prevalence estimates of households or adults “touched by crime” (TBC) are used for all comparisons in this report. Even though the ILS captures many incidents, it cannot replicate NCVS incidence estimates because it limits the number of incidents that may be reported within a household and does not unduplicate incidents across people.¹ The TBC prevalence measure is the ratio of the estimated number of persons (or households) who experienced a particular type of victimization to the number of persons (or households) in the target population. The LACS uses TBC measures for major categories such as property crime, violent crime, and serious violent crime. Very similar measures may be calculated from NCVS data. While the LACS prevalence and NCVS incidence measures are different, they should be correlated because most victims experience only one incident in the reference period and most incidents are experienced by only one adult within a household.

Westat conducted a “proof of concept” pretest of the two LACS instruments with a national sample of 2,500 addresses. Half the sample were sent the ILS, and half were sent the PLS. Debriefing interviews were conducted with a small sample of responding households. The primary goal of the pretest was to assess whether respondents were willing and able to use the proposed instruments to report victimizations, and whether the responses had enough detail to classify incidents accurately into relatively broad categories. Additional goals of the pretest were to obtain reasonable survey and item response rates and to assess whether the ILS or PLS instrument was a better performer.

The pretest results were encouraging. Response rates averaged 52.6 percent, with the PLS about 3 percentage points higher than the ILS. Victimization rates for both the PLS and ILS approximated those achieved in the core NCVS. The pretest did identify some relatively minor issues with the instruments that could be easily rectified for the LACS Field Test. The survey was named the American Crime Survey for this test.

1.3 Field Test

The primary goal of the LACS Field Test was to assess whether a mail survey could yield victimization estimates that correlate with those from the core NCVS and, to a lesser extent, the

¹ In the NCVS, if two people in the household are victims of the same incident, the incident is counted only once in the victimization rate estimation.

Uniform Crime Reporting (UCR) program of the Federal Bureau of Investigation (FBI). The UCR contains only police-reported incidents, and there is substantial variation in the quality of reporting by jurisdictions that may affect the correlation. The Field Test, a cross-sectional ABS design in the 40 largest core-based statistical areas (CBSAs) in the United States, was conducted between September and December 2015 and again between September and December 2016. A constant sample size across most of the 40 CBSAs was selected, with larger samples selected in three CBSAs in Year 1 and in two CBSAs in Year 2 to assess the feasibility of within-CBSA sampling and estimation. The larger CBSA samples were stratified by police jurisdictional boundaries. The Year 2 sample included both a new, independent cross-sectional ABS sample and a subsample of addresses from the 2015 sample (the “overlap sample”).

Both Year 1 and Year 2 included an experiment to compare the ILS and PLS versions of the questionnaire. A second questionnaire experiment in Year 1 varied the placement of questions on perceptions of community safety, with Form A placing them at the beginning of the instrument and Form B placing them closer to the end, after the questions about victimization. The questionnaire experiments were separately randomized by area in a 2x2 design (CBSA and stratum within the oversampled CBSAs). Each of the non-oversampled CBSAs had the same sample size for each treatment (PLS/ILS by form), as did each jurisdiction within each of the oversampled CBSAs. These experiments were to assess the questionnaire design’s effects on unit response rates; completeness of reporting in households with more than one adult; item missing rates; and key outcome estimates, including the number of adults who experience victimizations. The results are presented in Chapter 6.

Year 1 of the Field Test also experimented with the use of bilingual materials. In some self-administered surveys designed to reach Spanish-speaking households, bilingual (English and Spanish) instruments are provided. One approach, used in the Field Test, was to send bilingual materials to targeted addresses. In this case, the targeted addresses were in areas with high concentrations of Hispanic persons or with surnames likely to be Hispanic. The experiment also involved sending bilingual materials to a sample of the non-targeted addresses. This experiment was similar to earlier testing done in the National Household Education Survey.² The results, which

² Brick, J. M., Montaquila, J. M., Han, D., & Williams, D. (2012). Improving response rates for Spanish speakers in two-phase mail surveys. *Public Opinion Quarterly*, 76(4), 721-732. <https://www.jstor.org/stable/41684596>

examine response rates and the proportion of returns from Hispanic households, are presented in Chapter 4.

Finally, in addition to the overlap-versus-independent-sample experiment, Year 2 included an experiment varying the incentive amount and delivery method. As with the questionnaire experiment, the intent was to assess the effects on unit response and victimization estimates.

1.4 Contents of Report

This report covers the following topics about the LACS Field Test for Year 1 and Year 2 of the data collection effort:

- sample design (Chapter 2)
- data collection methods (Chapter 3)
- response rates and patterns (Chapter 4)
- estimation (Chapter 5)
- reports of victimization (Chapters 6A and 6B)
- jurisdiction-level data (Chapter 7)
- summary (Chapter 8).

Several appendices support these report sections. In addition, Appendix H on Year 1 instrument performance includes an analysis of data quality based on a comparison of text responses and closed-ended responses.

2. Sample Design

The operational goals of the LACS Field Test were to (1) evaluate whether a lower-cost data collection procedure can produce reliable level and change estimates of victimization for local areas that correlate with estimates from the core NCVS and (2) compare alternative questionnaire and data collection approaches that may best be used by users interested in these kinds of estimates.

Local areas in this study were defined as CBSAs.³ The population of interest for the Field Test consisted of all households in the 40 largest CBSAs in the United States, where CDSA size was measured by number of households. CBSAs were chosen as the geographical units so that comparisons could be made with CDSA-level crime rates from the core NCVS and from the UCR, which the FBI collects from participating law enforcement agencies. In Year 1 of the Field Test, three of the largest CBSAs—Chicago, Los Angeles, and Philadelphia—were sampled at a higher rate than the remaining 37 CBSAs and had sub-CDSA stratification. In Year 2, Chicago and Philadelphia were sampled at a higher rate and had the same sub-CDSA stratification as in Year 1, but Los Angeles was not oversampled and did not employ the sub-CDSA stratification used in Year 1. As discussed in Chapter 7, the Los Angeles oversample was dropped in Year 2 to control costs and due to other considerations such as the availability of data for comparison. The design for both years used an ABS, with a U.S. Postal Service (USPS) list of addresses as the sampling frame.

As described in Chapter 1, the Field Test had embedded experiments in both years to investigate questionnaires and procedural measures. One of those experiments, in Year 2, included a 25 percent subsample of the Year 1 sampled addresses, along with a new ABS selected in the same 40 CBSAs as in Year 1. The overlap portion of the Year 2 sample (the subsample of the Year 1 addresses retained for Year 2) was intended to assess the potential for reducing the variance of the Year 1 to Year 2 change estimates by taking advantage of the correlation in crime rates over time for the same geographic area.

³ Office of Management and Budget. (2013). *Revised delineations of metropolitan statistical areas, micropolitan statistical areas, and combined statistical areas, and guidance on uses of delineations of these areas* (OMB Bulletin No. 13-01). <https://obamawhitehouse.archives.gov/sites/default/files/omb/bulletins/2013/b13-01.pdf>

2.1 Year 1: Stratification, Sample Sizes, and Sample Selection

The sample sizes for each CBSA were calculated to provide sufficient power and precision to detect (1) statistically significant correlation between crime rates for the LACS and the core NCVS and for the LACS and the UCR; and (2) differences in crime rates among the instruments (ILS, PLS) and forms (A, B) across all 40 CBSAs, all within the available resource constraints in Year 1. There was also a desire to compare geographical subareas within the three large CBSAs, which led to increasing the overall sample sizes for Chicago, Philadelphia, and Los Angeles.

The Year 1 study used a randomized complete block design to compare the instruments and forms. Within each CBSA (and within each subarea for Chicago, Philadelphia, and Los Angeles) sampled addresses were randomly assigned to receive either ILS Form A, ILS Form B, PLS Form A, or PLS Form B, with approximately a quarter of the addresses in each stratum receiving each experimental treatment. This design allows the CBSA-to-CBSA variability in response rates and victimizations to be removed from the comparison of the instruments and forms, thereby increasing the power for those comparisons.⁴ At the same time, the collection of data from 40 CBSAs allows exploration of correlations between LACS estimates of victimization rates and those from the NCVS and UCR. The Year 2 study applied the same design principles for the evaluation of the comparison of the ILS and PLS and for various incentive and mailing procedures.

The Year 1 target for each of the 37 non-oversampled CBSAs (all CBSAs except Philadelphia, Los Angeles, and Chicago) was 2,100 completed surveys. The targets for the three oversampled CBSAs were 7,500 completed surveys for Los Angeles, 7,500 for Chicago, and 9,363 for Philadelphia, for an overall total of 102,063 completed surveys. Section 2.2 presents the power calculations leading to these sample sizes.

The initial sample size of addresses needed to obtain these target completes assumed a uniform response rate of 50 percent and a vacancy rate of 11 percent. The basis for our response rate assumption was the LACS pretest, which was based on a representative sample of 2,500 addresses across the United States. The pretest obtained an overall response rate of 50.4 percent (54.5 percent

⁴ Cox, D. R., & Reid, N. (2000). The theory of the design of experiments. In D. R. Cox, V. Isham, N. Keiding, L. N. Reid, R. Tibshirani, & H. Tong (Eds.), *Monographs on statistics and applied probability* (Vol. 86, pp. 48-52). Chapman & Hall/CRC.

using the Council of American Survey Research Organizations (CASRO) method). The total initial sample size for the Field Test was 229,351 addresses.

To allow for oversampling of geographic subareas, Chicago, Los Angeles, and Philadelphia were stratified by jurisdiction. The major strata were the central city and the remainder of the CBSA, as crime rate data were available from police departments for the central cities but not necessarily for the entire CBSA. (Note that “central city” here is not necessarily the same as the OMB definition for the CBSA.) Within the central city, geographic subareas were further stratified using information about how the police departments were organized and managed. The geographic subareas were defined by the level of geography for which local crime statistics were thought to be available. Within the remaining 37 CBSAs, there was no additional stratification because only estimates for the entire CBSA were produced for these CBSAs.

The sample sizes in the three large CBSAs were chosen to provide adequate precision for comparing subarea estimates within CBSAs. In the three oversampled CBSAs, the sample size was allocated to the central city and Remainder strata. The Remainder stratum was allocated the sample size it would have received under proportional allocation if 2,100 interviews were targeted for the entire CBSA; the rest of the sample was assigned to the central-city strata. This allocation prevents the Remainder stratum from being undersampled compared to areas in other CBSAs and keeps the allocation to this stratum proportional, as it would be in the 37 CBSAs where the target is only 2,100 interviews.

Three types of sample allocation were considered within the oversampled CBSAs: proportional allocation, equal allocation, and a compromise allocation. Proportional allocation apportions the available sample in proportion to the population in the area; equal allocation assigns the same sample size to each area; and the compromise allocation modifies the sample sizes to allow better comparisons of estimates for the areas within the city by increasing the proportional-allocation sample size in small areas and decreasing it in larger areas. Tables 2-1 to 2-3 show the chosen sample allocation scheme and the sample sizes that would result from proportional allocation for comparison.

Table 2-1. Los Angeles police department bureaus and sample allocations

| Bureau | Percent of population * | Allocations | | |
|---------|-------------------------|---------------|---------|------------|
| | | Proportional* | Equal** | Compromise |
| Central | 24% | 1,429 | 1,511 | 1,345 |
| South | 17% | 1,016 | 1,511 | 1,300 |

| | | | | |
|------------------|------|-------|-------|-------|
| West | 22% | 1,334 | 1,511 | 1,300 |
| Valley | 37% | 2,265 | 1,511 | 2,100 |
| Los Angeles city | 100% | 6,045 | 6,045 | 6,045 |

* Subject to rounding error. Percentages are rounded, but the proportional counts are based on unrounded percentages.

** The Year 1 chosen allocation.

Los Angeles. The city of Los Angeles is organized into 21 police divisions, which fall under four administrative bureaus:⁵ Central, South, West, and Valley. Table 2-1 shows the population distribution for the city and a target sample size under equal allocation of 1,511 completed surveys for each bureau. The target sample size for the remainder of the CBSA was 1,456, for a total of 7,500 completed surveys for the Los Angeles CBSA.

For Los Angeles, equal allocation gave adequate power to detect a 5 percentage point difference between bureaus on an item with a prevalence of 30 percent. This allocation did increase the design effect for citywide estimates by a factor of 1.09. (Note that proportional allocation had a design effect of 1.0.) A compromise allocation was examined to reduce this design effect while still meeting the power goals for comparisons, by having a minimum sample of 1,300 in each bureau. The compromise reduced the design effect to 1.01. However, the importance of the comparisons within the city and the modest design effect of 1.09 resulted in the adoption of equal allocation in this case.

Table 2-2. Chicago police department areas and sample allocations

| Police area | Percent of population* | Allocations | | |
|--------------|------------------------|---------------|-------|--------------|
| | | Proportional* | Equal | Compromise** |
| North | 45% | 2,665 | 2,000 | 2,200 |
| Central | 39% | 2,354 | 2,000 | 2,000 |
| South | 16% | 981 | 2,000 | 1,800 |
| Chicago city | 100% | 6,000 | 6,000 | 6,000 |

* Subject to rounding error. Percentages are rounded, but the proportional counts are based on unrounded percentages.

** The Year 1 chosen allocation.

Chicago. The city of Chicago is organized into three police areas (North, South, and Central)⁶ that comprise 25 police districts. There are other reporting structures in Chicago, but this one was chosen for the Field Test. Table 2-2 shows the distribution of the population in the city and the

⁵ See Los Angeles Police Department. (2009). *Los Angeles Police Department bureaus and areas* [Map]. http://assets.lapdonline.org/assets/pdf/Citywide_09.pdf

⁶ See City of Chicago Office of Emergency Management and Communications. (2016). *Chicago police areas, districts and beats* [Map]. http://gis.chicagopolice.org/pdfs/district_beat.pdf

target sample size for each police area using a compromise allocation: 2,200 for the North, 2,000 for the Central, and 1,800 for the South. The target sample size for the remainder of the CBSA was 1,500, for a total of 7,500 completed surveys for the Chicago CBSA.

Equal allocation produced sufficiently large sample sizes for each of the police areas because there are only three. The design effect for the equal allocation was 1.13 primarily because of the large disparity in populations across police areas. With equal allocation, the South was oversampled by a factor of 1.8 compared to proportional allocation. The compromise allocation in this case allocated 1,800 to the South also and lowered the citywide design effect to 1.09. Therefore, the compromise allocation was used for Chicago.

Table 2-3. Philadelphia police divisions and sample allocations

| Divisions | Percent of population* | Allocations | | |
|-------------------|------------------------|---------------|---------|------------|
| | | Proportional* | Equal** | Compromise |
| Central | 9% | 534 | 1,300 | 400 |
| East | 12% | 733 | 1,300 | 400 |
| Northeast | 29% | 1,704 | 1,300 | 1,600 |
| Northwest | 21% | 1,237 | 1,300 | 1,600 |
| South | 11% | 642 | 1,300 | 400 |
| Southwest | 18% | 1,092 | 1,300 | 1,540 |
| Philadelphia city | 100% | 5,940 | 7,800 | 5,940 |

* Subject to rounding error. Percentages are rounded, but the proportional counts are based on unrounded percentages.

** The Year 1 chosen allocation.

Philadelphia. The city of Philadelphia is organized into six police divisions.⁷ Table 2-3 shows the population distribution for the city and a target sample size of 1,300 for each division using equal allocation. The target sample size for the remainder of the CBSA was 1,563, for a total of 9,363 completed surveys for the Philadelphia CBSA.

An overall sample size of 7,500 for the CBSA would result in 5,940 for the city of Philadelphia and an equal allocation yield of fewer than 1,000 in each of the six divisions, which would not provide the power desired for comparisons. The sample size would also give a citywide design effect of 1.17. The compromise did give adequate power for three of the six divisions, but the sample sizes for the other three divisions were small (the design effect was lowered to 1.12). To reach the goal for the city, the overall sample size was increased to 7,800, and an equal sample size of 1,300 was allocated

⁷ See Philadelphia Police Department. (2017). *Philadelphia Police Department organizational chart* [Hierarchical chart including police divisions]. <https://www.phillypolice.com/assets/about-the-department/Organizational-Chart-03-28-17.pdf>

to each division. This allocation still resulted in a design effect of 1.17, but with the increased sample size, the citywide estimates had an effective sample size of nearly 6,700.

Addresses were sampled with equal probability within each CBSA and within each stratum in the oversampled CBSAs. Prior to sampling, the address frame was sorted geographically by state and zip code within each stratum. The Remainder stratum in the Philadelphia and Chicago CBSAs contained addresses in more than one state.

The sampled addresses were randomly apportioned separately for each CBSA or CBSA stratum to one of the four experimental treatments: ILS Form A, ILS Form B, PLS Form A, or PLS Form B. Approximately a quarter of the addresses in a stratum received each form.

2.2 Year 2: Stratification, Sample Sizes, and Sample Selection

The Year 2 sample design included a 25 percent overlap with the Year 1 sampled addresses and a new address-based sample selected from the most recent address frame. The new sample was selected in the same 40 CBSAs as in Year 1. The Year 1 stratification within the Chicago and Philadelphia CBSAs was retained, but the Los Angeles CBSA was not stratified in Year 2.

The Year 2 target sample sizes are summarized in Tables 2-4 and 2-5 for the Chicago and Philadelphia CBSAs and are the same as the Year 1 sample sizes. In each of the remaining 38 CBSAs, the initial sample size was 4,720 addresses, with a target of 2,100 completed interviews, based on assumptions of a 50 percent response rate and 11 percent vacancy rate. The Year 1 sample for the Los Angeles CBSA was reduced to 4,720 by subsampling the Year 1 sample of addresses in the four police bureaus prior to Year 2 sampling.

Table 2-4. Year 2 Chicago CBSA strata and sample sizes

| Police areas | Target sample size | Initial sample size |
|-------------------|--------------------|---------------------|
| North | 2,200 | 4,944 |
| Central | 2,000 | 4,494 |
| South | 1,800 | 4,045 |
| Remainder of CBSA | 1,500 | 3,371 |
| Total | 7,500 | 16,854 |

Table 2-5. Year 2 Philadelphia CBSA strata and sample sizes

| Divisions | Target sample size | Initial sample size |
|----------------|--------------------|---------------------|
| Central | 1,300 | 2,921 |
| East | 1,300 | 2,921 |
| Northeast | 1,300 | 2,921 |
| Northwest | 1,300 | 2,921 |
| South | 1,300 | 2,921 |
| Southwest | 1,300 | 2,921 |
| Remainder CBSA | 1,563 | 3,512 |
| Total | 9,363 | 21,038 |

Only addresses assigned to Form A for the ILS and PLS questionnaires and not assigned to the bilingual mail experiment in Year 1 were allowed a chance of selection for the overlap. The form experiment conducted in Year 1 resulted in dropping Form B, so retaining sample addresses assigned to Form B was not appropriate. Year 1 sample addresses that fit these criteria (roughly half the Year 1 sample) were subsampled at a rate of 0.5 within each CBSA and stratum and retained for the Year 2 sample. The overlap portion of the sample retained the instrument assignments (ILS, PLS) from Year 1.

The new portion of the Year 2 sample was selected from the most recent USPS address lists, using the same procedures as in Year 1. For each CBSA (or CBSA stratum), the sample size was calculated as the Year 2 total (initial) sample size minus the number of addresses retained for the overlap portion. The new Year 2 sampled addresses were randomly assigned to either the ILS or PLS within each CBSA stratum by sorting the addresses by state, county, census tract and census block group, then numbering them as 1, 2, 1, 2 ... until the end of the file was reached, and assigning the 1s to the ILS and 2s to the PLS.

The next step was to assign the sampled addresses to treatment groups for the Year 2 incentive and mailing experiments. All Year 2 sampled addresses were randomly assigned to six equal-size treatment groups by sorting the sample within CBSA (or CBSA stratum) and instrument (ILS, PLS) by state, county, Census tract and Census block group, then numbering the addresses from 1 to 6 repeatedly until all addresses were assigned a number. The six treatments are described in Table 2-6. This assignment was done separately for the new and overlap portions of the sample. This procedure completed the randomized block design for Year 2.

Table 2-6. Treatment groups for Year 2 incentive and mailing experiments

| Treatment | Incentive | Third mailing |
|-----------|-----------|---------------|
| 1 | \$2 | FedEx |
| 2 | \$2 | USPS |
| 3 | \$1 | FedEx |
| 4 | \$1 | USPS |
| 5 | \$0 | FedEx |
| 6 | \$0 | USPS |

A questionnaire was mailed to each sampled address. As in Year 1, both English- and Spanish-language questionnaires were sent to all sampled addresses in census tracts that had a high percentage of linguistically isolated households (as identified by the 2010 Census) or that were associated with Hispanic surnames, according to the address frame information. In the remaining tracts, bilingual survey materials were mailed to a subsample of addresses across all 40 CBSAs as an experiment. In Year 2, only new sample addresses that were outside linguistically isolated tracts and were not associated with Hispanic surnames were eligible for the bilingual experiment. The subsampling was done by sorting the new addresses within each CBSA stratum, instrument (ILS, PLS), and treatment (1-6) cell by state, county, census tract, and census block group, then using systematic sampling to randomly sample four addresses per cell to receive the bilingual survey materials. A total of 2,352 Year 2 new sampled addresses ($49 \text{ CBSA strata} \times 12 \times 4 = 2,352$) were assigned to the bilingual experiment in this way.

2.3 Expected Level of Precision

2.3.1 Estimates for Geographic Areas

An important goal of the analysis is to test whether the correlations between victimization rates for the LACS and the core NCVS and between the LACS and the UCR are significantly different from zero. For the Field Test, victimization rates comparable to the existing NCVS rates cannot be calculated because of the differences in the self-administered LACS instruments and the other data sources. The ILS questionnaires collects data on only the four most recent crimes in households, and the PLS does not identify unique crime incidents. Instead, the LACS was designed to be able to calculate the proportion of households and persons reporting at least one victimization (or “touched by crime,” TBC incident). A high correlation between the LACS TBC estimates and the core NCVS TBC estimates across the CBSAs would indicate that the LACS is able to detect differences in

victimization rates across localities. Forty pairs of victimization rates are available to calculate a correlation coefficient for each data source and type of crime. For example, the correlation between the LACS TBC rates and NCVS TBC rates for property crime and violent crime can be computed. A related analysis involves regressing the NCVS rates on the LACS rates using the set of CBSAs for which estimates exist in each source. A similar analysis can be done using the UCR crime rates. See Chapter 6 for details on these analyses.

Sample Size for the 37 Non-oversampled CBSAs

The sample size for each of the 37 non-oversampled CBSAs was chosen to be able to detect a correlation of 0.5 between a LACS-estimated victimization rate and the NCVS or UCR rate with power of at least 80 percent. This analysis assumed that the sample size in the three oversampled CBSAs would be at least as large as the sample size in the other 37 CBSAs.

To determine the likelihood of detecting a statistically significant correlation, a power analysis was conducted under varying assumptions about the correlation and the number of completed interviews. The power for a correlation coefficient depends on (1) the number of CBSAs, (2) the population variance among the true victimization rates for the CBSAs, and (3) the expected sampling variability for the CBA-level measurements in each source. The population mean and variance for the true crime rate distribution were estimated by first estimating property and violent crime rates for 38 of the largest CBSAs using the 2012 UCR,⁸ then averaging across the 38 CBA estimates for each crime type to estimate the population mean. The population standard deviation across CBSAs was estimated from the variability of the 38 CBA estimates. (Two of the 40 CBSAs were omitted because they lacked UCR data for 2012.) The power analysis was then run separately for property and violent crime rates. The power analysis was repeated using 2009-2011 NCVS crime rates for the same CBSAs to estimate the population parameters and to check that the sample sizes calculated from the UCR power analysis would be adequate for variances calculated from the NCVS. The population mean and standard deviation were calculated by pooling 2009-2011 NCVS data to increase the stability of the estimates. The power analysis accounted for the sampling error in the

⁸ The UCR was used for this purpose instead of the NCVS because the NCVS has large sampling errors for some of the CBSAs.

LACS CBSA estimates by estimating the attenuation of the correlation coefficient that would occur because of the sampling error.

The power analysis showed that if the true correlation coefficient (rho) is at least 0.5 and the number of completed interviews for the LACS crime rate estimates is 2,000, the power to detect a statistically significant correlation is about 0.86 for property crime and 0.82 for violent crime. For the three large CBSAs, this assumes no design effect from oversampling the central city stratum. The results of the power analysis using the UCR data to estimate the population parameters are given in Tables 2-7 and 2-8.

Table 2-7. Power for test of $H_0: \text{Rho} = 0$, based on UCR property crime rates

| Rho | n = 1000 | n = 1500 | n = 2000 | n = 2500 |
|-----|----------|----------|----------|----------|
| 0.2 | 0.1897 | 0.2008 | 0.2070 | 0.2110 |
| 0.3 | 0.3737 | 0.3981 | 0.4117 | 0.4203 |
| 0.4 | 0.6056 | 0.6401 | 0.6586 | 0.6701 |
| 0.5 | 0.8166 | 0.8478 | 0.8633 | 0.8726 |
| 0.6 | 0.9456 | 0.9618 | 0.9689 | 0.9729 |
| 0.7 | 0.9919 | 0.9958 | 0.9972 | 0.9978 |
| 0.8 | 0.9996 | 0.9999 | 1.0000 | 1.0000 |
| 0.9 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Table 2-8. Power for test of $H_0: \text{Rho} = 0$, based on UCR violent crime rates

| Rho | n = 1000 | n = 1500 | n = 2000 | n = 2500 |
|-----|----------|----------|----------|----------|
| 0.2 | 0.1672 | 0.1825 | 0.1918 | 0.1980 |
| 0.3 | 0.3229 | 0.3576 | 0.3783 | 0.3919 |
| 0.4 | 0.5292 | 0.5821 | 0.6121 | 0.6314 |
| 0.5 | 0.7389 | 0.7940 | 0.8227 | 0.8402 |
| 0.6 | 0.8951 | 0.9323 | 0.9490 | 0.9581 |
| 0.7 | 0.9737 | 0.9880 | 0.9928 | 0.9950 |
| 0.8 | 0.9968 | 0.9992 | 0.9997 | 0.9998 |
| 0.9 | 0.9999 | 1.0000 | 1.0000 | 1.0000 |

Based on the power analysis, the target sample size of 2,100 completed surveys for each of the 37 non-oversampled CBSAs (with a sample size of at least 2,100 in the three oversampled CBSAs) was expected to provide good power for detecting a statistically significant correlation between crime rates for the LACS and the core NCVS and for the LACS and the UCR.

Sample Size for the Three Oversampled CBSAs

One of the goals of oversampling three of the CBSAs was to be able to detect differences among subareas within the CBSA. Table 2-9 gives the power for testing differences between proportions

for different subareas within the three large CBSAs. Table 2-10 gives 95 percent confidence-interval half-widths for proportions based on a range of sample sizes. Power calculations are given for differences of two low proportions (such as estimated victimization rates) and for differences of two higher proportions (which may arise for some of the community questions). These tables show, for example, that in the Chicago CBSA, it is possible to estimate proportions for the subareas with confidence interval half-widths of no more than 2 to 3 percent and to detect differences of 4 percentage points between the areas with power of 0.77 or better (assuming a sample size of 1,000 to 2,000 completes per area).

Table 2-9. Power for two-sided test of $H_0: P_1 - P_2 = 0$, alpha = .05

| P1 | P2 | n1 = 600 n2 = 600 | n1 = 800 n2 = 800 | n1 = 1,000 n2 = 1,000 | n1 = 1,500 n2 = 1,500 | n1 = 2,000 n2 = 2,000 |
|-----|-----|----------------------|----------------------|--------------------------|--------------------------|--------------------------|
| 10% | 5% | 0.92 | 0.97 | 0.99 | 1.00 | 1.00 |
| 10% | 6% | 0.73 | 0.84 | 0.91 | 0.98 | 1.00 |
| 10% | 7% | 0.46 | 0.58 | 0.68 | 0.84 | 0.93 |
| 10% | 8% | 0.23 | 0.29 | 0.35 | 0.48 | 0.60 |
| 50% | 45% | 0.41 | 0.52 | 0.61 | 0.78 | 0.89 |
| 50% | 44% | 0.55 | 0.67 | 0.77 | 0.91 | 0.97 |
| 50% | 43% | 0.68 | 0.80 | 0.88 | 0.97 | 0.99 |
| 50% | 42% | 0.79 | 0.90 | 0.95 | 0.99 | 1.00 |

Table 2-10. 95 percent confidence-interval half-widths for a proportion based on sample size n

| Sample size (n) | Proportion | | | | | | |
|-----------------|------------|-----------|------------|------------|------------|------------|------------|
| | 2% (%) | 5% (%) | 10% (%) | 20% (%) | 30% (%) | 40% (%) | 50% (%) |
| 100 | 2.74 | 4.27 | 5.88 | 7.84 | 8.98 | 9.60 | 9.80 |
| 200 | 1.94 | 3.02 | 4.16 | 5.54 | 6.35 | 6.79 | 6.93 |
| 300 | 1.58 | 2.47 | 3.39 | 4.53 | 5.19 | 5.54 | 5.66 |
| 400 | 1.37 | 2.14 | 2.94 | 3.92 | 4.49 | 4.80 | 4.90 |
| 500 | 1.23 | 1.91 | 2.63 | 3.51 | 4.02 | 4.29 | 4.38 |
| 600 | 1.12 | 1.74 | 2.40 | 3.20 | 3.67 | 3.92 | 4.00 |
| 800 | 0.97 | 1.51 | 2.08 | 2.77 | 3.18 | 3.39 | 3.46 |
| 1,000 | 0.87 | 1.35 | 1.86 | 2.48 | 2.84 | 3.04 | 3.10 |
| 1,500 | 0.71 | 1.10 | 1.52 | 2.02 | 2.32 | 2.48 | 2.53 |
| 2,000 | 0.61 | 0.96 | 1.31 | 1.75 | 2.01 | 2.15 | 2.19 |

2.3.2 Estimates of Change

An important objective of having a low-cost alternative to the NCVS, such as the ILS or PLS is to provide estimates of change over time at a local level. Change estimates can be especially valuable for assessing the effects of programs or interventions introduced within a local area. The characteristics of

interest may be estimates of changes in rates of victimization or attitudes as measured in non-crime items.

The design of the LACS Field Test included two administrations of the survey one year apart to provide guidance on design decisions associated with measuring change. The sample of addresses was partially overlapping, with 25 percent of the addresses sampled in Year 1 included again in Year 2. The addresses sampled in the overlap portion of the sample were retained for Year 2 even if they did not respond in Year 1. The remaining three-quarters of the sample were sampled independently.

The purpose of the overlap was to provide information on the effectiveness of overlapping the sampled addresses. Statistically, a completely overlapping design is most efficient for measuring change if the correlation over time is positive. However, sending surveys to the same addresses more than once could introduce effects that needed to be considered in planning. For example, response rates might differ for those in the overlap (they might be higher or lower). Other types of effects such as conditioning error (time-in-sample effects) could also occur.

The Field Test enabled estimation of some of these effects. Correlations over time from the same addresses could be computed from the overlap sample for victimization rates and for estimates from the non-crime items. The response rates (and costs) for the overlap and non-overlap samples could be computed to assess the effect of overlapping on the propensity to respond. Estimates of change in the proportion of households or persons touched by crime and estimates of non-crime items could be compared to evaluate whether surveying Year 2 had effects on responses to these items. At the aggregate level across all 40 CBSAs, the sample sizes were sufficient for estimating all of these types of statistics with a high degree of precision. These analyses are presented in subsequent chapters.

While these objectives were important, the Field Test had limitations with regard to evaluating estimates of change. One limitation was the lack of accurate measures of change at the local level to compare against the outcomes of the survey. The core NCVS is not very precise at this level, the UCR has other quality issues, and changes in estimates in a one-year period are likely to be too small for accurate measurement.⁹ Nevertheless, the estimates of change in the proportions touched by crime

⁹ As noted, the NCVS sample was redesigned in 2016 to enhance the survey's ability to provide direct estimates of victimization in the largest 22 states and large metropolitan areas within those states. The LACS took place in 2015 and 2016 in the 40 largest CBSAs, which have some but not complete overlap with the 22 largest states. For more information, see Morgan, R. E., & Kena, G. (2018). *Criminal victimization, 2016: Revised* (NCJ 252121). Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/cv16.pdf>

across the aggregate of the 40 CBSAs from the LACS and either the UCR or the core NCVS could be computed, although the core NCVS may need to have measures of change accumulated over multiple years to be accurate. This type of comparison could also be done separately for the overlapping and independent samples. While these evaluations were not at the local level, they did provide a quality check on the LACS estimates of change.

Another limitation was that the use of this data collection approach for evaluating interventions at the local level should have been more tailored than what the Field Test could allow for. For example, a more tailored approach could use non-crime items specific to the intervention, target the sample based on the areas within the CBSA getting the intervention, and time the pre- and post-surveys to capture the full effect of the intervention. These design features were infeasible for the Field Test where no interventions were considered. The estimates from the Field Test were also computed for doing the survey after one year, and different schedules would lead to different estimates of correlations and response effects.

3. Data Collection Methods

As mentioned in Chapter 1, the LACS began with a pilot test of a CATI administered by a centralized interviewing staff. Westat adapted the NCVS instruments for telephone interviewing using an ABS. Pilot test results indicated that it is extremely difficult, if not impossible, to replicate NCVS estimates of victimization using this approach. The full description of this pilot test is provided in a separate report.¹⁰ The second phase of LACS research tested a simpler, self-administered mail questionnaire designed to generate local-area estimates of victimization.

3.1 Instrumentation

Draft instruments were developed using selected content from the current NCVS and supplemental content from other existing surveys. As described in Section 1, two versions of the instrument were compared in the Field Test: the ILS, which collects details about individual incidents, and the PLS, which collects information only at the household and person levels. Year 1 also tested two forms of the instruments: in Form A, respondents were asked a short series of community safety and policing items before the victimization questions, while in Form B these items were near the end of the instrument. See Appendix A for a copy of the instruments. Each of these instruments relied on household respondents to report for themselves and other adult household members.

Each of the four English questionnaires was translated into Spanish. A Spanish-language questionnaire was mailed with the English instrument if (1) the address was in a linguistically isolated area, (2) the name associated with the address was in the Census' Hispanic surname list, or (3) the address was selected for the bilingual experiment. The experiment is described in Chapter 2.

¹⁰ Brick, J. M., Lohr, S., Edwards, W. S., Giambo, P., Broene, P., Williams, D., & Dipko, S. (2013). *National survey of crime victimization companion study – pilot: Summary of pilot results*. Bureau of Justice Statistics. https://www.bjs.gov/content/pub/pdf/ncvs-cs_prr.pdf

3.1.1 Instrument Testing Prior to Field Test

Cognitive testing of the ILS and PLS instruments began in July 2013 and concluded in December 2013, with iterative testing and revision. Following the initial cognitive tests, a small-scale pretest was conducted from June to August 2014. Pretest findings were used to revise the instruments. These revised instruments were then subjected to a round of cognitive interviews.

The rationale for conducting a pretest was that it could provide information beyond what could be obtained from cognitive testing. In particular, it allowed the research team to obtain a rough assessment of unit and item response rates; of the level of detail respondents would provide in narrative questions when not prompted by an interviewer; and of the prevalence of incomplete instruments or response errors, such as entering a response in the wrong field or naming a victim who is not a household member.

A simple random sample of 2,500 addresses from the continental U.S. was selected for the pretest. Half the sample received an ILS instrument, and half received a PLS instrument. Within these strata, half were sent Form A, and half were sent Form B. Each address received a questionnaire with a cover letter and a \$2 incentive; a postcard reminder followed about a week later. Those households that had not responded within a few weeks of the initial questionnaire were sent a replacement questionnaire. A few weeks after the second mailing, a final survey was sent via Federal Express (FedEx) to addresses that had not yet responded. This pretest methodology resulted in an overall response rate of approximately 50 percent.

To assess the impact of the instrument and form experiments, we examined response rates, the reporting of crime, and distributions of responses to the neighborhood questions. The sample size had the power to detect only large differences in instrument performance. Pretest results did not suggest that placement of the neighborhood items would have a large effect on the response rate or on responses to these items. There was some indication, although not statistically significant, that placement affected crime reporting, with the upfront placement generating more reports of victimization. Since the pretest was inconclusive, both the ILS/PLS and form experiments were continued in the LACS Field Test.

3.2 Data Collection Approach

Households selected for the Field Test were asked to complete either the ILS or PLS instrument (and in Year 1, addresses were selected to receive either Form A or Form B of each instrument).

The data collection protocol involved the following:

- In Year 1, the initial survey packet was sent with USPS first-class postage and included an introductory letter, a \$2 incentive, a questionnaire, and a prepaid return envelope. In Year 2, an incentive experiment was included, with a third of the sample receiving a \$2 incentive, a third received \$1, and a third receiving no monetary incentive.
- In Year 1, sampled addresses were matched with telephone numbers using a national vendor. If a landline phone number was available and the address was selected for the experimental treatment, then Westat placed an automated (interactive voice response, or IVR) telephone call with a thank you/reminder message. The remaining matched addresses and all unmatched addresses were mailed a postcard. A random sample of addresses with a matched telephone number were sent a postcard instead of receiving a call, to test the efficacy of the call compared to the postcard. This experiment was not continued in Year 2, when all sampled addresses received a postcard reminder.¹¹
- Households that had not responded by the cutoff date were sent a follow-up survey packet similar to the initial mailing, except without an incentive.
- Year 1 households that still had not responded were sent a third survey packet via FedEx two-day service. In Year 2, addresses were split so that half received a packet via FedEx and half received a final delivery via USPS.

3.3 Field Test Schedule and Outcomes

The schedule for mailing questionnaires and reminders is shown in Tables 3-1a (Year 1) and 3-1b (Year 2). Due to the size of the mailings, both the survey printer and FedEx had difficulty sending packages in one attempt. The printer required a list of addresses for the second and third survey packets weeks before the scheduled mailings. This lag meant that some respondents received additional mailings even though Westat had already received a completed survey. For the third survey packet mailing, FedEx told Westat that it would need to send the packets out over the course of 6 calendar days. Another challenge was that the early return rate was considerably slower than what we had observed during the national pretest. While this lag was a challenge, a survey conducted

¹¹ This decision was due in part to uncertainties arising from a 2015 memorandum by the Federal Trade Commission on enforcement of the Telephone Consumer Protection Act.

by a local jurisdiction should not face similar challenges, since the mail volume would likely be considerably smaller.

Table 3-1a. Year 1 LACS Field Test – data collection schedule

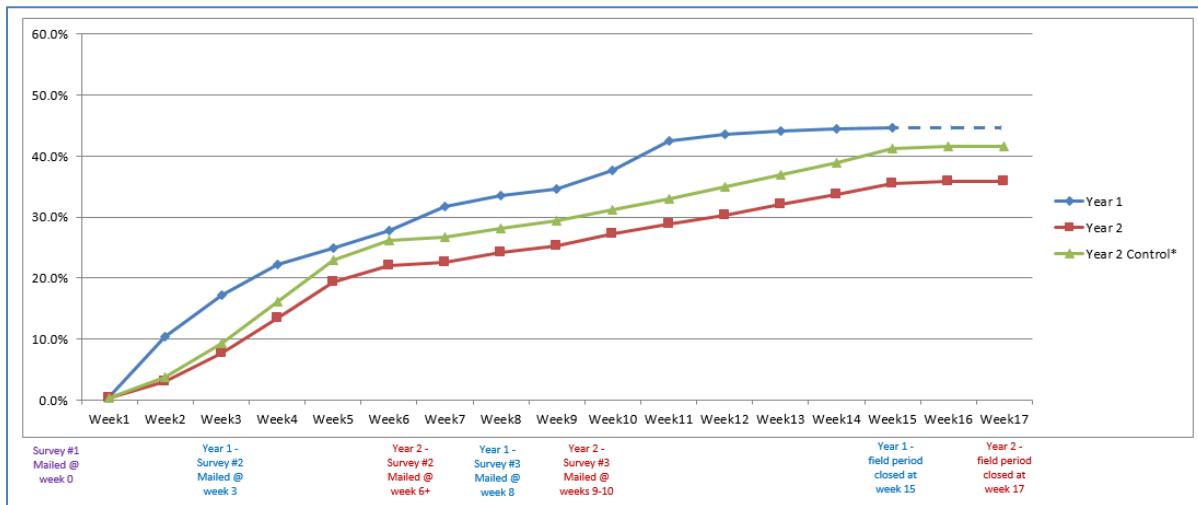
| Data collection | Date(s) |
|----------------------------------|--------------------|
| • Wave 1 survey mailing | 9/23/2015 |
| • Reminder postcard mailing | 9/30/2015 |
| • Reminder automated calls began | 9/28/2015 |
| • Wave 2 survey mailing | 10/21/2015 |
| • Wave 3 survey mailing (FedEx) | 11/18 - 11/23/2015 |
| • Closeout field period | 1/8/2016 |

Table 3-1b. Year 2 LACS Field Test – data collection schedule

| Data collection | Date(s) |
|---|-------------------|
| • Wave 1 survey mailing | 9/26/2016 |
| • Reminder postcard mailing | 10/6/2016 |
| • Wave 2 survey mailing | 11/8 - 11/13/2016 |
| • Wave 3 survey mailing (half FedEx, half USPS) | 12/5 - 12/9/2016 |
| • Closeout field period | 1/26/2017 |

Figure 3-1 presents completion rates from Year 1 and Year 2 by week of the field period. Year 2 rates were lower than those in Year 1. This difference was due in part to differences in the methodology and in part to a real reduction in the LACS response rate. The green line in Figure 3-1 includes the subset of Year 2 addresses that had the same methodology as in Year 1 (i.e., a \$2 incentive and FedEx delivery for the final survey packet). The percentages presented in Figure 3-1 are based on operational data and may not match the final response rates. The latter rates are based on a different definition of a “completed survey” than the operational definition.

Figure 3-1. LACS Field Test – percentage of total completed surveys, by week



* Year 2 Control includes the same data collection methodology as Year 1. Note that this subsample includes both the Year 2 independent sample and the overlap sample, which may account for the difference.

4. Response Rates and Patterns

One of the critical issues in this era of low survey response rates is whether it is feasible to conduct a high-quality survey on a topic like criminal victimization using relatively low-cost data collection methods. Can a low-cost survey produce reliable and credible estimates? Nonresponse is a key error source that must be evaluated to answer this question. Nonresponse error is a function of the response rate (the proportion of sampled households that complete the survey) and differences in the characteristics of respondents and nonrespondents. This chapter begins by examining the response rate, both overall and by experimental treatment, then examines differences between respondents and nonrespondents, and concludes with a rough comparison of the LACS respondent demographic profile to estimates from the Census Bureau's American Community Survey (ACS).

The first sections are for Year 1, and later sections are for Year 2.

While the feasibility of a LACS from a response rate perspective is of interest, the primary focus of this chapter is evaluating differences in the potential for nonresponse bias by experimental conditions. In Year 1, the treatments were the instrument (ILS/PLS), the Form (A/B), IVR or postcard reminder, and the Spanish-language experiment (English-only/both languages). In Year 2, the treatments were the instrument (ILS/PLS), the amount of the cash incentive, the use of FedEx mailing for nonresponse follow-up, the effect of the overlap, and the Spanish-language experiment.

4.1 Year 1 Overall Response Rates

Across all experimental conditions and the 40 CBSAs, the Year 1 sample included almost 230,000 addresses with close to 94,000 households returning a survey. The overall response rate was 47.1 percent using the American Association of Public Opinion Research (AAPOR) method RR3.^{12,13} This response rate was considerably higher than could be achieved using other low-cost data collection methods such as telephone or the internet. This rate is especially encouraging for a

¹² Approximately 88 percent of the unknown eligibility addresses were likely to be eligible based on typical vacant rates in household surveys. If the AAPOR RR3 definition with this eligibility rate were used, then the response rate would be 47.9 percent. The minimum rate (AAPOR RR1) was 43.9 percent.

¹³ The American Association for Public Opinion Research. (2016). *Standard definitions: Final dispositions of case codes and outcome rates for surveys* (9th ed.). https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf

topic that is potentially sensitive, like victimization. Further, large metropolitan areas are typically associated with lower response rates than national samples are. Thus, at this high level, a mail LACS does appear feasible though there is still substantial potential for nonresponse bias because bias is not a function of the response rate alone.

4.2 Year 1 Response Rates by Treatment

Table B-1 in Appendix B shows the distribution of the number of households by sample disposition for all 53 sampled areas (CBSAs and strata within the oversampled CBSAs). The table also gives the AAPOR RR1 response rate by CBSA and stratum for each instrument. We use the RR1, which is the minimum rate, for all comparisons hereafter for consistency. (This rate assumes all addresses with unknown eligibility are eligible nonrespondents.)

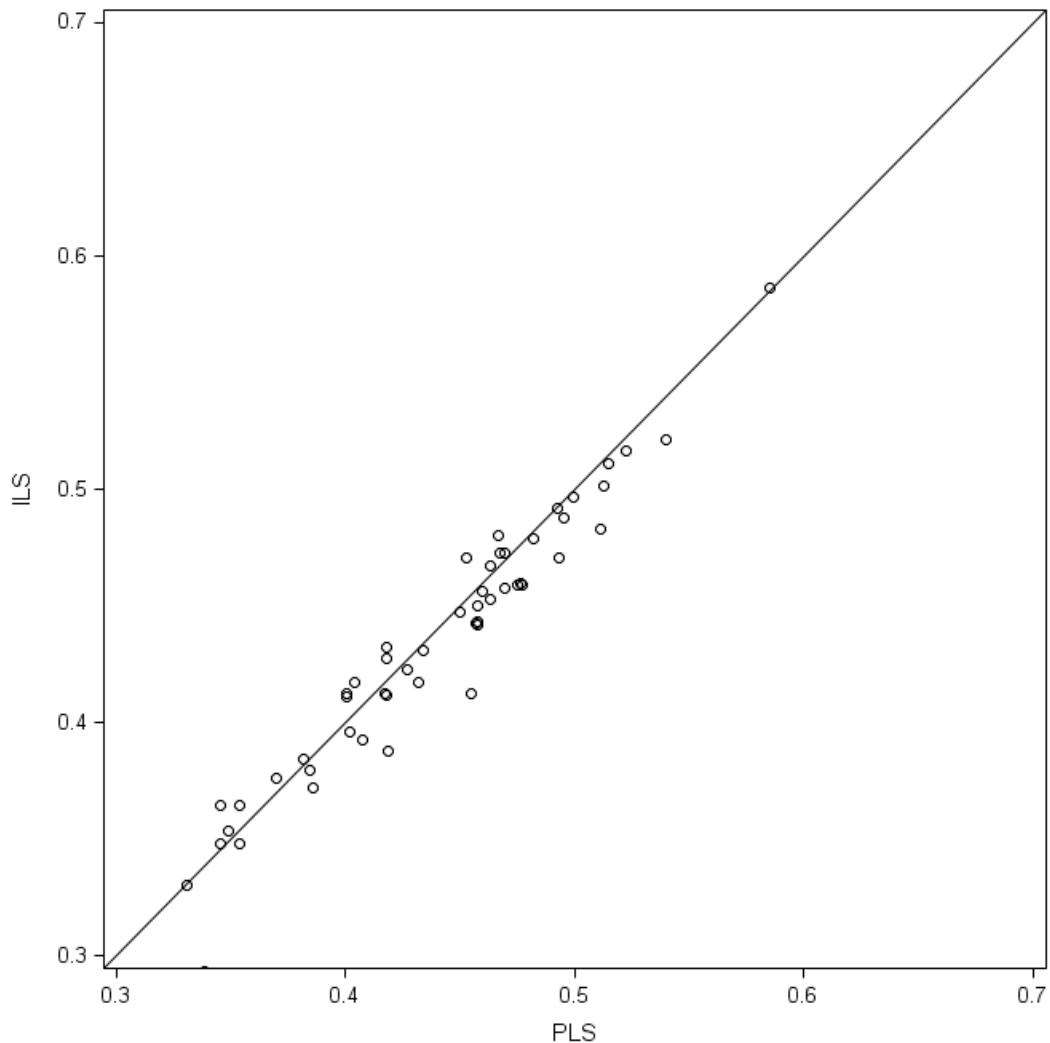
Response Rates by Reminder Treatment (IVR/Postcard)

For the 145,160 addresses eligible for the experiment (those addresses that had a landline telephone number linked to the sampled address), 100,004 were randomly assigned to the IVR treatment and 45,156 to the postcard treatment. AAPOR RR1 was very similar for the two treatments (44.7 percent for the IVR and 45.1 percent for the postcard). For both the ILS and PLS, the difference was consistently small (0.2 percentage points for the ILS instruments and 0.6 percentage points for the PLS instruments).

Response Rates by Questionnaire Treatment (ILS/PLS)

Figure 4-1 summarizes the response rates for the ILS and PLS across the 53 CBSAs and subareas. The line in the figure is at 45 degrees, so points above the line are areas where the ILS response rate is higher, and points below the line are where the PLS is higher. The design of the experiment balanced the sample across the form treatment, so this analysis shows the main effect of the questionnaire type. The response rates varied across the areas (from about 28 to 59 percent), but the ILS and PLS rates were very similar. In terms of the response rate, neither questionnaire instrument had an advantage over the other. The average difference across the 53 areas was 0.5 percentage points. The same results were obtained when looking only at the 40 CBSAs (i.e., the simple average of the 40 response rates rather than the 53 that include the strata).

Figure 4-1. Year 1 response rates for 53 areas (CBSAs and subareas), by instrument



Response Rates by Form (A/B)

Recalling that Form A has the community items before victimization items and Form B has community items after, for both the ILS and PLS. Form A had a 1.0 percentage point higher mean response rate across the 53 CBSA areas, but the forms performed differently by instrument. Figures 4-2a and 4-2b show the AAPOR RR1 for the 53 areas by instrument and form for the ILS and PLS, respectively. In Figure 4-2b, the points are spread evenly above and below the reference line, and the mean and median response rates for the forms are essentially identical. On the other hand, in Figure 4-2a, about 80 percent of the points are below the reference line, where the response rate for Form A is higher than the response rate for Form B. The mean difference is 1.9 percentage points and is

statistically significant. Even though the difference is not large, lower response rates increase costs and increase the potential for nonresponse bias.

Figure 4-2a. Year 1 response rates for 53 areas (CBSAs and subareas), by ILS form

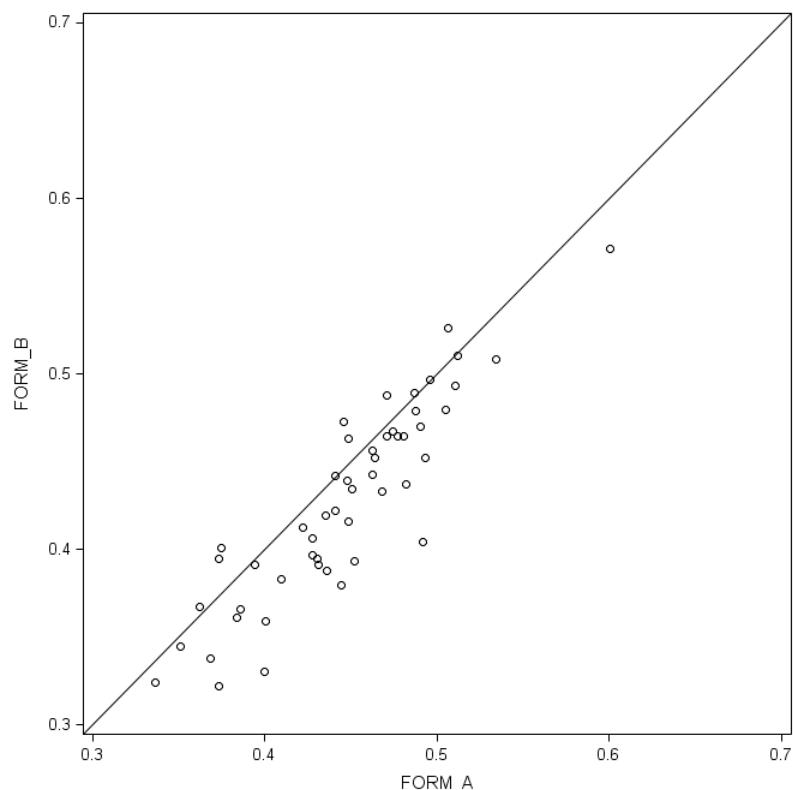
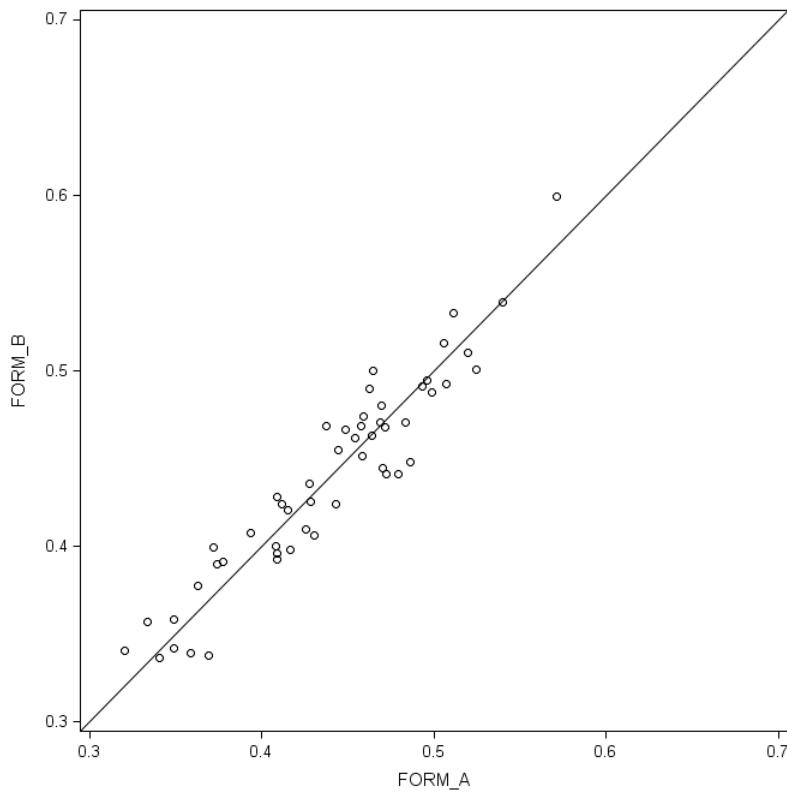


Figure 4-2b. Year 1 response rates for 53 areas (CBSAs and subareas), by PLS form



Figures 4-2a and 4-2b demonstrate an interaction between the instrument and form treatments.

With the PLS, the response rate was essentially unaffected by whether Form A or Form B was used, while the ILS's response rate for Form B was lower (44.1 percent for Form A and 42.2 percent for Form B). ILS Form B begins with the enumeration of adults in the household rather than questions about victimization. Rostering the household is not very engaging (it may even be off-putting) and is largely unrelated to the survey topic. ILS Form A begins with questions about the neighborhood, including crime and related issues, before the roster. The PLS never rosters adults explicitly, and both PLS forms begin with items related to the topic. These differences in questionnaire construction were likely responsible for the observed interaction in response rates by instrument and form.

Response Rates by Use of Bilingual Materials

The third experiment was the use of bilingual materials in a subsample of 2,000 addresses outside linguistically isolated areas and not associated with Hispanic surnames. As described earlier, the

subsample was allocated equally over the CBSAs although the sample in each CBSA was small (50 addresses). The control group for the experiment was the set of addresses that were not subsampled (i.e., the remainder of the addresses outside linguistically isolated areas and not associated with Hispanic surnames).

Table 4-1 shows the dispositions and response rates for the bilingual experiment across instruments and forms as well as overall. The effect of including bilingual materials was an increase in the response rate of about 2.6 percentage points (with a standard error of 1.1 percent) compared to sending English-only instruments. The sample size was too small to evaluate the differences by instrument and form, but across all four of the treatments, sending both English and Spanish instruments never resulted in a lower response rate than sending English only.¹⁴ These response rate results were consistent with those reported in Brick et al. (2013), but the major difference was that the LACS tested sending a relatively large instrument in a single-phase design, whereas Brick et al. examined a short screener in a two-phase survey.¹⁵

The primary purpose of sending materials in both English and Spanish was to increase response from those households that speak Spanish primarily or exclusively. Though no question in the instrument directly measures English- or Spanish-language proficiency; one measure of English-language proficiency is the percentage of the completed cases that mailed back Spanish-language instruments. For the set of cases that were always sent instruments in both languages (in linguistically isolated areas or associated with Hispanic surnames), 26 percent of the completes were Spanish-language instruments. Sending both language instruments was effective in these situations. In the experimental cases that were outside linguistically isolated areas and not associated with Hispanic surnames but were sent instruments in both languages, about 2 percent of the returns were Spanish-language instruments. Since there were fewer than 900 completed cases in the experiment, the number of cases completed in Spanish was small. It is reasonable to assume that very few if any of these Spanish-language cases would have been completed without the dual-language mailing.

¹⁴ For most of the analyses in this report, a random effects model was used (CBSAs and subareas in three CBSAs) where the areas were the random effects. For the analysis of the bilingual experiment, this approach was not used because the sample sizes were small. Instead, the sampling errors were computed using simple random sampling assumptions, resulting in estimated sampling errors that were overestimates because the blocking by CBSAs was not accounted for. This approach is conservative, and some effects may not be identified.

¹⁵ Brick et al. (2013).

Another measure of English-language proficiency is the percentage of persons who reported being of Hispanic origin. Table 4-2 shows the percentage of adults reporting they are of Hispanic origin, regardless of race, by the experimental conditions. The number of responding households that were sent the bilingual materials was small: approximately 200 in each of the instruments by form treatments. The small sample size resulted in large standard errors of the estimates of the percentage of respondents who reported being Hispanic and limited the ability to assess the size of the effects of the experiment. The nominal effect in the first three instrument-by-form treatments was an increase in the percentage reporting Hispanic origin, but in the PLS Form B treatment, the nominal effect was a decrease in the percentage. Overall, there was virtually no difference in the proportion of self-reported Hispanics between the experimental and control groups. After reviewing the instrument, PLS Form B did not appear to have any feature that would depress Hispanic reporting. It is possible that providing materials in both languages would increase reporting by adults of Hispanic origin, but the experimental sample size was too small to evaluate that hypothesis adequately.

Table 4-1. Year 1 number and rates of response for Spanish-language experiment, by instrument and form

| Instrument | Form | English only | | | | English and Spanish | | | | Difference (English-only and both) | | |
|------------|------|-----------------------|--------------------------|----------------------|------------------|-----------------------|--------------------------|----------------------|------------------|---------------------------------------|------|---------|
| | | Number respondents | Number nonrespondents | Number ineligible | Response rate | Number respondents | Number nonrespondents | Number ineligible | Response rate | Estimate | S.E. | t-value |
| ILS | A | 21,096 | 25,514 | 3,703 | 45.3% | 229 | 263 | 45 | 46.5% | -1.3% | 2.2% | -0.6 |
| ILS | B | 20,377 | 26,540 | 3,532 | 43.4% | 223 | 241 | 40 | 48.1% | -4.6% | 2.2% | -2.1 |
| PLS | A | 21,029 | 25,652 | 3,725 | 45.0% | 214 | 234 | 42 | 47.8% | -2.7% | 2.3% | -1.2 |
| PLS | B | 21,107 | 25,680 | 3,645 | 45.1% | 205 | 231 | 33 | 47.0% | -1.9% | 2.3% | -0.8 |
| ILS | All | 41,473 | 52,054 | 7,235 | 44.3% | 452 | 504 | 85 | 47.3% | -2.9% | 1.6% | -1.9 |
| PLS | All | 42,136 | 51,332 | 7,370 | 45.1% | 419 | 465 | 75 | 47.4% | -2.3% | 1.6% | -1.4 |
| All | A | 42,125 | 51,166 | 7,428 | 45.2% | 443 | 497 | 87 | 47.1% | -2.0% | 1.6% | -1.3 |
| All | B | 41,484 | 52,220 | 7,177 | 44.3% | 428 | 472 | 73 | 47.6% | -3.3% | 1.6% | -2.0 |
| All | All | 83,609 | 103,386 | 14,605 | 44.7% | 871 | 969 | 160 | 47.3% | -2.6% | 1.1% | -2.3 |

Note: Standard errors of differences are based on simple random sampling assumptions of the number of households without accounting for the block experimental design. The standard errors would be smaller if they accounted for the blocking.

Table 4-2. Year 1 number and percentage of responding adults of Hispanic origin, by Spanish-language experiment, instrument, and form

| Instrument | Form | English-only | | | | English and Spanish | | | | S.E. |
|------------|------|----------------------|------------------|---------------------|------|----------------------|------------------|---------------------|------|------|
| | | Number households | Number adults | Percent Hispanic | S.E. | Number households | Number adults | Percent Hispanic | S.E. | |
| ILS | A | 21,096 | 40,249 | 7.9% | 0.2% | 229 | 427 | 8.2% | 1.8% | |
| ILS | B | 20,377 | 38,997 | 7.4% | 0.2% | 223 | 438 | 8.9% | 1.9% | |
| PLS | A | 21,029 | 39,898 | 7.7% | 0.2% | 214 | 404 | 8.7% | 1.9% | |
| PLS | B | 21,107 | 39,809 | 7.7% | 0.2% | 205 | 376 | 5.1% | 1.5% | |

Note: Standard errors of differences are based on simple random sampling assumptions of the number of households without accounting for the block experimental design. The standard errors would be smaller if they accounted for the blocking.

4.3 Year 1 Response Patterns and Comparisons

This section examines the relationship between the response rates and characteristics known for all sampled addresses, both from the sampling frame and from ecological data (data from the ACS about the geographical areas) for Year 1. These relationships were considered in weighting the data but are described here because such associations are important in assessing the potential for nonresponse bias due to differential nonresponse. Differences in the characteristics of those who responded by experimental condition are presented subsequently.

To examine the associations between response and sampling frame characteristics for nonresponse weighting, a categorical search algorithm was used within each CBSA and stratum to reduce nonresponse bias as fully as possible. Here, the relationships were explored using a mixed logistic regression model (see Appendix C) to predict response with the 53 sampling areas as random effects. The experimental treatments and characteristics of the address and area were fixed effects in this model. This model is a much simpler way to view the overall patterns than would be involved with presenting 53 separate tree diagrams.

Table 4-3 shows the estimated fixed effects from the mixed logistic regression model. The fixed effects include the experimental treatments (instrument, form, and the interaction between them) as well as data from the ABS sampling frame (phone—whether the address had a telephone associated with it; and dwelling—whether the address was a multiple- or single-dwelling unit) and data from the block group of the address derived from either the ACS or the 2010 Census (percentage of adults who are college graduates; percentage of adults who did not graduate from high school; percentage of adults of Hispanic origin; percentage of adults who are black and not Hispanic; percentage of households owned rather than rented; percentage of adults ages 18 to 24; percentage of adults age 65 or older; and percentage of households below the poverty threshold). The non-experimental variables were chosen based on both their availability and expected relationship to response. When the model was run, interactions between the instrument and form and between phone and dwelling were large and statistically significant, so the model was rerun with the instrument and form combined and the phone and dwelling combined to make it easier to interpret the effect.

Table 4-3. Year 1 estimated coefficients of mixed logistic regression models predicting probability of responding, by experimental treatments and sampling frame variables

| Effect | Estimate | S.E. | t-value |
|--------------------------------------|----------|-------|---------|
| Intercept | -0.056 | 0.041 | -13.9 |
| Experimental variables | | | |
| ILS Form A | -0.004 | 0.013 | -0.3 |
| ILS Form B | -0.058 | 0.013 | -4.6 |
| PLS Form A | -0.019 | 0.013 | -1.6 |
| ABS frame variables | | | |
| Single dwelling – phone | 0.506 | 0.021 | 23.8 |
| Single dwelling – no phone | 0.292 | 0.022 | 13.6 |
| Multiple dwelling – phone | -0.015 | 0.021 | -0.7 |
| Ecological variables from ACS | | | |
| Percent college graduate | 0.005 | 0.000 | 14.5 |
| Percent not high school graduate | -0.002 | 0.001 | -3.7 |
| Percent Hispanic | -0.002 | 0.000 | -5.4 |
| Percent non-Hispanic black alone | -0.006 | 0.000 | -20.7 |
| Percent owner | 0.001 | 0.000 | 4.6 |
| Percent ages 18-24 | -0.010 | 0.001 | -12.2 |
| Percent age 65 or older | 0.009 | 0.001 | 16.0 |
| Percent below poverty | 0.001 | 0.000 | -1.5 |

Looking at the experimental fixed effects first, the ILS Form B effect was large and negative, consistent with the analysis in the previous section of this chapter. These estimates reinforced the finding that the response rate for the ILS depends on the form, and ILS Form B has the lowest response rate of the four instrument-by-form conditions.

The two variables from the ABS sampling frame (dwelling and phone) were strongly related to response, and they too interacted. Addresses classified as single-dwelling units with matched phone numbers had the highest response rates, while single-dwelling units without phones were less likely to respond. The addresses classified as multiple-dwelling units were least likely to respond, whether they had a matched phone number or not. The presence of a matched phone number had a substantial effect only in single-unit dwellings. These results were more nuanced than what is typically described in the survey literature (primarily identifying main effects).

The last rows of the table are for ecological variables (data from the area of the address rather than the address itself) from the ACS and 2010 Census. These effects were statistically significant for some of the variables, but the effect sizes were relatively small even when they were significant. Again, these results were generally consistent with the patterns identified in the nonresponse weighting adjustment search. The ABS dwelling and phone variables were the first variables identified as predictors of nonresponse in nearly every CBSA and stratum, and the ecological variables entered the trees later.

Next, some differences by instrument and form are presented for the percentage of households having select characteristics (lived at address for 5 years or more, own the home, one-adult household, and have someone younger than age 18 in the household). Differences in these variables could indicate potential nonresponse bias. All of the estimates are unweighted since weighting to control totals would distort the relationships being examined. Table 4-4 gives the estimated difference, the standard error of the difference, and the 95 percent confidence interval of the difference. These estimates are contrasts from the mixed logistic regression with the 53 CBSAs and strata as random effects. The differences were not large, and the 95 percent confidence intervals generally included zero. The only F-test assessing the significance of the experimental levels with a p-value of less than .05 was for owning a home.

Table 4-4. Year 1 estimated (unweighted) difference of percentage of households having a characteristic from mixed logistic regression models with CBSA and strata as random effects

| Item | Estimated difference | S.E. | 95% confidence interval of difference |
|---------------------------------------|----------------------|-------|---------------------------------------|
| Lived here for 5 years or more | | | |
| PLS – ILS | 0.018 | 0.014 | [-0.009, 0.045] |
| ILS A – ILS B | 0.053 | 0.020 | [0.015, 0.091] |
| PLS A – PLS B | 0.000 | 0.019 | [-0.038, 0.038] |
| PLS A – ILS A | -0.008 | 0.019 | [-0.046, 0.030] |
| PLS B – ILS B | 0.045 | 0.020 | [0.006, 0.083] |
| Own home | | | |
| PLS – ILS | 0.035 | 0.014 | [0.006, 0.063] |
| ILS A – ILS B | 0.030 | 0.020 | [-0.010, 0.070] |
| PLS A – PLS B | 0.001 | 0.020 | [-.039, 0.041] |
| PLS A – ILS A | 0.020 | 0.020 | [-0.020, 0.060] |
| PLS B – ILS B | 0.049 | 0.020 | [0.009, 0.089] |
| One adult in household | | | |
| PLS – ILS | -0.033 | 0.015 | [-0.062, -0.004] |
| ILS A – ILS B | 0.017 | 0.021 | [-0.024, 0.058] |
| PLS A – PLS B | -0.022 | 0.021 | [-0.064, 0.019] |
| PLS A – ILS A | -0.053 | 0.021 | [-0.094, -0.012] |
| PLS B – ILS B | -0.014 | 0.021 | [-0.055, 0.027] |
| Presence of children | | | |
| PLS – ILS | 0.002 | 0.014 | [-0.027, 0.030] |
| ILS A – ILS B | 0.025 | 0.021 | [-0.016, 0.065] |
| PLS A – PLS B | -0.005 | 0.020 | [-0.045, 0.035] |
| PLS A – ILS A | -0.013 | 0.020 | [-0.053, 0.027] |
| PLS B – ILS B | 0.017 | 0.021 | [-0.024, 0.057] |

Note: The F-tests of the effect of the instrument and form differences had p-values of more than .05 for all of the items except owning the home, for which the p-value was exactly .05.

Table 4-5 shows the same statistics for adult-level characteristics. The mixed logistic regression model was unweighted so that the effects of raking to characteristics such as age, sex, and race did not distort the evaluation. The F-tests of the effect of the instrument and form differences had p-values of less than .05, except for Hispanic origin and age younger than 30 years. The Hispanic-origin effect appears to be due at least in part to a difference between the two forms for the ILS, but there is no mechanism associated with these forms to explain the difference, a difference that is not afforded importance here. The difference between the ILS and PLS in the percentage of adults reporting an age younger than 31 (with more younger than age 31 in the ILS) was more substantial. The item construction is identical in the ILS and PLS for this variable, but it is possible that the ILS attracted more responses from young adults than the PLS through some other mechanism. Given the large number of differences being evaluated, this difference is re-examined in Year 2 later in this chapter.

Table 4-5. Year 1 estimated (unweighted) difference of percentage of adults having a characteristic from mixed logistic regression models with CBSA and strata as random effects

| Item | Estimate | S.E. | 95% confidence interval of difference |
|--------------------------------------|----------|-------|---------------------------------------|
| Male | | | |
| PLS – ILS | -0.002 | 0.009 | [-0.021, 0.016] |
| ILS A – ILS B | 0.013 | 0.013 | [-0.013, 0.039] |
| PLS A – PLS B | 0.006 | 0.013 | [-0.020, 0.032] |
| PLS A – ILS A | -0.006 | 0.013 | [-0.032, 0.020] |
| PLS B – ILS B | 0.001 | 0.013 | [-0.025, 0.028] |
| Hispanic origin | | | |
| PLS – ILS | -0.026 | 0.015 | [-0.054, 0.003] |
| ILS A – ILS B | 0.057 | 0.021 | [0.017, 0.097] |
| PLS A – PLS B | 0.001 | 0.021 | [-0.039, 0.042] |
| PLS A – ILS A | -0.054 | 0.020 | [-0.094, -0.014] |
| PLS B – ILS B | 0.002 | 0.021 | [-0.039, 0.042] |
| White, Hispanic | | | |
| PLS – ILS | -0.016 | 0.012 | [-0.039, 0.008] |
| ILS A – ILS B | 0.036 | 0.017 | [0.002, 0.070] |
| PLS A – PLS B | 0.021 | 0.017 | [-0.012, 0.055] |
| PLS A – ILS A | -0.023 | 0.017 | [-0.057, 0.011] |
| PLS B – ILS B | -0.008 | 0.017 | [-0.042, 0.026] |
| Asian and/or Pacific Islander | | | |
| PLS – ILS | 0.020 | 0.015 | [-0.010, 0.051] |
| ILS A – ILS B | -0.022 | 0.022 | [-0.065, 0.021] |
| PLS A – PLS B | -0.028 | 0.022 | [-0.070, 0.015] |
| PLS A – ILS A | 0.017 | 0.022 | [-0.026, 0.060] |
| PLS B – ILS B | 0.023 | 0.022 | [-0.020, 0.066] |
| Younger than age 31 | | | |
| PLS – ILS | -0.085 | 0.013 | [-0.110, -0.060] |
| ILS A – ILS B | -0.036 | 0.018 | [-0.071, -0.002] |
| PLS A – PLS B | 0.010 | 0.018 | [-0.026, 0.045] |
| PLS A – ILS A | -0.062 | 0.018 | [-0.097, -0.027] |
| PLS B – ILS B | -0.108 | 0.018 | [-0.143, -0.073] |
| Older than age 59 | | | |
| PLS – ILS | 0.014 | 0.010 | [-0.006, 0.034] |
| ILS A – ILS B | -0.010 | 0.014 | [-0.039, 0.018] |
| PLS A – PLS B | -0.011 | 0.014 | [-0.040, 0.017] |
| PLS A – ILS A | 0.014 | 0.014 | [-0.014, 0.042] |
| PLS B – ILS B | 0.015 | 0.014 | [-0.014, 0.043] |
| Bachelor's or higher | | | |
| PLS – ILS | 0.008 | 0.010 | [-0.012, 0.027] |
| ILS A – ILS B | -0.005 | 0.014 | [-0.032, 0.022] |
| PLS A – PLS B | 0.001 | 0.014 | [-0.026, 0.028] |
| PLS A – ILS A | 0.011 | 0.014 | [-0.016, 0.038] |
| PLS B – ILS B | 0.004 | 0.014 | [-0.023, 0.032] |

Note: The F-tests of the effect of the instrument and form differences had p-values of less than .05, except Hispanic origin and age younger than 31.

Next, some characteristics from LACS respondents were compared to estimates from the 2010-2014 ACS 5-year file. The LACS estimates were unweighted aggregates across the 40 CBSAs, while the ACS estimates were appropriately weighted estimates of the population totals across the 40 CBSAs. The unweighted LACS counts did not provide an estimate of the aggregate that corresponded well, since the aggregate was largely a function of the sample allocation rather than the underlying population.

Despite this serious problem, the LACS counts and the ACS estimates are given in Table 4-6. No precision estimates are given, to emphasize the lack of comparability of the data sources. The comparison is intended only to provide a rough guide of the respondent profiles for both the ILS and PLS. The differences between the ILS and PLS counts and the ACS estimates were relatively small and relatively consistent with expected differences in response for subgroups, such as lower response from households with young adults and higher response rates from households with older adults. Again, the only purpose of this comparison is to verify that the ILS and PLS counts appear reasonable for these demographic groups.

Table 4-6. Year 1 percentage of responding households by household characteristics, LACS unweighted counts for ILS and PLS, and estimated percentage from 2010-2014 ACS

| Characteristic | Source | | |
|--|------------|------------|--------------------|
| | ILS (%) | PLS (%) | 2010-14 ACS (%) |
| Household size | | | |
| Households with 1 adult | 29.1 | 30.2 | 33.1 |
| Households with 2 adults | 52.3 | 52.6 | 51.0 |
| Households with 3 or more adults | 18.6 | 17.3 | 15.9 |
| Household composition | | | |
| No children | 71.6 | 71.4 | 67.5 |
| One adult with children | 3.6 | 4.2 | 5.5 |
| Multiple adults with children | 24.8 | 24.4 | 26.9 |
| Racial composition | | | |
| At least 1 rostered adult is non-white or Hispanic | 36.2 | 36.2 | 33.8 |
| Gender composition | | | |
| Households with 1 or more adult males | 78.0 | 77.1 | 76.4 |
| Households with 1 or more adult females | 86.3 | 85.8 | 84.5 |
| Age composition | | | |
| Households with 1 or more ages 18-29 | 22.9 | 20.9 | 26.2 |
| Households with 1 or more ages 30-44 | 31.1 | 31.3 | 34.6 |
| Households with 1 or more ages 45-59 | 38.9 | 38.8 | 38.2 |
| Households with 1 or more ages 60 or older | 44.7 | 44.3 | 35.6 |
| Special interest populations | | | |
| Households with 1 or more males ages 18-29 | 13.5 | 12.2 | 15.7 |
| Households living at address for 1 year or less | 11.6 | 11.1 | 14.6 |

Note: LACS percentages are unweighted counts based on the number of adults rostered in the household. ACS estimates are based on all occupied housing units for the 40 largest CBSAs.

4.4 Year 2 Response Rates Overall and by Treatment

Across all experimental conditions and the 40 CBSAs, the Year 2 sample included 217,250 addresses with approximately 71,000 households returning a survey. The overall response rate was 40.9 percent using AAPOR RR3. This response rate was lower than the Year 1 response rate, at least in part due to the experimental treatments and overlap sampling, which are described later. The Year 2 response rate was still much higher than the approximately 15 percent response rate obtained when a telephone data collection was attempted in the pilot phase of this project (Brick et al., 2013).¹⁶ The AAPOR RR1 response rate overall for Year 2 was 35.6 percent.

Results of Year 1 Spanish-language Experiment Repeated in Year 2

The bilingual experiment was continued in Year 2 with the same procedures as used in Year 1. A subsample of 2,352 addresses outside linguistically isolated areas and not associated with Hispanic surnames were sent the bilingual materials. The subsample was allocated equally over the CBSAs although the sample in each CBSA was small. The control group for the experiment was the set of addresses that were not subsampled (i.e., the remainder of the addresses outside linguistically isolated areas and not associated with Hispanic surnames).

The AAPOR RR1 response rate was 36.7 percent for those given the bilingual materials and 36.3 percent for those not given the bilingual materials. Again, sending the bilingual materials did not depress response rates, but in this case the difference was very small, compared to the 2.6 percentage point increase found in Year 1. Consistent with Year 1, the yield in terms of respondents sending in a completed instrument in Spanish in the experimental treatment was very low (13 households returned the Spanish version). The overall effectiveness of sending the bilingual materials to addresses outside linguistically isolated areas and not associated with Hispanic surnames was small, and the gains in responses to the Spanish instruments are unlikely to exceed the additional costs of printing and mailing both instruments.

Results of New Experiments in Year 2

These analyses again used fixed effects from a mixed logistic regression model where the dependent, or outcome, variable was response to the survey. The fixed effects included the Year 2 experimental

¹⁶ Brick et al. (2013).

treatments (instrument, incentive (\$0/\$1/\$2), FedEx follow-up, and overlap) as well as data from the ABS sampling frame (the constructed variable with four levels crossing whether the address had a telephone associated with it and whether the address was a multiple- or single-dwelling unit) and data from the block group of the address derived from either ACS or the 2010 Census (percentage of adults who graduated from college; percentage of adults who did not graduate from high school; percentage of adults of Hispanic origin; percentage of adults who are black and not Hispanic; percentage of households owned rather than rented; percentage of adults ages 18 to 24; percentage of adults age 65 or older; and percentage of households below the poverty threshold). The non-experimental variables were the same as those used in Year 1. As in that analysis, the level of the variable not shown in the table is the reference cell. For example, PLS is the reference cell for the instrument. When the model was run initially, two-way interactions between all the experimental variables were included, but none were statistically significant. The model was rerun without these interactions. The output is in Table 4-7.

Table 4-7. Year 2 estimated coefficients of mixed logistic regression models predicting probability of responding, by experimental treatments and sampling frame variables

| Effect | Estimate | S.E. | t-value |
|--------------------------------------|----------|-------|---------|
| Intercept | -0.748 | 0.044 | -16.9 |
| Experimental variables | | | |
| ILS | -0.003 | 0.010 | -0.4 |
| Incentive - \$0 | -0.359 | 0.012 | -30.5 |
| Incentive - \$1 | -0.138 | 0.012 | -11.9 |
| FedEx - none | -0.223 | 0.010 | -23.2 |
| Overlap - none | -0.190 | 0.011 | -16.9 |
| ABS frame variables | | | |
| Single dwelling - phone | 0.642 | 0.023 | 27.9 |
| Single dwelling - no phone | 0.302 | 0.023 | 13.0 |
| Multiple dwelling - phone | 0.118 | 0.023 | 5.1 |
| Ecological variables from ACS | | | |
| Percent college graduate | 0.005 | 0.000 | 13.9 |
| Percent not high school graduate | -0.003 | 0.001 | -3.8 |
| Percent Hispanic | -0.003 | 0.000 | -6.9 |
| Percent non-Hispanic black | -0.006 | 0.000 | -19.4 |
| Percent owner | 0.001 | 0.000 | 3.1 |
| Percent ages 18-24 | -0.009 | 0.001 | -9.1 |
| Percent age 65 or older | 0.010 | 0.001 | 17.3 |
| Percent below poverty | 0.000 | 0.001 | 0.2 |

Looking at the instrument (ILS in the table), the estimated effect was nearly zero, consistent with the Year 1 finding that the two instruments had similar response rates when the community items were positioned at the front of the questionnaire as it was in all instruments in Year 2. Table B-2 in Appendix B shows the paired comparison of the ILS and PLS response rates for all of the 53 strata.

Overall, the ILS and PLS response rate differences by stratum were very small and not statistically significant. Neither instrument had an advantage in terms of the overall response rate.

The incentive experiment in Year 2 reduced the incentive given in Year 1 (\$2) to either \$1 or \$0 to determine the effect of using lower cost procedures. As expected, the \$2 incentive resulted in substantially higher response rates than both the \$1 and no-incentive treatments, as shown in Table 4-7. The average response rates for the 53 strata were 39.3 percent for the \$2 treatment, 36.2 percent for the \$1 treatment, and 31.4 percent for the \$0 treatment. Adding an incentive of even \$1 increased response rates.

The other mailing treatment was sending the final mailing to nonrespondents using FedEx, instead of using first-class mail like in the previous mailings. Table 4-7 shows that the FedEx follow-up was effective at raising the overall response rate, even though it was used in only the last step of the contact procedure. In Year 1, a FedEx follow-up was sent to all nonrespondents. The average response rate across the 53 strata for the nonrespondents sent the FedEx follow-up was 38.0 percent, and the average for nonrespondents sent follow-ups by first-class mail was 33.2 percent. The 4.8 percentage point difference was statistically significant.

The last experimental treatment was retaining a subsample of cases from Year 1. As noted earlier, the address was retained so that if the household that lived at the address in Year 1 moved out and a new household moved in, the new household was the recipient of the survey request. Table 4-7 shows the overlap had a statistically significant effect with a lower response rate for the addresses retained from Year 1. The average response rate of the new sample (no overlap) over the 40 CBSAs was 37.3 percent, and the overlap response rate was 33.2 percent. The 4.1 percentage point difference was statistically significant. Table B-3 in Appendix B shows the paired comparison of the overlap and non-overlap response rates for CBSAs. (The CBSAs were used for this analysis rather than the strata because the number of overlap cases in some of the strata within CBSAs was small.)

The effect of having the same addresses in the sample for more than one period has been extensively investigated in the core NCVS longitudinal study. In Chapter 6B, the effects of the overlap on victimization reporting are examined within this research context. One additional analysis presented here is the effect that reporting victimizations in Year 1 had on the response rate for Year 2. In particular, the research question is whether responding addresses in Year 1 retained in the

sample respond at a higher or lower rate in Year 2 depending on whether they reported a victimization in Year 1.

Chapters 6A and 6B describe various victimization outcomes referred to as TBC statistics, where the crime can be a property crime or a violent crime. Because being victimized is a relatively rare event, the number of households that reported being touched by crime in Year 1 was small, and only about 25 percent of these were randomly assigned to be in the overlap. Thus, the power to detect differences in Year 2 response rates by the Year 1 victimization status was limited. The average Year 2 response rate for households reporting a violent crime in Year 1 was about 14 percentage points lower than for households that did not report a violent crime, but this difference was not statistically significant. About 80 percent of the CBSAs and strata had a lower nominal response rate for households touched by violent crime than those not touched by violent crime. The pattern was similar for the touched-by-property-crime statistic: the average Year 2 response rate for overlap households reporting being touched by a property crime in Year 1 was nearly 7 percent lower than for those that did not report a property crime. Again, this difference was not statistically significant, but the pattern across CBSAs and strata was a consistently (roughly 80 percent) lower response rate for households reporting property crime in Year 1.

The other, non-experimental variables in Table 4-7 show that the same relationships for the frame and ecological characteristics in Year 1 held in Year 2. These relationships were consistent over time. Again, the dwelling type and presence of a landline telephone were the only variables that had relatively strong relationships to response in this mail survey.

The Year 2 differences by instrument for the percentage of households having a characteristic (lived at address for 5 years or more, own the home, one-adult household, and have someone younger than age 18 in the household) are given in Table 4-8. Again, these estimates were unweighted contrasts from the mixed logistic regression with the 53 CBSAs and strata as random effects. As in Year 1, the differences were not large, and the 95 percent confidence intervals generally included zero. Table 4-9 shows the adult-level estimated differences. The Hispanic-origin effect that had been statistically significant in Year 1 was no longer significant in Year 2, so the effect in Year 1 was probably due to testing many characteristics. The more substantial Year 1 difference between the ILS and PLS in the percentage of adults reporting an age younger than 31 (with more younger than age 31 in the ILS) also appeared in Year 2. There is a possibility that the ILS rostering resulted in more young adults going unreported in the PLS. While this contrast was the largest observed, the

difference was still not very large. Comparisons of the demographics to the ACS were not repeated for Year 2 because the Year 1 analysis showed these comparisons were not very informative.

Table 4-8. Year 2 estimated (unweighted) difference of percentage of households having a characteristic from mixed logistic regression models with CBSA and stratum as random effects

| Item | Estimated difference | S.E. | 95% confidence interval of difference |
|---------------------------------------|----------------------|-------|---------------------------------------|
| Lived here for 5 years or more | | | |
| PLS – ILS | -0.018 | 0.014 | [-0.009, 0.045] |
| Own home | | | |
| PLS – ILS | -0.034 | 0.014 | [0.006, 0.006] |
| One adult in household | | | |
| PLS – ILS | -0.033 | 0.015 | [-0.063, 0.004] |
| Presence of children | | | |
| PLS – ILS | -0.002 | 0.014 | [-0.027, 0.030] |

Table 4-9. Year 2 estimated (unweighted) difference of percentage of adults having a characteristic from mixed logistic regression models with CBSA and stratum as random effects

| Item | Estimate | S.E. | 95% confidence interval of difference |
|--------------------------------------|----------|-------|---------------------------------------|
| Male | | | |
| PLS – ILS | -0.002 | 0.009 | [-0.021, 0.016] |
| Hispanic origin | | | |
| PLS – ILS | -0.026 | 0.015 | [-0.055, 0.002] |
| White, Hispanic | | | |
| PLS – ILS | -0.016 | 0.012 | [-0.040, 0.008] |
| Asian and/or Pacific Islander | | | |
| PLS – ILS | 0.020 | 0.015 | [-0.010, 0.051] |
| Younger than age 31 | | | |
| PLS – ILS | -0.085 | 0.013 | [-0.109, -0.060] |
| Older than age 59 | | | |
| PLS – ILS | 0.014 | 0.011 | [-0.006, 0.034] |
| Bachelor's or higher | | | |
| PLS – ILS | 0.008 | 0.010 | [-0.012, 0.027] |

4.5 Summary of Response Findings

The use of a mail survey to collect data on criminal victimization proved to be effective at least with regard to the response rate and observed characteristics of the respondents. The response rate in Year 1 was just below 50 percent on average. Year 2 introduced a number of experimental conditions that generally depressed response rates by lowering the cash incentive and dropping the use of FedEx to deliver the follow-up mailing. Retaining some addresses to be sampled in Year 2 after being sampled in Year 1 also depressed response rates in Year 2. These experiments were

conducted because communities seeking to use this methodology may, for various reasons, be unable to use all of the Year 1 procedures. For the Year 2 sample using Year 1 procedures (\$2 incentive, FedEx follow-up, and no overlap cases), the average Year 2 response rate across CBSAs was about 2 percentage points lower than in Year 1. For a relatively low-cost data collection method, these response rates are reasonable.

The response rates did vary substantially by CBSA. Table 4-10 summarizes the distribution of Year 2 response rates across CBSAs for addresses assigned the Year 1 approach. The median was 41.6 percent, with an interquartile range of 8.1 percentage points (45.9 to 37.8). Despite this variation, the Year 2 CBSA/stratum rates were highly correlated with those from Year 1. Figure 4-3 shows Year 1 and Year 2 AAPOR RR1 response rates across all experimental treatments across CBSAs. The graph shows the strong correlation of the response rates by CBSA from year to year.

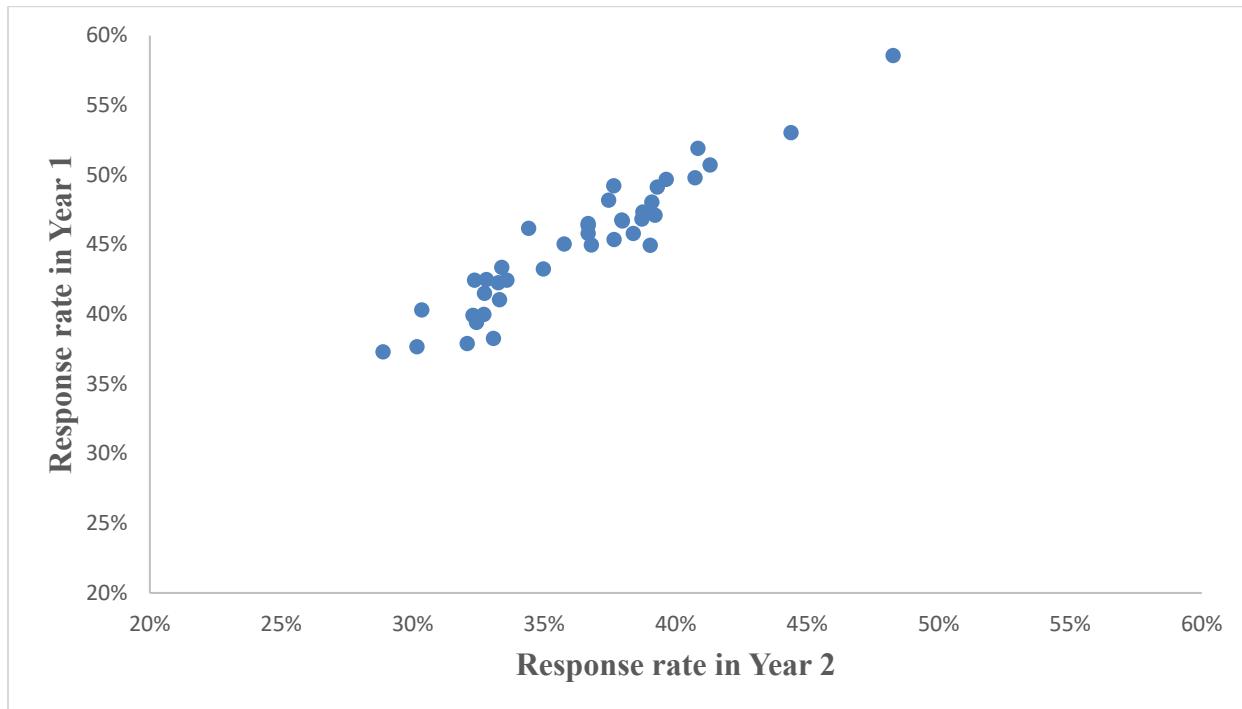
Table 4-10. Summary statistics for Year 2 response rates across CBSAs for sampled households using Year 1 protocol (\$2 incentive, FedEx follow-up, non-overlap households)

| Percentile | Response rate |
|---------------|---------------|
| 90th | 48.5 |
| 75th | 45.9 |
| 50th (median) | 41.6 |
| 25th | 37.8 |
| 10th | 33.8 |

Other observed response patterns that were consistent from year to year are not unusual for sample surveys. For example, households with young adults respond at a lower rate than those with older adults, and households with only one adult respond at a lower rate than those with more than one adult. Some nonresponse biases that may be due to these differential response rates may be mitigated by nonresponse adjustments using data available from the sampling frame. The weighting scheme used for this survey accounted for these types of differences.

One of the key experiments examined the effect the ILS and PLS instruments may have on response rates. The Year 2 analysis showed the two instruments had very comparable response rates. The Year 1 instrument response rate analysis was more complicated because there was an interaction between the instrument and form experiments. The Year 1 response rates for Form A were consistent for the ILS and PLS, but Form B had a lower response rate for the ILS than the PLS. After the complete analysis of the Year 1 findings, all of the Year 2 instruments used the Form A structure.

Figure 4-3. Scatter diagram of Year 1 and Year 2 AAPOR RR1 response rates for CBSAs



The findings from the bilingual experiment showed that sending both English- and Spanish-language instruments slightly increased response rates, but very few households in the experiment returned a Spanish instrument. The evidence suggests that restricting the use of bilingual materials to addresses in linguistically isolated areas and associated with Hispanic surnames may adequately cover most households that are predominately Spanish-speaking. Sending materials in both languages incurs additional postage and processing costs that may not be worth the expense for other addresses.

Another experiment in Year 2 retained a sample of the Year 1 addresses for Year 2. These overlap addresses had a response rate that was about 3 percentage points lower in Year 2 than the addresses that were not in the sample in Year 1. Considering response rates alone, the inclusion of addresses in the sample for two consecutive years did lower response rates. The other evidence about the overlap that is concerning, although not statistically significant, is that those reporting a victimization in Year 1 had a lower response rate in Year 2.

The other Year 2 experiments examined alternative treatments that might be useful for cities or communities conducting the survey themselves. The Year 2 treatments included using \$0 and \$1 prepaid cash incentives compared to \$2, as used in all cases in Year 1. The Year 2 design also

experimented with using first-class mail for the last nonresponse follow-up mailing instead of FedEx, which was used in all Year 1 cases. The results of the experiments showed that all of these treatments did lower response rates, and the effects of the incentive and the FedEx follow-up were independent of each other. No differences in terms of the demographic profile of respondents were detected, implying that the lower response rates may not have increased potential nonresponse bias for statistics associated with the characteristics examined.

Table 4-11 provides an approximate guide to the effects of using these different mailing treatments. It shows the average loss in terms of the number of percentage points if the incentive and FedEx nonresponse follow-up mailing methods differed from the \$2 incentive with FedEx follow-up. For example, the median response rate in Year 2 in the non-overlap cases was 41.6 percent when the \$2 incentive and FedEx follow-up treatment was used (see Table 4-10). If the \$1 incentive and no first-class follow-up were used instead, a 33.5 percent response rate (a loss of 7.9 percentage points; see Table 4-11) would be expected. These losses are estimates and subject to sampling error and may vary depending on other factors (such as the overall response rate in the particular CBSA), but the table is intended to provide some sense of the magnitude of the effect of using different treatments. The methods used to collect the data had an important effect on the overall response rates.

Table 4-11. Estimated percentage point loss in response rate for new sample (those not surveyed in the previous year), by incentive and mailing treatment (compared with control group)

| Incentive amount | FedEx follow-up | First-class mail follow-up |
|------------------|-----------------|----------------------------|
| \$2 | - | -4.8 |
| \$1 | -3.1 | -7.9 |
| \$0 | -7.9 | -12.7 |

5. Estimation

This chapter describes the process of producing weights, replicate weights, and Taylor series variance variables to support CBSA- and stratum-level estimates and estimates of their precision for the LACS. Since different instruments and forms were used to collect the data and the inference population could be defined differently, several options were considered in the development of the weights. The inference population could be the aggregate of adults in the 40 CBSAs with the individual CBSAs as domains. This approach is consistent with that used for most national surveys. However, the main purpose of the LACS is to develop a methodology to produce local (e.g., CBSA or stratum-within-CBSA) estimates, and the aggregate of the 40 CBSAs was not considered meaningful for this goal. Thus, the estimation procedures were constructed primarily to support CBSA-level estimates. This approach required 40 separate weightings, one for each CBSA, without regard to any data collected from the other CBSAs.

The other consideration was whether one set of weights would be appropriate for the analysis of the four instrument-by-form experimental conditions in Year 1 and the other treatment conditions in Year 2. The alternatives were separate weights for each condition or separate weights by instrument or form. Before examining any of the survey data, the decision was made in Year 1 to produce separate weights for the ILS and PLS by CBSA. This decision also applied to Year 2. The rationale was that different instrument structures could substantially affect estimates, especially of victimizations. The form experiment in Year 1 was expected to have less dramatic effects because the structure of the instruments was not altered. The small pretest described in Chapter 3 found only small differences in response rates by form, as did preliminary Field Test returns. Thus, response rates did not play a role in determining which weights would be produced.

The LACS is a household-level questionnaire inquiring about up to four adults within the household. In Year 1, the weighting procedure implemented for each of the 40 CBSAs, separately for the ILS and PLS, involved the following steps:

- The base weight for the sampled address was computed as the ratio of the number of addresses in the CBSA stratum to the number of sampled addresses.
- The base weights were adjusted for household unit nonresponse within weighting classes within CBSA and stratum.

- Missing values for data items used in household raking were replaced with imputed values.
- Responding household weights were raked to match CBSA-level household control totals from the ACS.
- A record was created for each adult, and missing values for data items to be used in adult raking were replaced with imputed values.
- The household-level weight attached to each adult was raked to match CBSA-level adult population control totals from the ACS. This raking yielded a final adult-level weight.

In Year 2, the base weight calculation for the sampled address was more complex due to the overlap portion of the sample (see details below). Otherwise, the weighting steps were the same as for Year 1.

In addition to these full sample weights, jackknife replicate weights were computed separately for the ILS and PLS by CBSA. The replication procedure repeated all the weighting steps from creating base weights to raking the adult weights for each replicate subsample. These replicate weights are used to produce standard errors of CBSA-level estimates. Taylor series variance stratum and PSU variables were also developed for linearization variance estimation methods. The rest of this chapter provides more details on each step of weighting and variance estimation.

The weights described in Sections 5.1 and 5.2 summed to the number of households and adults, respectively, for each CBSA. A separate set of weights was created for each instrument (ILS, PLS) so that each set summed to the number of households and adults for each CBSA. After those weights were constructed, an additional set of scaled weights was formed. The scaled weights summed to the target sample size for each CBSA, and thus could be used in analyses of the entire data set for which it was desired that each respondent would be counted approximately equally, regardless of the size of the CBSA.

5.1 Weighting Households

5.1.1 Household Base Weights

The first step was creating household base weights. The base weight for a sampled address was the inverse of the probability of selection of the sampled address from the CBSA stratum. In Year 1, since the addresses were selected with equal probability within CBSA and stratum, the base weight was the same for each address sampled from a stratum. The base weight, d_{hk} , for every sampled address k in stratum b was—

$$d_{hk} = \frac{T_b}{n_b} \quad (5.1)$$

where T_b was the number of addresses on the sampling frame in stratum b and where n_b was the number sampled for the instrument (ILS or PLS).

In Year 2, the inclusion probability for each sampled address was computed in two parts since addresses could have been included as part of the overlap sample or as part of the new sample. The overall probability of selection in Year 2 was—

$$\begin{aligned} P(\text{in Year 2 sample}) &= P(\text{in overlap sample} \mid \text{in Year 1 sample}) \times P(\text{in Year 1 sample}) \\ &\quad + P(\text{in new Year 2 sample} \mid \text{not in Year 1 sample}) \times P(\text{not in Year 1 sample}) \end{aligned}$$

Year 1 sample addresses that were eligible to be in the Year 2 overlap (roughly half the sample) were subsampled at a rate of 0.5 and retained for the overlap.¹⁷ This resulted in a 25 percent overlap with the Year 2 sample. Only Year 1 addresses that were randomized to Form A and were not randomized to the bilingual experiment were eligible to be sampled for the overlap. Therefore, using the rules of conditional probability it followed that—

$P(\text{in overlap sample} \mid \text{in Year 1 sample}) = P(\text{Form A} \mid \text{in Year 1 sample}) \times P(\text{no bilingual experiment} \mid \text{in Year 1 sample}) \times P(\text{subsampled for overlap} \mid \text{in Year 1 sample, no bilingual, Form A})$. The remainder of the expression of the probability follows immediately.

¹⁷ In the Los Angeles CBSA, the Year 1 address sample was subsampled at a rate of 0.09746 to reduce the sample to 4,720 addresses prior to subsampling for the overlap. This was reflected in the household base weight calculation.

The second term can be written as—

$$P(\text{in new Year 2 sample} \mid \text{not in Year 1 sample}) \times P(\text{not in Year 1 sample}) = \\ (n_2 \div [N_2 - n_1]) \times (1 - [n_1 \div N_1])$$

where—

n_1 = number of addresses sampled in Year 1 in the CBSA stratum

n_2 = number of addresses sampled in Year 2 for the new sample

N_1 = address frame count in CBSA stratum in Year 1

N_2 = address frame count in CBSA stratum in Year 2.

Note that in selecting the Year 2 new sample, Year 1 sampled addresses were excluded from the address frame to avoid duplicate addresses in the sample.

In Year 1, the probability of being randomized to Form A was 0.5, and the probability of being randomized to the bilingual experiment was $50 \div (\text{number of sampled addresses outside linguistically isolated Census tracts and not associated with Hispanic surnames})$ within each CBSA stratum. In Year 2, the entire new sample was assigned to Form A, and the overlap portion retained its Form A assignment from Year 1. The probability of being assigned to the bilingual experiment for the new Year 2 addresses was $4 \div (\text{number of new sampled addresses})$ in each CBSA stratum^{xinstrumentxtreatment cell.}

Finally, the Year 2 household base weight was calculated as the inverse of the Year 2 inclusion probability, or $1 \div P(\text{households in Year 2 sample})$.

5.1.2 Household Nonresponse Adjustments

The next step was adjusting the household base weight for household-level nonresponse. All sampled addresses were given disposition codes that were then classified as (a) respondent;¹⁸ (b) ineligible (most eligibles were returned by the postmaster as undeliverable, and some came back with an indication that they were not residential); (c) refusals (returned but did not complete the survey or called to refuse); or (d) unknown status. These categories are referred to as “C” for

¹⁸ A respondent household had to return the questionnaire and complete some key items related to the household to be considered a completed case.

complete, “T” for ineligible, “R” for refusal, and “U” for unknown. The vast majority of the nonrespondents did not return the instrument and are in U.

A weighting class nonresponse adjustment accounted for household-level nonresponse. Weighting classes were formed within each instrument and CBSA stratum based on the results of a categorical search algorithm. In Year 2, classes were formed separately for the overlap and the new Year 2 sample within each instrument and CBSA stratum. The search algorithm identified classes with similar response rates using data from the sampling frame (single- or multiple-dwelling type and presence of a matched telephone number) and ecological data for the block group from the ACS associated with each address (percentage of adults in the block group by education, race, Hispanic origin, and age levels). The minimum cell size (number of sampled addresses in the cell) was set at 80.

The classes were then used to create the nonresponse-adjusted weights for each instrument and CBSA stratum. The process involved two adjustment steps, first for unknown eligibility and then for household unit nonresponse. The first step essentially estimated the percentage of the cases in U that would be eligible and counted them as eligible nonrespondents. The first adjustment for weighting class l in stratum h can be written as—

$$A_{hl} = \begin{cases} \frac{\sum_{k \in l} d_{hk}}{\sum_{k \in l} (1 - \delta_{hk}(U))d_{hk}} & \text{if } hk \in (C, I, R) \\ 0 & \text{if } hk \in U \end{cases} \quad (5.2)$$

where $\delta_{hk}(U) = 1$ if address hk is in the unknown disposition category and is equal to zero otherwise.

The second step was applying the ratio of the total sum of weights of respondents and nonrespondents to the total sum of weights of the respondents, within weighting class. The second adjustment was—

$$B_{hl} = \begin{cases} \frac{\sum_{hk \in l} A_{hl} d_{hk} \delta_{hk}(C \text{ or } R)}{\sum_{hk \in l} A_{hl} d_{hk} \delta_{hk}(C)} & \text{if } hkl \in C \\ 0 & \text{if } hkl \in (I, R) \end{cases} \quad (5.3)$$

The nonresponse adjustment factors were evaluated, and if the factor for a class was too large (more than twice the average factor), then the classes were collapsed so the adjustment factors were reduced below this level.

The nonresponse- and eligibility-adjusted base weight was then the product of the base weight and the two adjustment factors and was set to zero if the address was not a respondent. The weight was—

$$d_{hlk}^{nr} = d_{hlk} A_{hl} B_{hl} \quad (5.4)$$

where sampled address hlk was a respondent to the mail survey.

5.1.3 Raking Household Weights

The final step at the address level was adjustment of the nonresponse weights for the responding households, to control totals computed from the 2010-2014 ACS 5-year file for the Year 1 weights and from the 2011-2015 ACS 5-year file for the Year 2 weights. For each of the 40 CBSAs, the control total number of households was computed for two dimensions:

1. homeownership with two levels (owned/rented, where rented included other arrangements)
2. household type with three levels (single-person household/household of two or more persons with at least one younger than age 18/household of two or more persons with no one younger than age 18).

Data items corresponding to these dimensions and levels were also derived for the responding households. Since a small percentage of the items in these computations had missing values, a simple process was used to impute these missing responses.

The adjustment of the nonresponse household weights to ACS control totals was done by raking the respondents' weights in a CBSA to the control totals, separately by instrument. Raking is a form of calibration weighting similar to poststratification but allows for more than one dimension of control totals.¹⁹ To reduce the effect of the raking adjustments on the weights, large weighting adjustments in a CBSA were trimmed to four times the median weight, and the trimmed weights were raked again to match the control totals. Since there were essentially 80 separate raking-trimming processes (one for each of the 40 CBSAs by instrument), the trimming procedure was automated. The final household weight for a responding household was—

$$w_k^{hh} = \alpha_i \beta_j d_k^{nr} \quad (5.5)$$

where α_i was the raking adjustment factor for level i of the homeownership dimension in the CBSA, and β_j was the factor for level j of the household type dimension in the CBSA. These raking factors included the trimming and final raking adjustments.

5.2 Weighting Adults

The ILS and PLS instruments use different approaches to identify adults in the household. The ILS rosters up to four adults in a series of items for each adult (first name, sex, age, race/ethnicity, and education). The PLS embeds these same demographic items in the questions about the adult's victimization experiences. The PLS also allows for four adults. Neither instrument includes instructions for subsampling adults, so the few households with more than four adults were left to complete the questionnaire however they wished.

The first weighting step at the adult level was defining surveys with adequate information to be considered complete. One condition was that the household had to be complete using the criteria given earlier, so the raked household weight could be used as the starting point. An additional criterion was that at least some of the demographic items (sex, age, race/ethnicity, and education data) had to be available for every adult. Finally, to compute meaningful adult-level crime victimization statistics, the adult demographics had to be associated with any reported personal

¹⁹ Deville, J.-C., & Särndal, C.-E. (1992). Calibration estimators in survey sampling. *Journal of the American Statistical Association*, 87(418), 376-382. <https://doi.org/10.1080/01621459.1992.10475217>

victimization. For the PLS, this linkage is immediate from the construction of the instrument. The ILS requires that each victimization incident link back to the rostered adult who experienced the incident. If no such linkage was possible for any in-scope incident, then all adults in the household were considered nonresponding. The same was true if the adult victim lacked demographic information: if there was no demographic information available for the victim, then all adults in the household were considered as nonrespondents for the adult-level file. While the incident was excluded from the adult-level file, it was maintained in the household-level file. As a result of this process, fewer than 1 percent of completed households were treated as nonresponding for adult weighting.

The adult file was created by producing a data record for each adult in a household with responding adults. For example, if two adults were identified in the instrument for a particular household, then two adult records were created with the same household-level variables (including the final household weight) plus the data associated with each of the adults.

The adult weights were computed by raking the final household weight on each adult record to control totals of the number of adults computed from the 2010-2014 ACS for Year 1 and the 2011-2015 ACS for Year 2 for each CBSA, separately by instrument. The adult raking dimensions for each CBSA were (1) sex by age (18-29/30-44/45-64/older than 64); (2) race/ethnicity (white alone, Hispanic/white alone, non-Hispanic/black alone/other); (3) education (less than high school/high school or GED/some college/bachelor's or higher).

Before raking, demographic items with missing data from the instruments were imputed using a hot deck. The raking procedure for the adult weights was very similar to that used for the household. The weight used as the input was the final household level weight, and there were three rather than two raking dimensions. To reduce the effect of the raking adjustments on the weights, large weighting adjustments in a CBSA were trimmed to four times the median weight, and the trimmed weights were raked again to match the control totals. Since there were essentially 80 separate raking-trimming processes (one for each of the 40 CBSAs by instrument), the raking and trimming procedure was automated. The final adult raked weight for a responding adult was—

$$w_k^{ad} = \alpha'_i \beta'_j \lambda'_g w_k^{hh} \quad (5.6)$$

where α'_i was the raking adjustment factor for level i of the sex by age dimension in the CBSA, β'_j was the factor for level j of the household type dimension, and λ'_g was the factor for level g of the education dimension. These raking factors included the trimming and final raking adjustments.

5.3 Variance Estimation

All of the estimates have errors due to sampling, rather than observing, the full population of households and adults in the CBSA. To estimate the sampling errors (the standard errors of the estimates), a replication method of variance estimation was implemented. Replicate variance estimation allows for easily computable design-consistent variance estimators for a wide variety of descriptive and analytic statistics. A grouped jackknife variance estimator was used that involved creating a set of replicate weights. Rust and Rao (1996) call this the stratified jackknife (JK2) method.²⁰ They also give more details on the general replication approach and its advantages when various nonresponse and raking adjustments are involved in the weighting.

Each replicate weight was generated by ‘deleting’ a grouped portion of the sampled households (setting the replicate weight to zero for the group) and reweighting the remaining sample units. A total of 150 replicate weights were formed. The replicates were created by first sorting the file of all sampled addresses by state and zip code within each CBSA stratum to reflect the order of selection. The first two records were assigned a variance stratum code of 1, with one of these randomly assigned a variance unit equal to 1 and the other assigned a variance unit equal to 2. The next pair was assigned a variance stratum equal to 2 and variance units 1 and 2, and so forth. The 151st pair of records began again with a variance stratum equal to 1. This process was continued modulo 150 so that the final variance strata within each CBSA and stratum ran from 1 to 150 and each had the same number of variance units with codes of 1 and 2.

In Year 2, the overlap portion of the sample was assigned to the same variance strata and variance unit they were assigned to in Year 1. This was done so that the variance reduction for estimates of change from Year 1 to Year 2 due to the overlap in the Year 2 sample would be incorporated in the

²⁰ Rust, K. F., & Rao, J. N. K. (1996). Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research*, 5(3), 283-310. <https://doi.org/10.1177%2F096228029600500305>

Year 2 variance estimates. The new sample in Year 2 was assigned to variance strata and variance units in the same way as the Year 1 sample.

The replicate strata and units were then used to create 150 replicate base weights for each sampled address. For addresses in variance stratum 1, replicate 1 base weights were set equal to the full sample weight for all sampled addresses except those in variance stratum 1. The replicate weights for units in variance unit 1 and variance stratum 1 were doubled and those in variance unit 2 and variance stratum 1 were set to zero. The same process was repeated for replicates 2 to 150 using the relevant variance stratum.

Once the 150 replicate base weights were created for a CBSA stratum and instrument, all of the weight adjustments (nonresponse and raking and trimming) were done in exactly the same manner as described above for the full sample weights. Thus, at the end, the final household and adult weights for each CBSA and instrument had 150 replicate weights that had gone through the same process as the full sample weight. The process of creating household and adult replicate weights described above was repeated for the Year 2 weights.

With these replicate weights, the jackknife variance estimator can be computed using any of a number of standard packages such as SAS, SUDAAN, R, STATA and WesVar. The estimate of variance for a full sample estimate is computed using the variation of the replicate estimates around the full-sample estimate as—

$$v(\hat{y}) = \sum_{r=1}^{150} (\hat{y}_{(r)} - \hat{y})^2 \quad (5.7)$$

where \hat{y} is the full sample estimate for a CBSA using one of the instruments, $\hat{y}_{(r)}$ is the corresponding estimate based on replicate r weights, and $v(\hat{y})$ is the estimated variance of the estimate. The standard error of the estimate is the square root of the estimated variance.

Variance estimates can also be computed using the Taylor series linearization method²¹ with SAS, SUDAAN, Stata, R, or SPSS software. The same variance strata and variance units that were used to create the jackknife replicate weights can be used with the linearization method, and no replicate

²¹ Wolter, K. M. (2007). *Introduction to variance estimation: Statistics for social and behavioral sciences* (2nd ed.). Springer.

weights are needed. However, variance estimates using linearization will not include the extra sampling variability from the nonresponse adjustments or the raking.

To get some idea of the precision of the estimates from the LACS, 10 estimates (nine percent-TBC estimates²² and the percent of one-adult households) were computed for each CBSA and instrument for Year 1, the replicate variances, and the design effect (deff) defined as the ratio of the replicate variance estimate to the simple random sampling variance estimate. The nine percent-TBC estimates were computed for Year 2 and for the Year 1 to Year 2 change for each CBSA also. Table 5-1 summarizes the mean and median design effects for these estimates. These effects, particularly for Year 1, on the precision relative to simple random sampling are largely due to the adjustments for nonresponse and are relatively modest. The increase in design effects for Year 2 can be attributed primarily to the sampling for the overlap portion of the sample.

Table 5-1. Estimated design effects for percent-TBC estimates, by year and one-year change

| | Year 1 | | Year 2 | | Year 1 to Year 2 change | |
|--------------|--------|------|--------|------|-------------------------|------|
| | ILS | PLS | ILS | PLS | ILS | PLS |
| Mean(deff) | 1.27 | 1.28 | 1.54 | 1.51 | 1.46 | 1.42 |
| Median(deff) | 1.18 | 1.20 | 1.37 | 1.35 | 1.33 | 1.28 |

5.4 Scaled Household and Adult Weights

To give each CBSA equal weight in the analysis so that large-population CBSAs would not dominate when the CBSAs were pooled, scaled household and adult weights were created separately for the ILS and PLS instruments by year. Both household and adult weights were scaled to the target sample size for each CBSA and year. The target number of sampled addresses is given in Table 5-2 for Year 1 and Year 2.

Table 5-2. Target number of sampled addresses, by CBSA and year

| CBSA | Year 1 | Year 2 |
|-----------------|--------|--------|
| Chicago | 7,500 | 7,500 |
| Philadelphia | 9,363 | 9,363 |
| Los Angeles | 7,500 | 2,100 |
| All other CBSAs | 2,100 | 2,100 |

²² TBC estimates for households include property crime excluding attempts, property crime including attempts, motor vehicle theft, any violent crime excluding attempts, any violent crime including attempts, and serious violent crime. For persons, a TBC is any violent crime excluding attempts, any violent crime including attempts, or serious violent crime.

6A. Year 1: Reports of Victimization

This chapter compares the ILS and PLS with each other and with victimization statistics obtained from the UCR and the NCVS. Details of the statistical methodology used for the production of the estimates for the comparison are given in Appendix C.

6A.1 Measures of Victimization

The LACS instruments do not have the specificity of the core NCVS for classifying victimizations into detailed crime types. In addition, the instruments do not collect details on all victimizations. The ILS collects details on up to four violent and four property victimizations. The PLS asks about the most recent violent victimization for each adult (up to four) in the household. Victimization rates that are directly equivalent to the core NCVS estimates, which are defined as (estimated total number of victimizations) ÷ (population size), cannot be calculated using these instruments.

Instead of using victimization rates, TBC statistics are computed. The person-level violent TBC indicator equals 1 if an adult reported at least one violent victimization and 0 otherwise. The household-level violent TBC indicator equals 1 if at least one violent victimization was reported by an adult in the household and 0 otherwise. The household-level property TBC indicator equals 1 if at least one property crime was reported for the household and 0 otherwise.

Tables 6A-1 and 6A-2 define the TBC indicators used in this report and describe how they were calculated from the ILS and PLS instruments, respectively. An algorithmic definition, describing which questions were used to define the indicators, is given in Appendix D. Tables 6A-3 and 6A-4 give the TBC summary statistics used for the instruments at the household and person levels, respectively.

Table 6A-1. Definition of TBC statistics, ILS

| Variable name | Level | Description | Definition |
|----------------|-----------|--|---|
| PROPERTYCRIME1 | Household | Touched by property crime, excludes attempts | = 1 if: Theft reported as part of a violent OR Property crime OR Offender got inside OR Car stolen |
| PROPERTYCRIME2 | Household | Touched by property crime, includes attempts | = 1 if PROPERTYCRIME1=1 OR Attempted theft OR Attempted car theft |
| MVTHEFT | Household | Touched by motor vehicle theft | = 1 if Any incident of a stolen vehicle is reported |
| ANYVIOLENT1 | Person | Touched by violent crime, excluding threats | = 1 if SERIOUSVIOLENT=1 OR Attacked OR Attempted forced intercourse OR Other sexual assault |
| ANYVIOLENT2 | Person | Touched by violent crime, including threats | = 1 if ANYVIOLENT1=1 OR Attempted or threatened assault |
| SERIOUSVIOLENT | Person | Touched by serious violent crime | = 1 if Weapon present OR Injury OR Forced sexual intercourse OR Theft and either attacked or threatened |

Table 6A-2. Definition of TBC statistics, PLS

| Variable name | Level | Description | Definition |
|----------------|-----------|--|--|
| PROPERTYCRIME1 | Household | Touched by property crime, excludes attempts | = 1 if Theft during break-in OR Car or items in car stolen OR Offender broke in OR Theft from household or any person |
| PROPERTYCRIME2 | Household | Touched by property crime, includes attempts | = 1 if PROPERTYCRIME1=1 OR Someone attempted to break into the home OR Vehicle was vandalized or broken into |
| MVTHEFT | Household | Touched by motor vehicle theft | = 1 if Any incidents of stolen cars are reported |
| ANYVIOLENT1 | Person | Touched by violent crime, excluding threats | = 1 if SERIOUSVIOLENT=1 OR Attacked OR Unwanted sexual assault |
| ANYVIOLENT2 | Person | Touched by violent crime, including threats | = 1 if ANYVIOLENT1=1 OR Threatened assault |
| SERIOUSVIOLENT | Person | Touched by serious violent crime | = 1 if Weapon present OR Injury OR or Theft and either attacked or threatened. <i>The PLS does not have a separate measure of forced sexual intercourse.</i> |

Table 6A-3. Definition of TBC summary statistics calculated at the household level

| Variable name | Description | Definition |
|---------------|---|---|
| HHTBPROP1 | Households touched by property crime, excludes attempts | Percentage of households with PROPERTYCRIME1 = 1 |
| HHTBPROP2 | Households touched by property crime, includes attempts | Percentage of households with PROPERTYCRIME2 = 1 |
| HHTBMVTHEFT | Households touched by motor vehicle theft | Percentage of households with MVTHEFT = 1 |
| HHTBVIOL1 | Households touched by violent crime, excluding threats | Percentage of households in which at least one person* has ANYVIOLENT1 = 1 |
| HHTBVIOL2 | Households touched by violent crime, including threats | Percentage of households in which at least one person* has ANYVIOLENT2 = 1 |
| HHTBSERVIOL | Households touched by serious violent crime | Percentage of households in which at least one person* has SERIOUSVIOLENT = 1 |

* Some respondents reported a violent crime for a person without demographic information. For these, the violent TBC indicator for the household was set equal to 1, even though there was no person record for the person reporting the victimization.

Table 6A-4. Definition of TBC summary statistics calculated at the person level

| Variable name | Description | Definition |
|---------------|---|---|
| PTBVIOL1 | Persons touched by violent crime, excluding threats | Percentage of persons with ANYVIOLENT1 = 1 |
| PTBVIOL2 | Persons touched by violent crime, including threats | Percentage of persons with ANYVIOLENT2 = 1 |
| PTBSERVIOL | Persons touched by serious violent crime | Percentage of persons with SERIOUSVIOLENT = 1 |

6A.2 Comparison of ILS and PLS, Forms A and B: Plots and Correlations

For each CBSA, the final raked weights were used to calculate TBC rates for each CBSA, separately by instruments (ILS and PLS) and separately for the two forms used with each instrument (Form A, in which the community questions start the questionnaire, and Form B, in which the community questions are at the end). Thus, six summary statistics are calculated for each of the TBC measures described in Tables 6A-3 and 6A-4: all ILS data, all PLS data, ILS Form A data, ILS Form B data, PLS Form A data, and PLS Form B data.

Calculating summary statistics separately for each CBSA allows investigation of the heterogeneity of estimated TBC rates across the 40 metropolitan areas. These CBSA-level statistics are used in Sections 6.5 and 6.6 for comparisons with crime statistics calculated from the UCR and the NCVS.

Appendix F displays scatterplots of pairs of these statistics for the variables. From the scatterplots, it can be seen that—

- The PLS records higher levels of property crime (including or excluding attempts, as well as motor vehicle theft by itself) than the ILS (Figures E-20, E-25, E-30).
- PLS Form A records higher levels of property crime than PLS Form B, and ILS Form A records slightly higher levels of property crime than ILS Form B (Figures E-16, E-17, E-21, E-22).
- For violent crime measures excluding threats, patterns are ambiguous. For the household- and person-level measures of touched by serious violent crime, the plots do not show clear patterns that one instrument or form is uniformly higher than the others. The PLS appears to be in general somewhat higher than the ILS for persons touched by violent crime excluding threats (Figures E-1 through E-5, E-11 through E-15, E-31 through E-35, E-41 through E-45).
- For violent crime including threats, the PLS records much higher levels than the ILS, and PLS Form A records higher levels than PLS Form B. This pattern occurs for both household- and person-level touched by violent TBC estimates (Figures E-6 through E-10, E-36 through E-40).

Table 6A-5 displays estimated correlation coefficients between the ILS and PLS, between ILS Form A and ILS Form B, and between PLS Form A and PLS Form B for the response variables in Tables 6A-3 and 6A-4. The full matrices of correlation coefficients for these response variables, including the 15 pairwise correlations among all six responses, are given in Appendix F. These statistics were computed as the Pearson correlation coefficient across the 40 CBSA-level summary statistics computed for each variable.

Table 6A-5. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics

| TBC variable | Corr (ILS, PLS both forms) | Corr (ILS A, ILS B) | Corr (PLS A, PLS B) |
|--------------|-------------------------------|------------------------|------------------------|
| HHTBPROP1 | 0.809*** | 0.715*** | 0.842*** |
| HHTBPROP2 | 0.851*** | 0.718*** | 0.824*** |
| HHTBMVTHEFT | 0.414** | 0.193 | 0.484** |
| HHTBVIOL1 | 0.259 | 0.172 | -0.257 |
| HHTBVIOL2 | 0.401* | 0.349* | 0.096 |
| HHTBSERVIOL | 0.311 | 0.141 | -0.088 |
| PTBVIOL1 | 0.262 | -0.037 | -0.240 |
| PTBVIOL2 | 0.305 | 0.090 | 0.188 |
| PTBSERVIOL | 0.188 | -0.075 | -0.057 |

* P-value < .05.

** P-value < .01.

*** P-value < .001.

Table 6A-5 indicates that the correlations between ILS and PLS, and between Forms A and B of the same instrument, are much higher for the property crime measures than for the violent crime measures. This may be due in part to the low rate of violent crime, where a difference of one or two incidents per CBSA may change the correlation.

Even a high correlation does not mean that the levels of TBC are similar for the instruments, as was seen in the scatterplots. In the next section, the block design of the experiment is used to evaluate whether one or more of the instruments and forms yields higher TBC rates than the others.

6A.3 Comparison of ILS and PLS, Forms A and B: Statistical Tests

As described in Section 6A.2, this study used a randomized complete block design to compare the instruments and forms. The blocking units were the strata in the study, with seven strata in the Philadelphia CBSA, four strata in the Chicago CBSA, five strata in the Los Angeles CBSA, and one stratum for each of the remaining 37 CBSAs. The sampled addresses were randomized in each of the 53 strata to receive either ILS Form A, ILS Form B, PLS Form A, or PLS Form B, with the addresses in each stratum split roughly equally among the four experimental treatments.

For the analyses in this section, six summary statistics are calculated for each of the TBC measures described in Tables 6A-3 and 6A-4: all ILS data, all PLS data, ILS Form A data, ILS Form B data, PLS Form A data, and PLS Form B data. Each of these statistics was calculated separately for each of the 53 strata in the study, using the final weights from each CBSA. The summary statistics used for the statistical tests comparing instruments and forms were thus for the 53 strata in which randomization was performed; the plots and correlations in Section 6A.2 were calculated for the 40 CBSAs.

To perform statistical tests comparing the instruments and forms, paired t-tests and blocked analysis of variance (ANOVA) models in which the blocking units were the 53 CBSA strata, were used. (See Appendix C for the statistical rationale for using a paired t test when there are heteroscedastic errors.) The analyses using paired t tests and block ANOVA models had similar results, and the contrasts of interest in Tables 6A-6 to 6A-8 used the paired t tests. Table 6A-6 provides the comparison of TBC rates for the variables in Tables 6A-3 and 6A-4 between the ILS and PLS. Tables 6A-7 and 6A-8 compare ILS Forms A and B, and PLS Forms A and B, respectively. The

averages reported in these tables are the averages of the 53 CBSA-stratum percentages, each of which was calculated using the survey weights.²³

Table 6A-6. Comparison of TBC rates, ILS and PLS

| TBC variable | Average PLS percent (%) | Average ILS percent (%) | Difference: PLS – ILS | 95% confidence Interval for difference | p-value for test that difference = 0 |
|--------------|-------------------------|-------------------------|-----------------------|--|--------------------------------------|
| HHTBPROP1 | 16.94 | 10.99 | 5.94 | [5.3, 6.59] | 1.42E-24 |
| HHTBPROP2 | 21.36 | 11.70 | 9.66 | [8.81, 10.51] | 8.55E-29 |
| HHTBMVTHEFT | 1.20 | 0.80 | 0.40 | [0.21, 0.58] | 9.58E-05 |
| HHTBVIOL1 | 2.65 | 2.51 | 0.14 | [-0.1, 0.38] | 2.37E-01 |
| HHTBVIOL2 | 5.60 | 3.39 | 2.21 | [1.94, 2.48] | 4.63E-22 |
| HHTBSERVIOL | 1.83 | 2.08 | -0.25 | [-0.47, -0.03] | 2.83E-02 |
| PTBVIOL1 | 1.62 | 1.41 | 0.21 | [0.05, 0.37] | 1.33E-02 |
| PTBVIOL2 | 3.39 | 1.90 | 1.49 | [1.28, 1.69] | 8.03E-20 |
| PTBSERVIOL | 1.13 | 1.18 | -0.05 | [-0.20, 0.10] | 4.89E-01 |

Table 6A-7. Comparison of TBC rates, ILS Forms A and B

| TBC variable | Average ILS A percent (%) | Average ILS B percent (%) | Difference: ILS A – ILS B | 95% confidence Interval for difference | p-value for test that difference = 0 |
|--------------|---------------------------|---------------------------|---------------------------|--|--------------------------------------|
| HHTBPROP1 | 11.27 | 10.69 | 0.58 | [-0.08, 1.24] | 8.24E-02 |
| HHTBPROP2 | 11.99 | 11.38 | 0.60 | [-0.01, 1.22] | 5.56E-02 |
| HHTBMVTHEFT | 0.81 | 0.79 | 0.02 | [-0.17, 0.21] | 8.62E-01 |
| HHTBVIOL1 | 2.54 | 2.46 | 0.08 | [-0.28, 0.43] | 6.69E-01 |
| HHTBVIOL2 | 3.54 | 3.22 | 0.32 | [-0.04, 0.67] | 7.90E-02 |
| HHTBSERVIOL | 2.10 | 2.04 | 0.06 | [-0.24, 0.35] | 7.10E-01 |
| PTBVIOL1 | 1.35 | 1.46 | -0.11 | [-0.37, 0.15] | 4.10E-01 |
| PTBVIOL2 | 1.88 | 1.91 | -0.03 | [-0.30, 0.24] | 8.41E-01 |
| PTBSERVIOL | 1.15 | 1.20 | -0.05 | [-0.28, 0.17] | 6.36E-01 |

²³ Note that the averages in columns 2 and 3 of Tables 6A-6 to 6A-8 estimate the average of the population TBC rates over the 53 strata, including the multiple strata in Chicago, Philadelphia, and Los Angeles. These averages should not be thought of as estimating the TBC rate in a “typical” CBSA, which should be estimated by the average of the 40 CBSA rates.

Table 6A-8. Comparison of TBC rates, PLS Forms A and B

| TBC variable | Average PLS A percent (%) | Average PLS B percent (%) | Difference: PLS A – PLS B | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|---------------------------|---------------------------|---------------------------|--|--------------------------------------|
| HHTBPROP1 | 18.01 | 15.87 | 2.14 | [1.34, 2.95] | 2.08E-06 |
| HHTBPROP2 | 22.99 | 19.71 | 3.27 | [2.25, 4.29] | 3.84E-08 |
| HHTBMVTHEFT | 1.39 | 1.01 | 0.37 | [0.16, 0.59] | 9.97E-04 |
| HHTBVIOL1 | 2.84 | 2.45 | 0.39 | [-0.01, 0.78] | 5.40E-02 |
| HHTBVIOL2 | 6.19 | 5.00 | 1.19 | [0.61, 1.76] | 1.23E-04 |
| HHTBSERVIOL | 2.01 | 1.65 | 0.36 | [0.04, 0.68] | 2.92E-02 |
| PTBVIOL1 | 1.77 | 1.46 | 0.31 | [0.05, 0.57] | 2.14E-02 |
| PTBVIOL2 | 3.73 | 3.03 | 0.70 | [0.31, 1.08] | 6.48E-04 |
| PTBSERVIOL | 1.27 | 0.98 | 0.29 | [0.08, 0.51] | 8.90E-03 |

Table 6A-6 shows that the PLS had higher reported property crime levels than the ILS. Both forms of the PLS had higher reported property crime than the corresponding forms of the ILS, but PLS Form A had higher levels than PLS Form B (Table 6A-8).

The PLS also had higher reported violent crime including threats at the person level, and violent crime excluding threats at the person level, than the ILS. Again, PLS Form A had higher rates of touched by violent crime than PLS Form B, for all measures except households touched by violent crime excluding threats (which had a p-value of .054 and thus trended in the same direction as all the other PLS Form A/B comparisons).

There were no statistically significant differences between ILS Form A and ILS Form B for any TBC measure.

Table 6A-9 reports the F-statistics and p-values for the blocked ANOVA model, in which the response variable was the weighted estimate of the percentage TBC for each instrument, form, and block. The 53 blocks were treated as random effects in this model (see Appendix C for rationale). This analysis presents a supplemental view to the results in Tables 6A-6 to 6A-8 focusing on the main effects (instrument, form) and interaction of instrument and form. As before, there was a large difference between the PLS and ILS for property crime and for violent crime including threats. There were also statistically significant interactions between instrument and form for property crime and violent crime (including threats), reflecting the difference found between PLS Forms A and B but the lack of significant differences between ILS Forms A and B.

Table 6A-9. F-statistics and p-values for main effects and interaction of instrument and form for the blocked ANOVA model run with summary statistics as the response variable

| Variable name | F-statistic for instrument (ILS or PLS) | p-value for instrument | F-statistic for form (A or B) | p-value for form | F-statistic for instrument-by-form interaction | p-value for interaction |
|---------------|---|------------------------|-------------------------------|------------------|--|-------------------------|
| HHTBPROP1 | 445.50 | 1.42E-47 | 23.30 | 3.27E-06 | 7.65 | 6.35E-03 |
| HHTBPROP2 | 786.09 | 8.47E-63 | 31.60 | 8.51E-08 | 14.97 | 1.60E-04 |
| HHTBMVTHEFT | 24.70 | 1.74E-06 | 6.02 | 1.52E-02 | 5.05 | 2.60E-02 |
| HHTBVIOL1 | 1.30 | 2.57E-01 | 3.28 | 7.22E-02 | 1.48 | 2.25E-01 |
| HHTBVIOL2 | 196.27 | 2.17E-29 | 22.48 | 4.74E-06 | 7.52 | 6.80E-03 |
| HHTBSERVIOL | 4.88 | 2.86E-02 | 3.59 | 5.99E-02 | 1.93 | 1.67E-01 |
| PTBVIOL1 | 5.59 | 1.93E-02 | 1.27 | 2.61E-01 | 5.56 | 1.96E-02 |
| PTBVIOL2 | 174.74 | 3.05E-27 | 8.89 | 3.34E-03 | 10.38 | 1.55E-03 |
| PTBSERVIOL | 0.39 | 5.33E-01 | 2.47 | 1.18E-01 | 5.22 | 2.37E-02 |

6A.4 TBC Propensity: ILS and PLS

The analysis in Section 6A.3 used the summary statistics of TBC rates from each CBSA stratum. In this section, the results of analyses are conducted using the TBC indicator variables for individual households or persons, described in Tables 6A-1 and 6A-2, as response variables. These analyses included covariates for demographic variables, along with the interactions of those variables with the instrument and form variables. The analyses reported in Tables 6A-10 through 6A-12 were performed without weights, using random effects for the CBSA strata to examine propensities.²⁴ Analogous analyses using scaled weights had similar results.²⁵

²⁴ These analyses were performed in PROC GLIMMIX of SAS software. The model predicted logit[P(response variable = 1)] as a linear function of tenure, time at address, presence of children, whether the household has one adult, and income category. The blocking variable of the CBSA stratum was included as a random effect. To avoid numerical instability, all models were fit using adaptive quadrature. These models were also used with interaction terms between the demographic covariates and instrument/form, but these models sometimes did not converge.

²⁵ Scaled weights were used with PROC SURVEYLOGISTIC from SAS software to allow for the nonresponse adjustments performed within each CBSA. The weights were scaled to sum to the targeted sample size of household respondents for each CBSA. The sample sizes were equal for all except the three oversampled CBAs. Without the scaling, the regression analyses using weights might be dominated by the CBAs with the largest population.

Table 6A-10. Coefficients of mixed logistic regression models predicting P(response variable) = 1 for household-level measures of property crime

| Effect | Level | PROPERTYCRIME1 | | PROPERTYCRIME2 | | MVTHEFT | |
|----------------------------------|-----------------------|----------------|-------------------------|----------------|-------------------------|----------|-------------------------|
| | | Estimate | 95% confidence Interval | Estimate | 95% confidence Interval | Estimate | 95% confidence Interval |
| Intercept | | -1.875 | [-1.99, -1.76] | -1.577 | [-1.69, -1.47] | -4.687 | [-4.96, -4.41] |
| Instrument/Form | ILS A | -0.394 | [-0.45, -0.34] | -0.585 | [-0.64, -0.53] | -0.215 | [-0.43, 0.00] |
| | ILS B | -0.439 | [-0.5, -0.38] | -0.637 | [-0.69, -0.58] | -0.201 | [-0.42, 0.01] |
| | PLS A | 0.176 | [0.13, 0.23] | 0.209 | [0.16, 0.26] | 0.337 | [0.15, 0.52] |
| | PLS B | 0 | N/A | 0 | N/A | 0 | N/A |
| Rent/own home | Other or missing | 0.000 | [-0.14, 0.14] | -0.036 | [-0.17, 0.10] | 0.049 | [-0.39, 0.49] |
| | Own | -0.243 | [-0.29, -0.19] | -0.269 | [-0.32, -0.22] | -0.518 | [-0.69, -0.34] |
| | Rent | 0 | N/A | 0 | N/A | 0 | N/A |
| Lived at address 5 years or more | Yes | -0.068 | [-0.11, -0.02] | -0.055 | [-0.10, -0.01] | 0.122 | [-0.04, 0.29] |
| | No or missing* | 0 | N/A | 0 | N/A | 0 | N/A |
| Children in household | Missing | -0.342 | [-0.46, -0.23] | -0.308 | [-0.41, -0.21] | 0.376 | [0.06, 0.69] |
| | Yes | 0.324 | [0.28, 0.37] | 0.314 | [0.27, 0.35] | 0.475 | [0.32, 0.63] |
| | No | 0 | N/A | 0 | N/A | 0 | N/A |
| Number of adults in household | Missing | 0.040 | [-0.09, 0.17] | 0.036 | [-0.08, 0.15] | 0.035 | [-0.40, 0.47] |
| | 3+ | 0.416 | [0.36, 0.48] | 0.430 | [0.37, 0.49] | 0.603 | [0.39, 0.81] |
| | 2 | 0.120 | [0.07, 0.17] | 0.126 | [0.08, 0.17] | 0.186 | [-0.01, 0.38] |
| | 1 | 0 | N/A | 0 | N/A | 0 | N/A |
| Household income | Missing | -0.348 | [-0.45, -0.25] | -0.377 | [-0.47, -0.28] | -0.774 | [-1.13, -0.42] |
| | More than \$100,000 | 0.150 | [0.08, 0.22] | 0.113 | [0.04, 0.18] | -0.638 | [-0.90, -0.38] |
| | \$50,001 to \$100,000 | 0.133 | [0.06, 0.20] | 0.097 | [0.03, 0.16] | -0.332 | [-0.56, -0.10] |
| | \$20,001 to \$50,000 | -0.008 | [-0.08, 0.06] | -0.009 | [-0.07, 0.06] | -0.184 | [-0.40, 0.03] |
| | \$20,000 or less | 0 | N/A | 0 | N/A | 0 | N/A |

Note: The zeroes among the estimates represent the reference levels for the covariates. A positive coefficient indicates that households at that level of the covariate has a higher propensity for being touched by crime relative to the reference level.

* There are 374 observations with missing values.

Table 6A-11. Coefficients of mixed logistic regression models predicting P(response variable) = 1 for household-level measures of violent crime

| Effect | Level | ANYVIOLENT1 | | ANYVIOLENT2 | | SERIOUSVIOLENT | |
|----------------------------------|-----------------------|-------------|-------------------------|-------------|-------------------------|----------------|-------------------------|
| | | Estimate | 95% confidence Interval | Estimate | 95% confidence Interval | Estimate | 95% confidence Interval |
| Intercept | | -3.043 | [-3.21, -2.88] | -2.419 | [-2.55, -2.29] | -3.468 | [-3.66, -3.28] |
| Instrument/Form | ILS A | 0.010 | [-0.12, 0.14] | -0.425 | [-0.53, -0.33] | 0.215 | [0.06, 0.37] |
| | ILS B | -0.067 | [-0.20, 0.07] | -0.547 | [-0.65, -0.44] | 0.160 | [0, 0.31] |
| | PLS A | 0.148 | [0.02, 0.27] | 0.199 | [0.11, 0.29] | 0.213 | [0.06, 0.36] |
| | PLS B | 0 | N/A | 0 | N/A | 0 | N/A |
| Rent/own home | Other or missing | 0.038 | [-0.23, 0.31] | 0.113 | [-0.09, 0.32] | 0.082 | [-0.22, 0.39] |
| | Own | -0.749 | [-0.86, -0.63] | -0.634 | [-0.72, -0.55] | -0.714 | [-0.85, -0.58] |
| | Rent | 0 | N/A | 0 | N/A | 0 | N/A |
| Lived at address 5 years or more | Yes | -0.237 | [-0.34, -0.13] | -0.243 | [-0.32, -0.16] | -0.198 | [-0.32, -0.08] |
| | No or missing* | 0 | N/A | 0 | N/A | 0 | N/A |
| Children in household | Missing | -0.378 | [-0.64, -0.12] | -0.530 | [-0.74, -0.32] | -0.264 | [-0.55, 0.02] |
| | Yes | 0.218 | [0.12, 0.32] | 0.188 | [0.11, 0.26] | 0.249 | [0.13, 0.36] |
| | No | 0 | N/A | 0 | N/A | 0 | N/A |
| Number of adults in household | Missing | -0.194 | [-0.49, 0.10] | -0.206 | [-0.43, 0.02] | -0.222 | [-0.57, 0.12] |
| | 3+ | 0.709 | [0.58, 0.84] | 0.568 | [0.47, 0.67] | 0.763 | [0.62, 0.91] |
| | 2 | -0.087 | [-0.21, 0.03] | -0.039 | [-0.13, 0.05] | -0.066 | [-0.21, 0.07] |
| | 1 | 0 | N/A | 0 | N/A | 0 | N/A |
| Household income | Missing | -0.677 | [-0.89, -0.47] | -0.582 | [-0.75, -0.41] | -0.692 | [-0.93, -0.46] |
| | More than \$100,000 | -0.670 | [-0.83, -0.51] | -0.429 | [-0.55, -0.31] | -0.790 | [-0.97, -0.61] |
| | \$50,001 to \$100,000 | -0.539 | [-0.68, -0.40] | -0.285 | [-0.39, -0.18] | -0.700 | [-0.86, -0.54] |
| | \$20,001 to \$50,000 | -0.487 | [-0.62, -0.35] | -0.332 | [-0.44, -0.23] | -0.574 | [-0.73, -0.42] |
| | \$20,000 or less | 0 | N/A | 0 | N/A | 0 | N/A |

Note: The zeroes among the estimates represent the reference levels for the covariates. A positive coefficient indicates that households at that level of the covariate have a higher propensity for being touched by crime relative to the reference level.

* There are 374 observations with missing values.

Table 6A-12. Coefficients of mixed logistic regression models predicting P(response variable) = 1 for person-level measures of violent crime

| Effect | Level | ANYVIOLENT1 | | ANYVIOLENT2 | | SERIOUSVIOLENT | |
|-----------------|----------------------------------|-------------|-------------------------|-------------|-------------------------|----------------|-------------------------|
| | | Estimate | 95% confidence Interval | Estimate | 95% confidence Interval | Estimate | 95% confidence Interval |
| Intercept | | -5.944 | [-6.16, -5.73] | -4.848 | [-5.01, -4.69] | -6.501 | [-6.75, -6.25] |
| Instrument/Form | ILS A | -0.129 | [-0.26, 0] | -0.553 | [-0.65, -0.46] | 0.071 | [-0.08, 0.22] |
| | ILS B | -0.098 | [-0.23, 0.03] | -0.566 | [-0.67, -0.47] | 0.117 | [-0.03, 0.27] |
| | PLS A | 0.122 | [0, 0.24] | 0.196 | [0.11, 0.28] | 0.181 | [0.03, 0.33] |
| | PLS B | 0 | N/A | 0 | N/A | 0 | N/A |
| Age | 18-29 | 1.657 | [1.48, 1.84] | 1.411 | [1.28, 1.54] | 1.629 | [1.42, 1.84] |
| | 30-44 | 1.434 | [1.26, 1.61] | 1.288 | [1.16, 1.41] | 1.425 | [1.22, 1.63] |
| | 45-64 | 0.989 | [0.81, 1.16] | 0.942 | [0.82, 1.06] | 1.012 | [0.81, 1.21] |
| | 65+ | 0 | 0 | 0 | 0 | 0 | 0 |
| Sex | Male | 0.089 | [0, 0.18] | 0.175 | [0.11, 0.24] | 0.145 | [0.04, 0.25] |
| | Female | 0 | N/A | 0 | N/A | 0 | N/A |
| Race/ethnicity | Other or missing | -0.007 | [-0.16, 0.14] | -0.205 | [-0.32, -0.09] | 0.028 | [-0.15, 0.20] |
| | Hispanic | -0.051 | [-0.19, 0.09] | -0.165 | [-0.27, -0.06] | -0.036 | [-0.20, 0.13] |
| | Black alone, non-Hispanic | 0.417 | [0.28, 0.55] | 0.143 | [0.04, 0.25] | 0.568 | [0.42, 0.72] |
| | White alone, non-Hispanic | 0 | N/A | 0 | N/A | 0 | N/A |
| Education | Less than high school | 0.485 | [0.30, 0.67] | 0.154 | [0.01, 0.30] | 0.639 | [0.43, 0.85] |
| | High school graduate or GED | 0.286 | [0.16, 0.42] | 0.057 | [-0.04, 0.15] | 0.437 | [0.29, 0.59] |
| | Some college or technical school | 0.469 | [0.36, 0.58] | 0.330 | [0.25, 0.41] | 0.525 | [0.40, 0.65] |
| | College graduate or higher | 0 | N/A | 0 | N/A | 0 | N/A |

Note: The zeroes among the estimates represent the reference levels for the covariates. A positive coefficient indicates that households at that level of the covariate have a higher propensity for being touched by crime relative to the reference level. The values of age, sex, and education levels were imputed when missing.

The analyses in Tables 6A-10 to 6A-12 support the results in Sections 6A.2 and 6A.3 on the differences in instruments and forms. For property crime, the PLS was higher than the ILS; for all crime variables, PLS Form A was higher than PLS Form B.

For the household-level analyses in Tables 6A-10 and 6A-11, after adjusting for the effects of other variables in the model, households that own their dwelling unit have lower predicted probabilities of being touched by either property or violent crime. Households that had been at the address for 5 years or more had lower predicted probabilities of being touched by violent crime. Households with more than one adult and households with children had higher predicted probabilities of being touched by violent or property time, likely because there were more potential victims in those households. Lower income households had higher predicted probabilities of being touched by violent crime or motor vehicle theft, while higher income households had higher predicted

probabilities of being touched by any type of property crime, results that may also be related to household size.

For the person-level touched-by-violent-crime analyses in Table 6A-12, after accounting for other variables in the model, the predicted probability of being touched by violent crime was higher for younger persons, males, black persons, and persons who are not college graduates. These findings were in line with results from the core NCVS.²⁶ Tables 6A-13a and 6A-13b display the estimates and standard errors for select TBC measures for each CBSA. Three TBC estimates are shown:

- ***Percentage of adults who had at least one serious violent crime victimization in the previous 12 months.*** In the Year 1 ILS instrument, CBSAs ranged from a low of 0.6 percent in San Jose to a high of 2.7 percent in Philadelphia. In the PLS instrument, CBSAs ranged from 0.8 percent in Atlanta to 2.66 percent in San Francisco.
- ***Percentage of adults who had at least one violent crime victimization in the previous 12 months.*** In the ILS instrument, CBSAs ranged from a low of 1.0 percent in Columbus to a high of 3.3 percent in Las Vegas. In the PLS instrument, the estimates ranged from 1.3 percent in Atlanta to 3.3 percent in San Francisco-Oakland.
- ***Percentage of households that had at least one property crime victimization in the previous 12 months.*** In the ILS instrument, CBSAs ranged from a low of 6.2 percent in Miami to a high of 16.9 percent in San Francisco-Oakland. In the PLS instrument, Pittsburg reported the lowest rate of property crime at 9.2 percent, with San Francisco-Oakland reporting the highest rate at 24.5 percent.

²⁶ For demographic analyses, see table 5 in Truman, J. L., & Langton, L. (2015). *Criminal victimization, 2014* (NCJ 248973). Bureau of Justice Statistics. <http://www.bjs.gov/content/pub/pdf/cv14.pdf>. Note that the core NCVS results looked at the demographic variables separately, while Table 6A-13 here examines them in the context of a multivariate regression in which multicollinearity may affect some of the coefficients.

Table 6A-13a. Households touched by crime by CBSA, ILS

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 12060 - Atlanta-Sandy Springs-Marietta, GA | 1.65 | 0.51 | 2.23 | 0.65 | 6.71 | 0.98 |
| CBSA 12420 - Austin-Round Rock, TX | 1.92 | 0.57 | 2.35 | 0.61 | 7.72 | 1.04 |
| CBSA 12580 - Baltimore-Towson, MD | 2.28 | 0.52 | 2.57 | 0.55 | 12.31 | 1.26 |
| CBSA 14460 - Boston-Cambridge-Quincy, MA | 1.09 | 0.38 | 1.19 | 0.39 | 7.26 | 0.89 |
| CBSA 16740 - Charlotte-Gastonia-Concord, NC-SC | 1.74 | 0.59 | 2.34 | 0.63 | 8.64 | 1.02 |
| CBSA 16980 - Chicago-Naperville-Joliet, IL-IN-WI | 1.76 | 0.31 | 2.10 | 0.35 | 7.97 | 0.64 |
| CBSA 17140 - Cincinnati-Middletown, OH-KY-IN | 2.32 | 0.55 | 2.71 | 0.59 | 12.78 | 1.17 |
| CBSA 17460 - Cleveland-Elyria-Mentor, OH | 1.74 | 0.50 | 2.01 | 0.52 | 7.84 | 0.98 |
| CBSA 18140 - Columbus, OH | 0.86 | 0.32 | 0.99 | 0.34 | 12.12 | 1.09 |
| CBSA 19100 - Dallas-Fort Worth-Arlington, TX | 0.95 | 0.36 | 1.20 | 0.40 | 9.48 | 1.09 |
| CBSA 19740 - Denver-Aurora, CO | 2.10 | 0.56 | 2.27 | 0.57 | 11.82 | 1.16 |
| CBSA 19820 - Detroit-Warren-Livonia, MI | 1.31 | 0.51 | 1.39 | 0.51 | 8.06 | 0.96 |
| CBSA 26420 - Houston-Sugar Land-Baytown, TX | 2.26 | 0.65 | 2.33 | 0.65 | 9.43 | 1.15 |
| CBSA 26900 - Indianapolis-Carmel, IN | 1.73 | 0.51 | 2.16 | 0.56 | 12.95 | 1.09 |
| CBSA 27260 - Jacksonville, FL | 1.31 | 0.37 | 1.67 | 0.43 | 9.03 | 0.95 |
| CBSA 28140 - Kansas City, MO-KS | 1.39 | 0.38 | 1.58 | 0.40 | 9.20 | 0.94 |
| CBSA 29820 - Las Vegas-Paradise, NV | 2.55 | 0.71 | 3.31 | 0.76 | 10.48 | 1.24 |
| CBSA 31080 - Los Angeles-Long Beach-Santa Ana, CA | 1.68 | 0.36 | 2.04 | 0.39 | 12.07 | 0.85 |
| CBSA 33100 - Miami-Fort Lauderdale-Pompano Beach, FL | 0.98 | 0.36 | 1.44 | 0.52 | 6.16 | 0.82 |
| CBSA 33340 - Milwaukee-Waukesha-West Allis, WI | 2.36 | 0.55 | 2.94 | 0.59 | 8.51 | 0.91 |
| CBSA 33460 - Minneapolis-St. Paul-Bloomington, MN-WI | 1.49 | 0.40 | 1.99 | 0.46 | 9.67 | 0.95 |
| CBSA 34980 - Nashville-Davidson-Murfreesboro-Franklin, TN | 2.03 | 0.53 | 2.46 | 0.57 | 8.85 | 0.98 |
| CBSA 35620 - NY-Northern NJ-LI, NY-NJ-PA | 1.18 | 0.34 | 1.50 | 0.41 | 6.47 | 0.95 |
| CBSA 36740 - Orlando-Kissimmee-Sanford, FL | 1.84 | 0.53 | 2.03 | 0.54 | 7.49 | 0.92 |
| CBSA 37980 - Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 2.71 | 0.53 | 3.19 | 0.57 | 10.19 | 0.90 |
| CBSA 38060 - Phoenix-Mesa-Scottsdale, AZ | 1.28 | 0.42 | 1.94 | 0.48 | 11.08 | 1.06 |

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 38300 - Pittsburgh, PA | 1.41 | 0.46 | 1.59 | 0.48 | 7.76 | 0.77 |
| CBSA 38900 - Portland-Vancouver-Hillsboro, OR-WA | 1.81 | 0.38 | 2.17 | 0.42 | 14.97 | 1.11 |
| CBSA 39300 - Providence-Warwick, RI-MA | 1.44 | 0.44 | 1.44 | 0.44 | 7.44 | 0.87 |
| CBSA 40140 - Riverside-San Bernardino-Ontario, CA | 2.06 | 0.52 | 2.42 | 0.56 | 10.47 | 0.99 |
| CBSA 40900 - Sacramento-Arden-Arcade-Roseville, CA | 2.38 | 0.60 | 2.65 | 0.63 | 12.25 | 1.05 |
| CBSA 41180 - St. Louis-MO-IL | 2.02 | 0.53 | 2.28 | 0.56 | 9.55 | 1.03 |
| CBSA 41700 - San Antonio, TX | 2.60 | 0.65 | 2.86 | 0.68 | 10.84 | 1.15 |
| CBSA 41740 - San Diego-Carlsbad-San Marcos, CA | 1.48 | 0.45 | 1.99 | 0.48 | 11.23 | 1.10 |
| CBSA 41860 - San Francisco-Oakland-Fremont, CA | 2.15 | 0.52 | 2.81 | 0.53 | 16.91 | 1.20 |
| CBSA 41940 - San Jose-Sunnyvale-Santa Clara, CA | 0.57 | 0.26 | 1.06 | 0.35 | 12.65 | 1.15 |
| CBSA 42660 - Seattle-Tacoma-Bellevue, WA | 1.54 | 0.42 | 2.13 | 0.51 | 14.32 | 1.08 |
| CBSA 45300 - Tampa-St. Petersburg-Clearwater, FL | 1.43 | 0.51 | 2.11 | 0.65 | 8.52 | 1.01 |
| CBSA 47260 - Virginia Beach-Norfolk-Newport News, VA-NC | 1.51 | 0.52 | 1.69 | 0.54 | 10.03 | 1.09 |
| CBSA 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV | 0.78 | 0.33 | 1.25 | 0.39 | 7.69 | 0.90 |

Table 6A-13b. Households touched by crime by CBSA, PLS

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 12060 - Atlanta-Sandy Springs-Marietta, GA | 0.81 | 0.34 | 1.27 | 0.41 | 13.86 | 1.23 |
| CBSA 12420 - Austin-Round Rock, TX | 0.88 | 0.35 | 2.28 | 0.54 | 16.16 | 1.44 |
| CBSA 12580 - Baltimore-Towson, MD | 2.28 | 0.50 | 3.20 | 0.60 | 18.76 | 1.30 |
| CBSA 14460 - Boston-Cambridge-Quincy, MA | 1.14 | 0.36 | 2.14 | 0.42 | 10.52 | 0.97 |
| CBSA 16740 - Charlotte-Gastonia-Concord, NC-SC | 1.53 | 0.50 | 2.02 | 0.55 | 12.08 | 1.28 |
| CBSA 16980 - Chicago-Naperville-Joliet, IL-IN-WI | 1.19 | 0.27 | 1.67 | 0.31 | 14.68 | 0.89 |
| CBSA 17140 - Cincinnati-Middletown, OH-KY-IN | 0.90 | 0.33 | 1.36 | 0.44 | 15.34 | 1.06 |
| CBSA 17460 - Cleveland-Elyria-Mentor, OH | 1.37 | 0.41 | 1.55 | 0.44 | 13.12 | 1.13 |
| CBSA 18140 - Columbus, OH | 1.90 | 0.57 | 2.61 | 0.61 | 16.45 | 1.28 |
| CBSA 19100 - Dallas-Fort Worth-Arlington, TX | 1.33 | 0.43 | 2.41 | 0.63 | 13.40 | 1.35 |
| CBSA 19740 - Denver-Aurora, CO | 1.98 | 0.54 | 2.72 | 0.63 | 16.43 | 1.27 |
| CBSA 19820 - Detroit-Warren-Livonia, MI | 1.30 | 0.40 | 1.86 | 0.46 | 11.74 | 1.13 |
| CBSA 26420 - Houston-Sugar Land-Baytown, TX | 1.69 | 0.53 | 2.27 | 0.63 | 16.30 | 1.34 |
| CBSA 26900 - Indianapolis-Carmel, IN | 1.95 | 0.50 | 2.53 | 0.58 | 18.06 | 1.39 |
| CBSA 27260 - Jacksonville, FL | 1.71 | 0.52 | 2.29 | 0.58 | 14.26 | 1.16 |
| CBSA 28140 - Kansas City, MO-KS | 1.68 | 0.44 | 2.20 | 0.50 | 13.35 | 1.11 |
| CBSA 29820 - Las Vegas-Paradise, NV | 1.72 | 0.51 | 2.58 | 0.63 | 19.13 | 1.43 |
| CBSA 31080 - Los Angeles-Long Beach-Santa Ana, CA | 2.01 | 0.40 | 2.74 | 0.45 | 19.03 | 1.21 |
| CBSA 33100 - Miami-Fort Lauderdale-Pompano Beach, FL | 1.55 | 0.44 | 2.14 | 0.51 | 13.33 | 1.36 |
| CBSA 33340 - Milwaukee-Waukesha-West Allis, WI | 2.26 | 0.57 | 3.16 | 0.69 | 14.73 | 1.17 |
| CBSA 33460 - Minneapolis-St. Paul-Bloomington, MN-WI | 1.45 | 0.37 | 2.57 | 0.50 | 11.96 | 0.87 |
| CBSA 34980 - Nashville-Davidson-Murfreesboro-Franklin, TN | 1.14 | 0.43 | 1.67 | 0.51 | 10.55 | 1.03 |
| CBSA 35620 - NY-Northern NJ-LI, NY-NJ-PA | 1.22 | 0.40 | 2.43 | 0.58 | 10.25 | 1.15 |
| CBSA 36740 - Orlando-Kissimmee-Sanford, FL | 1.85 | 0.48 | 2.93 | 0.65 | 13.37 | 1.23 |
| CBSA 37980 - Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 1.72 | 0.38 | 2.41 | 0.43 | 13.60 | 0.98 |
| CBSA 38060 - Phoenix-Mesa-Scottsdale, AZ | 1.25 | 0.41 | 1.84 | 0.48 | 15.99 | 1.28 |

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 38300 - Pittsburgh, PA | 1.92 | 0.48 | 2.59 | 0.55 | 9.23 | 0.88 |
| CBSA 38900 - Portland-Vancouver-Hillsboro, OR-WA | 2.24 | 0.51 | 2.82 | 0.57 | 18.86 | 1.30 |
| CBSA 39300 - Providence-Warwick, RI-MA | 1.86 | 0.55 | 2.12 | 0.56 | 13.53 | 1.25 |
| CBSA 40140 - Riverside-San Bernardino-Ontario, CA | 2.58 | 0.63 | 3.22 | 0.69 | 21.93 | 1.44 |
| CBSA 40900 - Sacramento-Arden-Arcade-Roseville, CA | 1.44 | 0.42 | 2.11 | 0.54 | 19.01 | 1.20 |
| CBSA 41180 - St. Louis-MO-IL | 1.32 | 0.35 | 2.50 | 0.53 | 12.89 | 1.11 |
| CBSA 41700 - San Antonio, TX | 1.59 | 0.46 | 2.36 | 0.56 | 17.11 | 1.35 |
| CBSA 41740 - San Diego-Carlsbad-San Marcos, CA | 1.44 | 0.38 | 2.47 | 0.49 | 17.82 | 1.19 |
| CBSA 41860 - San Francisco-Oakland-Fremont, CA | 2.66 | 0.52 | 3.27 | 0.62 | 24.46 | 1.39 |
| CBSA 41940 - San Jose-Sunnyvale-Santa Clara, CA | 1.00 | 0.32 | 1.38 | 0.34 | 20.34 | 1.32 |
| CBSA 42660 - Seattle-Tacoma-Bellevue, WA | 1.38 | 0.38 | 2.13 | 0.44 | 23.87 | 1.31 |
| CBSA 45300 - Tampa-St. Petersburg-Clearwater, FL | 1.06 | 0.37 | 1.68 | 0.46 | 14.30 | 1.09 |
| CBSA 47260 - Virginia Beach-Norfolk-Newport News, VA-NC | 1.81 | 0.55 | 2.57 | 0.63 | 15.38 | 1.29 |
| CBSA 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV | 1.33 | 0.37 | 1.77 | 0.41 | 12.92 | 0.96 |

6A.5 Comparison of ILS and PLS with the UCR

Statistics were obtained from the 2015 UCR for all CBSAs in the study that provided full data to the UCR program that year.^{27,28} The UCR statistics about crime are compiled from more than 18,000 law enforcement agencies that participate in the program. Because of the nature of the data collection, the UCR statistics are limited to crimes known to law enforcement agencies.

The statistics used to compare the LACS with the UCR data were the rates per 100,000 inhabitants for violent crime, property crime, and motor vehicle theft. Definitions of violent and property crime differ for the UCR and LACS. The UCR violent crime statistics include homicide, manslaughter, rape, robbery, and aggravated assault. The UCR property crime statistics include burglary, theft, and motor vehicle theft. Motor vehicle theft was treated as a separate response in this analysis because it is more likely to be reported to police than other crimes.²⁹

The variables created from the UCR data are—

- UCR_VIOLENT = violent crime rate (homicide, manslaughter, rape, robbery, and aggravated assault) per 100,000 inhabitants
- UCR_PROP = property crime rate (burglary, theft, and motor vehicle theft) per 100,000 inhabitants
- UCR_MVTHEFT = motor vehicle theft rate per 100,000 inhabitants.

Appendix G gives scatterplots showing the relationship between the UCR violent and property crime rates and those from the LACS.

Table 6A-14 gives the Pearson correlation coefficients relating the UCR summary statistics and the LACS summary statistics. These are the correlations between the UCR crime rates for each CBSA and the weighted estimate of the percent touched by crime from the ILS and PLS for each CBSA.

²⁷ All CBSAs in the LACS study had UCR crime rates for 2015 except for Boston, Charlotte, Cleveland, New York, and Portland, which had no crime rates in the UCR data. Denver and Houston had statistics for violent crime and motor vehicle theft but not property crime in general.

²⁸ For the UCR data, see Federal Bureau of Investigation (n.d.). *Table 6: Crime in the United States by metropolitan statistical area, 2015* [Table]. Retrieved June 21, 2017, from <https://ucr.fbi.gov/crime-in-the-u-s/2015/crime-in-the-u-s-2015/tables/table-6>

²⁹ See table 4 in Truman, J. L., & Morgan, R. E. (2016). *Criminal victimization, 2015* (NCJ 250180). Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/cv15.pdf>. The table shows 69.0 percent of motor vehicle thefts were reported to police in 2015, compared to 50.8 percent of burglaries and 28.6 percent of other thefts.

The table also shows correlations with the weighted estimates calculated separately for Forms A and B of each instrument.

Table 6A-14 shows that the highest correlations between the LACS and UCR statistics occurred for motor vehicle theft. In general, the correlations were less than 0.5. The property crime correlations were highest for PLS Form B, and the violent crime correlations were highest for ILS Form A.

Table 6A-14. Pearson correlation coefficients for UCR and LACS CBSA-level summary statistics of TBC

| UCR variable | LACS variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|--------------|---------------|-----------|----------|--------|-----------|----------|----------|
| UCR_PROP | HHTBPROP1 | 0.378* | 0.314 | 0.386* | 0.472** | 0.352* | 0.574*** |
| UCR_PROP | HHTBPROP2 | 0.402* | 0.349* | 0.391* | 0.471** | 0.334 | 0.604*** |
| UCR_MVTHEFT | HHTBMVTHEFT | 0.432** | 0.420* | 0.216 | 0.786*** | 0.775*** | 0.549*** |
| UCR_VIOLENT | HHTBVIOL1 | 0.490** | 0.536*** | 0.217 | 0.317 | 0.418* | -0.018 |
| UCR_VIOLENT | HHTBVIOL2 | 0.489** | 0.540*** | 0.297 | 0.260 | 0.321 | 0.047 |
| UCR_VIOLENT | HHTBSERVIOL | 0.474** | 0.546*** | 0.187 | 0.343* | 0.359* | 0.103 |
| UCR_VIOLENT | PTBVIOL1 | 0.492** | 0.485** | 0.161 | 0.338* | 0.389* | 0.022 |
| UCR_VIOLENT | PTBVIOL2 | 0.533*** | 0.507** | 0.284 | 0.265 | 0.291 | 0.124 |
| UCR_VIOLENT | PTBSERVIOL | 0.441** | 0.470** | 0.102 | 0.440** | 0.369* | 0.234 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

One potential reason for lower correlations is that some crimes are not reported to police and these unreported crimes do not appear in the UCR statistics. Motor vehicle theft, which has the highest rate of being reported to police, also had the highest correlations with the LACS TBC rates. Another possibility is that the UCR statistics are rates of crimes per 100,000 inhabitants and include multiple victimizations of the same persons or households. The LACS estimates include only adults (age 18 or older), and the TBC statistic counts persons (or households) rather than the number of incidents, so a person who was victimized more than once in the year is counted only once. The UCR data also include property crimes such as business break-ins that are not included in the scope of the LACS.

There have also been investigations indicating that some crimes reported to police are misclassified. An investigation by the *Los Angeles Times*, for example found that 1,200 violent offenses had been recorded as minor offenses, with aggravated assaults, for example, sometimes classified as simple assaults.³⁰ In the LACS, some incidents could also be misclassified. See Appendix H for a discussion

³⁰ Poston, B., & Rubin, J. (2014, August 9). LAPD misclassified nearly 1,200 violent crimes as minor offenses. *Los Angeles Times*. <http://www.latimes.com/local/la-me-crimestats-lapd-20140810-story.html>

of the nature of the potential errors in reporting incidents using the LACS. Misclassification of incidents in either system would tend to reduce the correlations.

To investigate the hypothesis that some of the low correlations may be due to differential rates of reporting crimes to police, additional TBC statistics for crimes reported to police were created. These statistics were calculated similarly to those in Tables 6A-1 and 6A-2, with the change being that the indicator variable was set to 1 only if at least one of the incidents for that type of crime was reported to police.

Table 6A-15 gives the Pearson correlation coefficients relating the UCR summary statistics and the LACS summary statistics for the percentage of households and persons who have at least one victimization of the specified type that is reported to police. These are the correlations between the UCR crime rates for each CBSA and the weighted estimate of the percent touched by police-reported crime (TBPRC) from the ILS and PLS for each CBSA. Table 6A-15 also shows correlations with the weighted estimates calculated separately for Forms A and B of each instrument.

Table 6A-15. Pearson correlation coefficients for UCR and LACS CBSA-level summary statistics of percentage touched by police-reported crime

| UCR variable | LACS variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|--------------|---------------|-----------|----------|--------|-----------|----------|----------|
| UCR_PROP | HHTBPROP1 | 0.417* | 0.345* | 0.323 | 0.691*** | 0.590*** | 0.655*** |
| UCR_PROP | HHTBPROP2 | 0.417* | 0.345* | 0.323 | 0.700*** | 0.592*** | 0.682*** |
| UCR_MVTHEFT | HHTBMVTHEFT | 0.436** | 0.408* | 0.233 | 0.799*** | 0.726*** | 0.516** |
| UCR_VIOLENT | HHTBVIOL1 | 0.535*** | 0.448** | 0.285 | 0.341* | 0.330 | 0.116 |
| UCR_VIOLENT | HHTBVIOL2 | 0.599*** | 0.576*** | 0.346* | 0.169 | 0.132 | 0.104 |
| UCR_VIOLENT | HHTBSERVIOL | 0.496** | 0.386* | 0.317 | 0.272 | 0.312 | 0.023 |
| UCR_VIOLENT | PTBVIOL1 | 0.414* | 0.342* | 0.144 | 0.304 | 0.271 | 0.115 |
| UCR_VIOLENT | PTBVIOL2 | 0.518** | 0.371* | 0.291 | 0.150 | 0.083 | 0.130 |
| UCR_VIOLENT | PTBSERVIOL | 0.376* | 0.294 | 0.173 | 0.287 | 0.242 | 0.123 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

The major difference between Tables 6A-14 and 6A-15 is that the PLS TBPRC measures of property crime have higher correlations with the police statistics for the general measures of property crime than do the TBC measures (the TBC correlations for PLS are not statistically significant while the TBPRC correlations are). The ILS TBPRC measures of violent crime have slightly lower p-values for the correlations with the police statistics for violent crime than do the TBC measures.

The unweighted percentage of households (and persons) with a TBC incident who had a TBC incident that was reported to police were examined, forming the statistic $100 \times (\text{number of households [persons] with TBPRC} = 1) \div (\text{number of households [persons] with TBC} = 1)$. Although these statistics are not comparable to reported-to-police statistics from the NCVS (the NCVS calculates percentage of victimizations that are reported to police), one would expect higher percentages of reporting to police for motor vehicle theft and more serious crimes than for the crime measures that include threats and attempts. Table 6A-16 shows that these expected patterns appeared for all instruments and forms, using the variables in Tables 6A-1 and 6A-2. For property crime, motor vehicle theft had the highest rate of reporting to police, followed by general property crime excluding attempts and general property crime including attempts. Serious violent crime had a higher rate of being reported to police, followed by violent crime excluding threats and violent crime including threats. The difference between the rates for violent crime including (ANYVIOLENT2) versus excluding threats (ANYVIOLENT1) was larger for the PLS than the ILS, which would be expected because the PLS has a more expansive definition of threats than the ILS.

Table 6A-16. Percentage of TBC reportings that involved at least one incident reported to police

| Level | Variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------|----------------|-----------|-------|-------|-----------|-------|-------|
| Household | PROPERTYCRIME1 | 46.4 | 47.0 | 45.8 | 41.1 | 40.6 | 41.7 |
| Household | PROPERTYCRIME2 | 43.5 | 43.9 | 43.1 | 35.2 | 34.3 | 36.2 |
| Household | MVTHEFT | 84.0 | 83.2 | 84.8 | 67.7 | 62.7 | 74.5 |
| Household | ANYVIOLENT1 | 63.5 | 65.9 | 60.8 | 53.5 | 55.6 | 51.1 |
| Household | ANYVIOLENT2 | 57.6 | 58.8 | 56.3 | 40.6 | 41.7 | 39.4 |
| Household | SERIOUSVIOLENT | 66.7 | 69.4 | 63.7 | 60.1 | 61.3 | 58.5 |
| Person | ANYVIOLENT1 | 62.5 | 64.0 | 60.9 | 53.0 | 55.0 | 50.7 |
| Person | ANYVIOLENT2 | 56.5 | 57.1 | 55.8 | 39.7 | 40.4 | 38.9 |
| Person | SERIOUSVIOLENT | 66.2 | 67.7 | 64.7 | 59.9 | 60.8 | 59.0 |

For all TBC variables, a higher percentage of the ILS households with at least one victimization had at least one of the victimizations reported to police than was the case for analogous PLS households. This suggests that the PLS may be eliciting more reports of non-police-reported victimizations than the ILS.

6A.6 Comparison of ILS and PLS with NCVS Results

Estimates of TBC rates were obtained from the NCVS for each CBSA. Because of the small sample sizes in many CBSAs for the NCVS prior to the 2016 sample redesign, data from the 2013-2015 NCVS were accumulated to calculate the rates. The NCVS asks respondents about victimizations in

the last 6 months (as opposed to the last 12 months for the LACS). Two successive interviews would need to be linked to calculate statistics about percentage TBC in the last 12 months from the NCVS, and the rotating panel design, as well as the fact that the NCVS does not follow households that move, means that there would be substantial missing data for such a linkage. The TBC statistics from the NCVS were thus calculated using victimizations that had been reported for the interview, and it was assumed that the percentage TBC in the last 6 months would be highly correlated with the percentage TBC in the last 12 months (this assumption cannot be tested from the data itself).

The TBC rates were calculated for each CBSA for which NCVS data were available at the Census Bureau. The statistics were calculated by concatenating the data files for the four quarters of years 2013 through 2015 and then calculating the TBC percentages for each CBSA using SAS PROC SURVEYFREQ with the NCVS final weights. The second-stage sampling units were used to calculate the variance of each CBSA-level estimate.

Five summary statistics were calculated from the NCVS for each CBSA in the sample:

- NCVS_HH_PROPERTY = estimated percentage of households that had experienced at least one property crime (completed or attempted burglary, forcible entry, motor vehicle theft, or household theft) in the previous 6 months. The standard errors for the CBSA statistics for NCVS_HH_PROPERTY ranged from 0.157 to 1.090.
- NCVS_HH_MVTHEFT = estimated percentage of households that had experienced at least one completed or attempted motor vehicle theft in the previous 6 months. The standard errors for NCVS_HH_MVTHEFT ranged from 0.025 to 0.226.
- NCVS_HH_VIOLENT = estimated percentage of households that had experienced at least one violent crime (completed or attempted rape, robbery, or aggravated assault; simple assault; sexual assault; unwanted sexual contact; or verbal threat of assault or sexual assault) in the previous 6 months. The standard errors for NCVS_HH_VIOLENT ranged from 0.072 to 0.500.
- NCVS_PER_VIOLENT = estimated percentage of adults who had experienced at least one violent crime in the previous 6 months. The standard errors for NCVS_PER_VIOLENT ranged from 0.050 to 0.314.
- NCVS_PER_SERVIOL = estimated percentage of adults who had experienced at least one serious violent crime (completed or attempted rape or robbery; aggravated assault; attempted aggravated assault with weapon; sexual attack; unwanted sexual contact; or verbal threat of rape or sexual assault) in the previous 6 months. The standard errors for NCVS_PER_SERVIOL ranged from 0.027 to 0.183.

This section presents only correlation coefficients relating the NCVS summary statistics to the LACS summary statistics calculated for each CBSA. These results underwent Disclosure Review Board review at the Census Bureau before being included in this report.

Table 6A-17 shows the Pearson correlation coefficients relating the NCVS TBC estimates for each CBSA, with the estimates calculated using the final weights for the ILS (both forms), ILS Form A, ILS Form B, the PLS (both forms), PLS Form A, and PLS Form B.

Table 6A-17. Pearson correlation coefficients for 2013-2015 NCVS and 2015 LACS CBSA-level summary statistics

| NCVS variable | LACS variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|------------------|---------------|-----------|---------|---------|-----------|---------|---------|
| NCVS_HH_PROPERTY | HHTBPROP1 | 0.64*** | 0.66*** | 0.52*** | 0.65*** | 0.67*** | 0.56*** |
| NCVS_HH_PROPERTY | HHTBPROP2 | 0.67*** | 0.68*** | 0.56*** | 0.62*** | 0.60*** | 0.58*** |
| NCVS_HH_MVTHEFT | HHTBMVTHEFT | 0.34* | 0.34* | 0.18 | 0.59*** | 0.71*** | 0.26 |
| NCVS_HH_VIOLENT | HHTBVIOL1 | 0.54*** | 0.40* | 0.44** | 0.47** | 0.33* | 0.24 |
| NCVS_HH_VIOLENT | HHTBVIOL2 | 0.54*** | 0.43** | 0.45** | 0.45** | 0.26 | 0.42** |
| NCVS_HH_VIOLENT | HHTBSERVIOL | 0.53*** | 0.34* | 0.46** | 0.47** | 0.31* | 0.31* |
| NCVS_PER_VIOLENT | PTBVIOL1 | 0.47** | 0.18 | 0.49** | 0.48** | 0.36* | 0.25 |
| NCVS_PER_VIOLENT | PTBVIOL2 | 0.47** | 0.20 | 0.48** | 0.48** | 0.32* | 0.44** |
| NCVS_PER_SERVIOL | PTBSERVIOL | 0.51*** | 0.19 | 0.53*** | 0.51*** | 0.41** | 0.31 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

The correlations between the NCVS variables and the corresponding LACS variables are positive and highly statistically significant, for both property and violent crime. This indicates that the LACS is able to detect differences in victimization rates across CBSAs. The correlations for violent crime at the person level are higher for ILS Form B than for ILS Form A, although the correlations for violent crime at the household level are comparable for the two forms of the ILS. The correlations between the NCVS and LACS were consistently high for both measures of property crime and for all instruments and forms. The correlations for motor vehicle theft were somewhat lower, but that can be explained in part by the low rates—in some cases, zero—seen in some of the CBSAs for the LACS. With rates of motor vehicle theft averaging less than 1 percent and the modest sample size in each of the CBSAs, occurrences of zero reported motor vehicle thefts in a CBSA are expected.

The correlations in Table 6A-17 are much higher than the correlations found in Section 6A.5 between the LACS and UCR. This can be explained in part by the low correlation between the NCVS and UCR across the CBSAs in which both had data, given in Table 6A-18. The correlation is high for motor vehicle theft, but not for other crime categories.

Table 6A-18. Pearson correlation coefficients for NCVS and UCR CBSA-level summary statistics

| NCVS variable | UCR variable | Correlation |
|------------------|--------------|-------------|
| NCVS_HH_PROPERTY | UCR_PROP | 0.30 |
| NCVS_HH_PROPERTY | UCR_MVTHEFT | 0.51** |
| NCVS_HH_MVTHEFT | UCR_MVTHEFT | 0.71*** |
| NCVS_HH_VIOLENT | UCR_VIOLENT | 0.32 |
| NCVS_PER_VIOLENT | UCR_VIOLENT | 0.30 |
| NCVS_PER_SERVIO | UCR_VIOLENT | 0.52** |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

The correlations between the LACS and NCVS are higher than might be expected. There are a number of potential explanations for the remaining differences. First are the large differences in instruments and mode of data collection, as well as the self-administered nature of the LACS. The two measures of TBC were not exactly parallel because they looked at the percentage of persons and households touched by crime for different time periods: the LACS asks about victimizations in the last year, while the NCVS asks about victimization in the past 6 months. In addition, the time periods being studied for victimizations differed. The LACS covered the one-year period ending in early 2016; the NCVS accumulated data over a 3-year period ending in 2015. NCVS data indicate that there were differences in victimization rates between successive years in this period: assault rates and all types of property crime victimization rates dropped between 2013 and 2014.³¹ The smaller correlations for violent crime may reflect differential CBSA-level changes in violent victimization over the 3-year period for which NCVS estimates were calculated.

6A.7 Summary

The analyses in this chapter used crime reports that were the result of the automated editing processes, without using any results from manual review of narratives provided in the questionnaires. The analyses were also done for the estimated TBC rates after manual edits were performed, and the substantive conclusions were the same for these analyses. An analysis of the differences between the automatic and manual edits is given in Appendix H.

The LACS Field Test provided evidence that—

- The PLS records higher levels of households touched by property crime than the ILS.

³¹ Truman & Langton (2015).

- The PLS records higher levels of persons touched by violent crime (both excluding and including threats) than the ILS.
- PLS Form A has higher levels of both property and violent TBC rates than PLS Form B. There are no statistically significant differences between ILS Forms A and B.
- The PLS and ILS TBC rates for property crime are highly correlated across CBSAs. The correspondence for violent crime is lower, and the correlation is not statistically significant for most of the violent crime measures.
- Both instruments have higher predicted probabilities of being touched by property crime for non-homeowners, households with children, higher-income households, and households with multiple adults. The predicted probabilities of being touched by violent crime are higher for males, younger persons, blacks, and persons with lower education levels. These are consistent with findings from the NCVS.
- Both ILS and PLS have significantly positive correlations with UCR statistics for motor vehicle theft. Neither form is significantly correlated with the UCR statistics for the broader measures of all property crime. It is possible that the high correlation for motor vehicle theft occurs because a high percentage of motor vehicle thefts are reported to police. ILS Form A has significantly positive correlations with UCR statistics for violent crime, but the PLS is not significantly correlated with the UCR.
- When victimizations from the ILS and PLS are restricted to those that were reported to police, the high correlations for motor vehicle theft persist. The ILS (and particularly ILS Form A) continues to be significantly correlated with the UCR statistics for violent crime. Both forms of the PLS are significantly correlated with the UCR statistics for the broader measures of all property crime.
- All forms of the ILS and PLS are highly correlated with the NCVS for property crime. For both instruments, the correlations are higher for Form A than for Form B. The correlations are somewhat lower for violent crime, but still statistically significant. For the person-level measures of violent crime, ILS Form B has higher correlations with the NCVS than ILS Form A. The correlations with the NCVS for household-level measures of being touched by violent crime are similar for ILS Forms A and B.

The high correlations of the LACS TBC statistics with the NCVS indicate that both the ILS and PLS can distinguish variation in crime rates across CBSAs. The ILS and PLS have different strengths, however, and the local area correlations at one point in time cannot predict how well each instrument will predict year-to-year change. Both instruments were retained for Year 2 to evaluate their performance for detecting change.

The results from the victimization analyses are generally consistent with the conclusions from Chapter 4 about the superiority of Form A for response rates. For response rates, the Form A

response rates were higher than the Form B response rates for the ILS. In this chapter, Form A results in higher victimization reports for the PLS and comparable victimization reports at the household level for the ILS. These results supported dropping Form B in Year 2 of data collection.

In general, the correlations between the TBC rates for the instruments and those from the NCVS were high. The general pattern was for Form A to be slightly more or equally correlated to the NCVS than Form B. The one exception is person-level violent victimization, where ILS Form B had higher correlations with the NCVS than ILS Form A. This finding may simply be an anomaly, or it may be related to data loss because incidents were less likely to be linked with a person in ILS Form A. (See Section 8 for further discussion of this latter possibility.) In correlations given in Tables E-8 to E-10 of Appendix F for person-level violent crime, the TBC rates for ILS Form A and ILS Form B were highly correlated with the TBC rate for the ILS (both forms). But ILS Form A and ILS Form B were not significantly correlated with each other. The same correlation pattern occurred for PLS Form A, PLS Form B, and the PLS (both forms). Because violent crime is so rare, only a handful of cases occurred in each CBSA for each separate instrument and form, and this led to lower precision for the estimated correlation when looking at the correlations separately by form.

6B. Year 2: Reports of Victimization

This chapter extends the Year 1 analysis of victimization reports to Year 2. It compares the statistics from the ILS and PLS with each other and with victimization statistics obtained from the NCVS. The effects of the experimental treatments on victimization rates in Year 2 are also evaluated. As in Year 1, a factorial design was implemented to support the analysis of the effects. The key factors in Year 2 were—

- **OVERLAP** – As described in Chapter 2, about half of the sampled addresses that were randomized to Form A in Year 1 were randomly selected to be retained in the Year 2 sample. The remaining addresses for the Year 2 sample were new to the study. Thus, about a quarter of the Year 2 questionnaires were sent to addresses that had also been selected for the Year 1 sample. The retained addresses were designated as OVERLAP = 1, and the newly sampled addresses had OVERLAP = 0.
- **QUESTIONNAIRE** – Half of the sampled addresses were randomly assigned to receive the PLS questionnaire, and the remaining half were assigned to receive the ILS questionnaire. For the addresses in the overlap sample, the randomization that had been used for Year 1 was retained for Year 2 so that an address that received the ILS questionnaire in Year 1 also received the ILS questionnaire in Year 2.
- **INCENTIVE** – A third of the sampled addresses within each QUESTIONNAIRE and OVERLAP group were randomly selected to receive \$2 as a thank you for completing the questionnaire. Another third of the sampled addresses were sent \$1, and the remaining third were thanked but sent no money. Thus, INCENTIVE had three levels: \$0, \$1, and \$2.
- **FEDEX** – Half of the sampled addresses within each OVERLAP by QUESTIONNAIRE by INCENTIVE group was randomly selected to receive the third mailing (if they had not responded by that time) by FedEx. The other half received the third mailing by USPS first-class mail.

Thus, the design of the experiment was a randomized complete block design, in which the four factors OVERLAP, QUESTIONNAIRE, INCENTIVE, and FEDEX were crossed within each block. The blocking units were the values of CBSA_STRATUM, where CBSA_STRATUM was defined to be the CBSA for all CBSAs except Chicago and Philadelphia and to be the substratum within the CBSA for Chicago and Philadelphia.

6B.1 Comparison of ILS and PLS TBC Rates

As for Year 1, TBC statistics were computed to compare the instruments and other experimental treatments. Section 6A-1 defined the TBC indicators used at the household and person levels. These same statistics were used for Year 2.

For each CBSA, the final raked weights were used to calculate TBC rates for each CBSA, separately for each instrument (ILS and PLS). Calculating summary statistics separately for each CBSA allows investigation of the heterogeneity of estimated TBC rates across the 40 metropolitan areas. These CBSA-level statistics are also used in Sections 6B.5 and 6B.6 for comparisons with crime statistics calculated from the UCR and the NCVS.

Table 6B-1 shows the correlations between the ILS percentages and the PLS percentages for each TBC measure. These Pearson correlation coefficients were computed across the 40 CBSA-level summary statistics computed for each variable.

Table 6B-1. Year 2 Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics

| TBC variable | Corr (ILS, PLS, all treatments) | p-value for correlation |
|--------------|---------------------------------|-------------------------|
| HHTBPROP1 | 0.805 | < .001 |
| HHTBPROP2 | 0.787 | < .001 |
| HHTBMVTHEFT | 0.473 | .002 |
| HHTBVIOL1 | 0.378 | .016 |
| HHTBVIOL2 | 0.518 | < .001 |
| HHTBSERVIOL | 0.246 | .126 |
| PTBVIOL1 | 0.287 | .073 |
| PTBVIOL2 | 0.397 | .011 |
| PTBSERVIOL | 0.148 | .361 |

Table 6B-1 indicates that the correlations between ILS and PLS are much higher for the property crime measures than for the violent crime measures, consistent with the finding in Year 1. The magnitudes of the correlations in Table 6B-1 are similar to the ones seen in Table 6A-5 for Year 1.

Table 6B-2 gives the results of a paired t test for comparing the ILS and PLS. The blocking units were the strata in the study, with seven strata in the Philadelphia CBSA, four strata in the Chicago CBSA, and one stratum for each of the remaining 38 CBSAs, for a total of 49 strata. Approximately half of the addresses in each stratum received each questionnaire. The values reported in the table

are the averages of the PLS and ILS percentages across the 49 strata. The table shows that the generally higher victimization rates observed in PLS in Year 1 persisted in Year 2.

Table 6B-2. Year 2 paired t test comparison of TBC rates, ILS and PLS

| TBC variable | Average PLS percent (%) | Average ILS percent (%) | Average difference: PLS – ILS | 95% confidence Interval for difference | p-value for test that difference = 0 |
|--------------|-------------------------|-------------------------|----------------------------------|--|--------------------------------------|
| HHTBPROP1 | 15.44 | 11.46 | 3.97 | [3.32, 4.63] | < .001 |
| HHTBPROP2 | 19.31 | 12.36 | 6.95 | [6.06, 7.84] | < .001 |
| HHTBMVTHEFT | 1.16 | 0.99 | 0.17 | [0, 0.35] | .005 |
| HHTBVIOL1 | 3.83 | 2.87 | 0.96 | [0.61, 1.31] | < .001 |
| HHTBVIOL2 | 7.11 | 4.10 | 3.01 | [2.55, 3.47] | < .001 |
| HHTBSERVIOL | 2.31 | 2.42 | -0.11 | [-0.42, 0.21] | .049 |
| PTBVIOL1 | 2.38 | 1.64 | 0.74 | [0.50, 0.99] | < .001 |
| PTBVIOL2 | 4.42 | 2.32 | 2.11 | [1.77, 2.44] | < .001 |
| PTBSERVIOL | 1.47 | 1.41 | 0.06 | [-0.15, 0.28] | .055 |

Tables 6B-3a and 6B-3b display estimates and standard errors for select TBC measures in the non-overlap sample for each CBSA. Appendix E also gives these estimates broken down for the overlap sample. The vast majority of the CBSA estimates of the percent TBC by instrument were very similar for Year 1 and Year 2 (Tables 6A-13a and 6A-13b compared to Tables 6B-3a and 6B-3b). With about 240 such comparisons, a handful of the differences would be expected to be very different just by sampling error. Some relatively large differences did occur. For example, the PLS estimate of serious violent crime for Austin-Round Rock, TX (CBSA 12420) went from 0.9 to 3.7 percent, and the PLS estimate of violent crime excluding threats for Detroit-Warren-Livonia, MI (CBSA 19820) went from 1.9 to 5.6 percent. These large differences were more common for the PLS estimates, possibly due to the larger number of changes made in the PLS instruments for the two years.

The three TBC variables included in Tables 6B-3a and 6B-3b are—

- *Percentage of adults who had at least one serious violent crime victimization in the previous 12 months.* In the Year 2 ILS instrument, CBSAs ranged from a low of 0.5 percent in Minneapolis-St. Paul to a high of 3.7 percent in Columbus. In the PLS instrument, CBSAs ranged from 0.5 percent in Boston to 4.4 percent in Cleveland.
- *Percentage of adults who had at least one violent crime victimization in the previous 12 months.* In the ILS instrument, CBSAs ranged from 0.95 percent in Orlando to 4.2 percent in

Columbus. In the PLS instrument, the estimates range from 1.3 percent in Riverside to 5.8 percent in Seattle.

- *Percentage of households that had at least one property crime victimization in the previous 12 months.* In the ILS instrument, CBSAs ranged from a low of 5.7 percent in New York City and its suburbs to a high of 17.3 percent in Riverside. In the PLS instrument, Boston respondents reported the lowest rate of property crime at 10.2 percent, with Seattle reporting the highest at 24.7 percent.

Table 6B-3a. Non-overlap households touched by crime by CBSA, ILS

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 12060 - Atlanta-Sandy Springs-Marietta, GA | 1.09 | 0.46 | 1.38 | 0.55 | 9.17 | 1.27 |
| CBSA 12420 - Austin-Round Rock, TX | 1.06 | 0.56 | 1.92 | 0.72 | 12.70 | 1.49 |
| CBSA 12580 - Baltimore-Towson, MD | 2.39 | 0.71 | 2.39 | 0.71 | 11.94 | 1.33 |
| CBSA 14460 - Boston-Cambridge-Quincy, MA | 0.71 | 0.37 | 1.23 | 0.48 | 6.64 | 1.03 |
| CBSA 16740 - Charlotte-Gastonia-Concord, NC-SC | 2.33 | 0.70 | 2.77 | 0.74 | 10.21 | 1.37 |
| CBSA 16980 - Chicago-Naperville-Joliet, IL-IN-WI | 2.60 | 0.52 | 2.93 | 0.53 | 10.61 | 1.05 |
| CBSA 17140 - Cincinnati-Middletown, OH-KY-IN | 1.83 | 0.63 | 2.38 | 0.71 | 11.06 | 1.26 |
| CBSA 17460 - Cleveland-Elyria-Mentor, OH | 2.30 | 0.73 | 3.36 | 0.84 | 8.27 | 1.17 |
| CBSA 18140 - Columbus, OH | 3.75 | 1.00 | 4.24 | 1.06 | 13.84 | 1.44 |
| CBSA 19100 - Dallas-Fort Worth-Arlington, TX | 2.35 | 0.79 | 2.72 | 0.84 | 10.70 | 1.24 |
| CBSA 19740 - Denver-Aurora, CO | 1.81 | 0.64 | 2.19 | 0.68 | 10.35 | 1.33 |
| CBSA 19820 - Detroit-Warren-Livonia, MI | 1.70 | 0.57 | 2.20 | 0.60 | 8.29 | 1.26 |
| CBSA 26420 - Houston-Sugar Land-Baytown, TX | 2.37 | 0.82 | 3.10 | 0.95 | 11.81 | 1.70 |
| CBSA 26900 - Indianapolis-Carmel, IN | 2.83 | 0.80 | 3.13 | 0.83 | 11.48 | 1.42 |
| CBSA 27260 - Jacksonville, FL | 2.81 | 0.85 | 2.98 | 0.87 | 11.85 | 1.65 |
| CBSA 28140 - Kansas City, MO-KS | 2.92 | 0.83 | 3.22 | 0.91 | 11.55 | 1.36 |
| CBSA 29820 - Las Vegas-Paradise, NV | 2.22 | 0.70 | 2.61 | 0.76 | 13.07 | 1.69 |
| CBSA 31080 - Los Angeles-Long Beach-Santa Ana, CA | 1.72 | 0.69 | 2.27 | 0.76 | 13.11 | 1.55 |
| CBSA 33100 - Miami-Fort Lauderdale-Pompano Beach, FL | 1.30 | 0.47 | 1.30 | 0.47 | 8.30 | 1.36 |
| CBSA 33340 - Milwaukee-Waukesha-West Allis, WI | 2.10 | 0.59 | 2.47 | 0.63 | 12.98 | 1.40 |
| CBSA 33460 - Minneapolis-St. Paul-Bloomington, MN-WI | 0.46 | 0.27 | 1.17 | 0.47 | 9.99 | 1.05 |
| CBSA 34980 - Nashville-Davidson-Murfreesboro-Franklin, TN | 1.96 | 0.69 | 2.76 | 0.87 | 10.19 | 1.36 |
| CBSA 35620 - NY-Northern NJ-LI, NY-NJ-PA | 0.78 | 0.39 | 1.21 | 0.50 | 5.69 | 1.11 |
| CBSA 36740 - Orlando-Kissimmee-Sanford, FL | 0.80 | 0.41 | 0.95 | 0.44 | 7.10 | 1.28 |
| CBSA 37980 - Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 2.45 | 0.53 | 2.74 | 0.54 | 10.56 | 1.21 |
| CBSA 38060 - Phoenix-Mesa-Scottsdale, AZ | 1.75 | 0.65 | 1.90 | 0.66 | 11.99 | 1.53 |

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 38300 - Pittsburgh, PA | 1.48 | 0.54 | 1.84 | 0.60 | 7.66 | 1.12 |
| CBSA 38900 - Portland-Vancouver-Hillsboro, OR-WA | 1.87 | 0.61 | 2.42 | 0.67 | 16.69 | 1.67 |
| CBSA 39300 - Providence-Warwick, RI-MA | 2.02 | 0.74 | 2.30 | 0.79 | 8.91 | 1.42 |
| CBSA 40140 - Riverside-San Bernardino-Ontario, CA | 2.74 | 0.78 | 3.06 | 0.81 | 17.30 | 1.68 |
| CBSA 40900 - Sacramento-Arden-Arcade-Roseville, CA | 2.47 | 0.69 | 2.78 | 0.75 | 14.79 | 1.50 |
| CBSA 41180 - St. Louis-MO-IL | 2.14 | 0.67 | 2.38 | 0.70 | 9.93 | 1.23 |
| CBSA 41700 - San Antonio, TX | 2.48 | 0.76 | 2.79 | 0.81 | 14.33 | 1.78 |
| CBSA 41740 - San Diego-Carlsbad-San Marcos, CA | 1.75 | 0.60 | 2.22 | 0.69 | 12.30 | 1.35 |
| CBSA 41860 - San Francisco-Oakland-Fremont, CA | 1.61 | 0.63 | 2.37 | 0.79 | 16.99 | 1.62 |
| CBSA 41940 - San Jose-Sunnyvale-Santa Clara, CA | 0.89 | 0.42 | 1.02 | 0.44 | 13.58 | 1.45 |
| CBSA 42660 - Seattle-Tacoma-Bellevue, WA | 2.12 | 0.56 | 2.58 | 0.62 | 17.02 | 1.60 |
| CBSA 45300 - Tampa-St. Petersburg-Clearwater, FL | 1.80 | 0.58 | 1.90 | 0.59 | 8.80 | 1.34 |
| CBSA 47260 - Virginia Beach-Norfolk-Newport News, VA-NC | 1.99 | 0.65 | 2.29 | 0.73 | 9.52 | 1.40 |
| CBSA 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV | 1.24 | 0.43 | 1.80 | 0.57 | 9.36 | 1.19 |

Table 6B-3b. Non-overlap households touched by crime by CBSA, PLS

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 12060 - Atlanta-Sandy Springs-Marietta, GA | 1.93 | 0.52 | 3.33 | 0.80 | 11.16 | 1.40 |
| CBSA 12420 - Austin-Round Rock, TX | 3.70 | 0.87 | 5.54 | 1.06 | 14.82 | 1.74 |
| CBSA 12580 - Baltimore-Towson, MD | 1.82 | 0.63 | 3.08 | 0.83 | 14.73 | 1.49 |
| CBSA 14460 - Boston-Cambridge-Quincy, MA | 0.46 | 0.24 | 2.26 | 0.58 | 10.16 | 1.29 |
| CBSA 16740 - Charlotte-Gastonia-Concord, NC-SC | 2.25 | 0.79 | 2.56 | 0.81 | 11.78 | 1.70 |
| CBSA 16980 - Chicago-Naperville-Joliet, IL-IN-WI | 2.65 | 0.65 | 3.48 | 0.67 | 12.36 | 1.12 |
| CBSA 17140 - Cincinnati-Middletown, OH-KY-IN | 3.06 | 0.89 | 4.68 | 1.03 | 14.22 | 1.59 |
| CBSA 17460 - Cleveland-Elyria-Mentor, OH | 4.42 | 0.96 | 5.43 | 1.01 | 12.98 | 1.43 |
| CBSA 18140 - Columbus, OH | 1.34 | 0.50 | 2.76 | 0.61 | 14.11 | 1.54 |
| CBSA 19100 - Dallas-Fort Worth-Arlington, TX | 0.88 | 0.46 | 1.96 | 0.67 | 16.61 | 1.62 |
| CBSA 19740 - Denver-Aurora, CO | 2.15 | 0.84 | 3.71 | 1.04 | 17.98 | 1.62 |
| CBSA 19820 - Detroit-Warren-Livonia, MI | 4.03 | 0.87 | 5.58 | 1.07 | 10.71 | 1.58 |
| CBSA 26420 - Houston-Sugar Land-Baytown, TX | 3.20 | 0.91 | 4.51 | 1.09 | 18.04 | 2.03 |
| CBSA 26900 - Indianapolis-Carmel, IN | 1.35 | 0.50 | 2.73 | 0.72 | 15.43 | 1.53 |
| CBSA 27260 - Jacksonville, FL | 2.22 | 0.75 | 3.79 | 1.09 | 15.38 | 1.89 |
| CBSA 28140 - Kansas City, MO-KS | 2.66 | 0.73 | 5.11 | 1.01 | 13.31 | 1.49 |
| CBSA 29820 - Las Vegas-Paradise, NV | 2.84 | 0.87 | 5.34 | 1.11 | 17.97 | 1.96 |
| CBSA 31080 - Los Angeles-Long Beach-Santa Ana, CA | 2.33 | 0.77 | 4.21 | 1.01 | 20.94 | 2.05 |
| CBSA 33100 - Miami-Fort Lauderdale-Pompano Beach, FL | 1.43 | 0.54 | 2.68 | 0.78 | 15.50 | 1.78 |
| CBSA 33340 - Milwaukee-Waukesha-West Allis, WI | 1.39 | 0.51 | 2.25 | 0.65 | 13.69 | 1.46 |
| CBSA 33460 - Minneapolis-St. Paul-Bloomington, MN-WI | 1.59 | 0.47 | 3.28 | 0.69 | 13.56 | 1.18 |
| CBSA 34980 - Nashville-Davidson-Murfreesboro-Franklin, TN | 2.14 | 0.69 | 3.92 | 0.94 | 11.24 | 1.53 |
| CBSA 35620 - NY-Northern NJ-LI, NY-NJ-PA | 1.22 | 0.48 | 3.26 | 0.84 | 11.05 | 1.42 |
| CBSA 36740 - Orlando-Kissimmee-Sanford, FL | 1.47 | 0.63 | 2.09 | 0.70 | 13.10 | 1.64 |
| CBSA 37980 - Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 2.43 | 0.65 | 3.54 | 0.70 | 13.62 | 1.17 |
| CBSA 38060 - Phoenix-Mesa-Scottsdale, AZ | 3.09 | 0.97 | 4.09 | 1.04 | 18.36 | 1.88 |

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|------|--|------|---|------|
| | Estimate | S.E. | Estimate | S.E. | Estimate | S.E. |
| CBSA 38300 - Pittsburgh, PA | 2.25 | 0.72 | 2.96 | 0.81 | 10.51 | 1.40 |
| CBSA 38900 - Portland-Vancouver-Hillsboro, OR-WA | 1.49 | 0.52 | 4.21 | 0.84 | 19.24 | 1.58 |
| CBSA 39300 - Providence-Warwick, RI-MA | 1.17 | 0.45 | 2.53 | 0.68 | 13.18 | 1.62 |
| CBSA 40140 - Riverside-San Bernardino-Ontario, CA | 0.47 | 0.28 | 1.30 | 0.47 | 18.74 | 1.71 |
| CBSA 40900 - Sacramento-Arden-Arcade-Roseville, CA | 3.16 | 0.77 | 5.21 | 0.98 | 19.96 | 1.88 |
| CBSA 41180 - St. Louis-MO-IL | 1.25 | 0.46 | 2.53 | 0.66 | 14.55 | 1.54 |
| CBSA 41700 - San Antonio, TX | 3.41 | 0.90 | 5.45 | 1.07 | 18.19 | 1.91 |
| CBSA 41740 - San Diego-Carlsbad-San Marcos, CA | 1.22 | 0.48 | 1.75 | 0.56 | 17.54 | 1.52 |
| CBSA 41860 - San Francisco-Oakland-Fremont, CA | 2.23 | 0.59 | 5.37 | 0.83 | 19.86 | 1.68 |
| CBSA 41940 - San Jose-Sunnyvale-Santa Clara, CA | 0.97 | 0.46 | 2.11 | 0.60 | 18.31 | 1.49 |
| CBSA 42660 - Seattle-Tacoma-Bellevue, WA | 3.74 | 0.80 | 5.80 | 1.07 | 24.67 | 1.77 |
| CBSA 45300 - Tampa-St. Petersburg-Clearwater, FL | 2.80 | 0.74 | 3.87 | 0.77 | 14.27 | 1.50 |
| CBSA 47260 - Virginia Beach-Norfolk-Newport News, VA-NC | 0.92 | 0.45 | 1.81 | 0.60 | 14.29 | 1.79 |
| CBSA 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV | 1.68 | 0.58 | 3.76 | 0.82 | 13.47 | 1.46 |

6B.2 Effects of Experimental Treatments on TBC Rates

An analysis of variance was conducted to evaluate which of the experimental factors, if any, affected TBC rates. This was done in two ways. First, the TBC rates were computed separately for each combination of CBSA_STRATUM, QUESTIONNAIRE, INCENTIVE, FEDEX, and OVERLAP, for a total of $49 \times 2 \times 3 \times 2 \times 2 = 1,176$ estimates. Each estimate was calculated using the final raked survey weights. An ANOVA model was fitted using these estimates as the response variable, where the model included main effects for all variables along with all the two-factor interactions for QUESTIONNAIRE, INCENTIVE, FEDEX, and OVERLAP.

The second analysis of variance was carried out as a regression analysis, using the binary TBC indicator of each household (or person) as the response. The model again included main effects for CBSA_STRATUM, QUESTIONNAIRE, INCENTIVE, FEDEX, and OVERLAP, as well as two-factor interactions for the last four variables. The analysis was carried out in SAS PROC SURVEYREG using the raked survey weights in the regression estimation and the replicate weights for the jackknife variance estimation. Including CBSA_STRATUM as a factor in the model accounts for the blocked design by reducing the contribution of the CBSA-to-CBSA variability to the mean squared error.

If every CBSA_STRATUM contained the same sample size and all weights were equal to 1, the two analyses would be expected to have similar results under the stratified random sampling design and random allocation used for this experiment. With nonresponse adjustments, however, the final weights varied across treatments and strata. Also, the first analysis treated each stratum as being of equal importance, while the second analysis accorded more influence to CBSAs with greater sample sizes. The two analyses were performed to confirm that the results held up under different modeling assumptions.

In fact, both analyses of variance resulted in the same conclusions. The ANOVA tables for both models showed that QUESTIONNAIRE and OVERLAP were highly significant for most on most measures, but FEDEX and INCENTIVE resulted in no more statistically significant differences than would be expected by chance. As a result of these findings, the summary statistics for each

combination of CBSA_STRATUM, QUESTIONNAIRE, and OVERLAP were recomputed (essentially ignoring the non-significant factors FEDEX and INCENTIVE). Paired t tests were computed as in the previous section to investigate the difference between the retained addresses and the new sample for the Year 2 estimated TBC rates.

The results of the paired t tests are given in Table 6B-4 for the ILS and Table 6B-5 for the PLS. Every TBC rate is lower for the retained addresses than for the new addresses, and almost all of the differences are statistically significant at the .05 level. Retaining addresses from one year to the next resulted in lower reports of TBC. The differences are not only statistically significant, but also of substantive importance. Many of the differences were 20 to 30 percent of the size of the estimated TBC rate in relative terms.

Table 6B-4. Year 2 paired t-test comparison of TBC rates for retained (OVERLAP = 1) and new (OVERLAP = 0) addresses, ILS

| TBC variable | Average percent (%), OVERLAP = 1 | Average percent (%), OVERLAP = 0 | Difference: (OVERLAP = 1) – (OVERLAP = 0) | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|----------------------------------|----------------------------------|---|--|--------------------------------------|
| HHTBPROP1 | 9.56 | 12.06 | -2.50 | [-3.41, -1.60] | < .001 |
| HHTBPROP2 | 10.56 | 12.93 | -2.37 | [-3.39, -1.35] | < .001 |
| HHTBMVTHEFT | 0.77 | 1.06 | -0.29 | [-0.51, -0.07] | .011 |
| HHTBVIOL1 | 2.31 | 3.04 | -0.73 | [-1.27, -0.19] | .008 |
| HHTBVIOL2 | 3.36 | 4.32 | -0.96 | [-1.65, -0.26] | .008 |
| HHTBSERVIOL | 1.91 | 2.57 | -0.66 | [-1.13, -0.18] | .008 |
| PTBVIOL1 | 1.27 | 1.76 | -0.49 | [-0.84, -0.14] | .007 |
| PTBVIOL2 | 1.84 | 2.46 | -0.63 | [-1.05, -0.20] | .005 |
| PTBSERVIOL | 1.08 | 1.51 | -0.43 | [-0.75, -0.11] | .009 |

Table 6B-5. Year 2 paired t-test comparison of TBC rates for retained (OVERLAP = 1) and new (OVERLAP = 0) addresses, PLS

| TBC variable | Average percent (%), OVERLAP = 1 | Average percent (%), OVERLAP = 0 | Difference: (OVERLAP = 1) – (OVERLAP = 0) | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|----------------------------------|----------------------------------|---|--|--------------------------------------|
| HHTBPROP1 | 13.31 | 16.13 | -2.82 | [-3.91, -1.72] | < .001 |
| HHTBPROP2 | 16.59 | 20.19 | -3.61 | [-4.75, -2.46] | < .001 |
| HHTBMVTHEFT | 0.80 | 1.30 | -0.50 | [-0.82, -0.19] | .002 |
| HHTBVIOL1 | 3.33 | 3.98 | -0.65 | [-1.30, 0.00] | .048 |
| HHTBVIOL2 | 6.03 | 7.45 | -1.42 | [-2.13, -0.71] | < .001 |
| HHTBSERVIOL | 1.98 | 2.41 | -0.43 | [-0.93, 0.06] | .084 |
| PTBVIOL1 | 2.02 | 2.50 | -0.47 | [-0.95, 0.00] | .050 |
| PTBVIOL2 | 3.55 | 4.71 | -1.16 | [-1.74, -0.59] | < .001 |
| PTBSERVIOL | 1.20 | 1.56 | -0.37 | [-0.72, -0.02] | .039 |

6B.3 Community and Policing Questions

The analyses in the first two sections of this chapter were repeated with the 13 community and policing questions (CPQs). Each of the questions was converted to a dichotomized form in which the response that indicated more safety, less fear of crime, or a more favorable attitude toward police was considered to be the “1” response. Table 6B-6 lists the 13 questions that were revised from Year 1, along with the dichotomization used to create the binary response for each variable.

Table 6B-6. Dichotomous versions of Year 2 CPQs

| Variable name | Question | Dichotomous variable |
|---------------|--|---|
| HHCPQ1 | On the whole, how much of the time is the community where you live safe? | = 1 if “always safe” or “mostly safe” = 0 if “sometimes safe,” “rarely safe,” or “never safe” |
| HHCPQ2 | Is there any place within a mile of your home where you would be afraid to walk alone at night? | = 1 if “no” = 0 if “yes” |
| HHCPQ3 | How often does fear of crime prevent you from doing things you would like to do? | = 1 if “rarely” or “never” = 0 if “very often” or “somewhat often” |
| HHCPQ4 | When you leave your home, how often do you think about it being broken into or vandalized while you’re away? | = 1 if “rarely” or “never” = 0 if “very often” or “somewhat often” |
| HHCPQ5 | In the past 3 years, do you believe your community has— | = 1 if “become safer” or “stayed the same” = 0 if “become less safe” = missing if “don’t know” |
| HHCPQ6 | Overall, how much of the time is the place where you work safe? | = 1 if “always safe” or “mostly safe” = 0 if “sometimes safe,” “rarely safe,” or “never safe” = missing if “does not apply; do not work” |
| HHCPQ7 | How would you rate the local police on treating people respectfully? | = 1 if “very respectful” or “somewhat respectful” = 0 if “neither respectful nor disrespectful,” “somewhat disrespectful,” or “very disrespectful” |
| HHCPQ8 | How much time and attention do the local police give to what people have to say before making their decisions? | = 1 if “great deal of time” or “a lot of time” = 0 if “a moderate amount of time,” “a little time,” or “no time at all” |
| HHCPQ9 | How consistent are the local police in applying the laws in the same way to everyone? | = 1 if “very consistent” or “somewhat consistent” = 0 if “neither consistent nor inconsistent,” “somewhat inconsistent,” or “very inconsistent” |
| HHCPQ10 | How would you rate the local police on treating people fairly, regardless of who they are? | = 1 if “very fair” or “somewhat fair” = 0 if “neither fair nor unfair,” “somewhat unfair,” or “very unfair” |
| HHCPQ11 | How much of the time can the local police be trusted to make decisions that are right? | = 1 if “always can be trusted” or “usually can be trusted” = 0 if “sometimes can be trusted,” “rarely can be trusted,” or “never can be trusted” |
| HHCPQ12 | How would you rate the local police on enforcing the law in ways that protect the rights of all of the people? | = 1 if “very good job” or “somewhat good job” = 0 if “neither good nor bad job,” “somewhat bad job,” or “very bad job” |
| HHCPQ13 | Taking everything into account, how would you rate the job the local police are doing? | = 1 if “very good job” or “somewhat good job” = 0 if “neither good nor bad job,” “somewhat bad job,” or “very bad job” |

Table 6B-7 gives the comparison of ILS and PLS instruments for the CPQs described in Table 6B-6.

Table 6B-7. Year 2 paired t-test comparison of CPQ dichotomous responses, ILS and PLS

| CPQ variable | Average PLS percent (%) | Average ILS percent (%) | Difference: PLS – ILS | 95% confidence Interval for difference | p-value for test that difference = 0 |
|--------------|-------------------------|-------------------------|-----------------------|--|--------------------------------------|
| HHCPQ1 | 84.83 | 84.68 | 0.16 | [-0.55, 0.86] | .66 |
| HHCPQ2 | 46.25 | 46.30 | -0.05 | [-0.72, 0.62] | .88 |
| HHCPQ3 | 73.27 | 73.52 | -0.26 | [-1.08, 0.57] | .53 |
| HHCPQ4 | 67.10 | 67.20 | -0.10 | [-1.03, 0.83] | .83 |
| HHCPQ5 | 73.51 | 74.07 | -0.56 | [-1.23, 0.12] | .10 |
| HHCPQ6 | 87.31 | 87.13 | 0.18 | [-0.48, 0.83] | .60 |
| HHCPQ7 | 79.66 | 79.82 | -0.16 | [-0.87, 0.56] | .66 |
| HHCPQ8 | 42.05 | 42.32 | -0.27 | [-1.09, 0.56] | .52 |
| HHCPQ9 | 67.92 | 68.70 | -0.78 | [-1.59, 0.03] | .06 |
| HHCPQ10 | 71.72 | 72.79 | -1.08 | [-1.88, -0.27] | .01 |
| HHCPQ11 | 75.23 | 76.07 | -0.84 | [-1.49, -0.19] | .01 |
| HHCPQ12 | 78.69 | 79.41 | -0.72 | [-1.37, -0.07] | .03 |
| HHCPQ13 | 82.40 | 82.56 | -0.16 | [-0.80, 0.48] | .61 |

Unlike the victimization TBC variables analyzed in the previous sections, where the PLS had higher TBC rates than the ILS, the estimates for the PLS and ILS were not significantly different for the questions about community safety and fear of crime (questions HHCPQ1 through HHCPQ6). There were also no statistically significant differences for the questions about police treating people respectfully (HHCPQ7), giving time and attention to what people say before making decisions (HHCPQ8), police consistency in applying the laws in the same way to everyone (HHCPQ9), and overall rating of police (HHCPQ13). However, the PLS, which had higher victimization rates than the ILS, had lower percentages of respondents saying that police treat people very fair or somewhat fair (HHCPQ10), that police can always or usually be trusted to make decisions that are right (HHCPQ11), and that police do a very or somewhat good job on enforcing the law in ways that protect the rights of all people (HHCPQ12).

As with the TBC questions, there were no statistically significant differences for factors FEDEX and INCENTIVE for the CPQs. There were, however, differences between the responses of the households at addresses that were retained from the Year 1 sample and the households in new addresses selected for Year 2. Tables 6B-8 and 6B-9 show the differences between the retained and new households for the ILS and PLS, respectively.

Table 6B-8. Year 2 paired t-test comparison of CPQ dichotomous responses for retained (OVERLAP = 1) and new (OVERLAP = 0) addresses, ILS

| CPQ variable | Average percent (%), OVERLAP = 1 | Average percent (%), OVERLAP = 0 | Difference: (OVERLAP = 1) – (OVERLAP = 0) | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|----------------------------------|----------------------------------|---|--|--------------------------------------|
| HHCPQ1 | 85.54 | 84.41 | 1.13 | [0.19, 2.07] | .019 |
| HHCPQ2 | 46.82 | 46.13 | 0.69 | [-0.40, 1.77] | .210 |
| HHCPQ3 | 74.39 | 73.23 | 1.16 | [-0.18, 2.49] | .089 |
| HHCPQ4 | 67.91 | 66.96 | 0.95 | [-0.19, 2.08] | .100 |
| HHCPQ5 | 75.79 | 73.51 | 2.28 | [1.06, 3.51] | < .001 |
| HHCPQ6 | 87.53 | 87.00 | 0.52 | [-0.46, 1.51] | .290 |
| HHCPQ7 | 81.98 | 79.16 | 2.82 | [1.53, 4.11] | < .001 |
| HHCPQ8 | 44.65 | 41.61 | 3.05 | [1.70, 4.39] | < .001 |
| HHCPQ9 | 71.02 | 67.96 | 3.06 | [1.61, 4.51] | < .001 |
| HHCPQ10 | 74.90 | 72.13 | 2.77 | [1.55, 4.00] | < .001 |
| HHCPQ11 | 77.32 | 75.67 | 1.65 | [0.56, 2.74] | .004 |
| HHCPQ12 | 80.67 | 79.02 | 1.65 | [0.44, 2.86] | .009 |
| HHCPQ13 | 83.38 | 82.32 | 1.07 | [-0.06, 2.19] | .063 |

Table 6B-9. Year 2 paired t-test comparison of CPQ dichotomous responses for retained (OVERLAP = 1) and new (OVERLAP = 0) addresses, PLS

| CPQ variable | Average percent (%), OVERLAP = 1 | Average percent (%), OVERLAP = 0 | Difference: (OVERLAP = 1) – (OVERLAP = 0) | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|----------------------------------|----------------------------------|---|--|--------------------------------------|
| HHCPQ1 | 85.93 | 84.47 | 1.46 | [0.64, 2.29] | < .001 |
| HHCPQ2 | 47.93 | 45.73 | 2.20 | [0.67, 3.73] | .006 |
| HHCPQ3 | 74.09 | 73.01 | 1.08 | [-0.15, 2.31] | .083 |
| HHCPQ4 | 68.17 | 66.75 | 1.41 | [0.06, 2.76] | .041 |
| HHCPQ5 | 74.85 | 73.06 | 1.79 | [0.58, 3.00] | .005 |
| HHCPQ6 | 87.70 | 87.19 | 0.51 | [-0.65, 1.67] | .380 |
| HHCPQ7 | 81.46 | 79.09 | 2.37 | [1.27, 3.47] | < .001 |
| HHCPQ8 | 43.18 | 41.70 | 1.49 | [0.35, 2.62] | .011 |
| HHCPQ9 | 69.52 | 67.42 | 2.10 | [0.73, 3.47] | .003 |
| HHCPQ10 | 73.20 | 71.26 | 1.94 | [0.66, 3.22] | .003 |
| HHCPQ11 | 76.59 | 74.79 | 1.80 | [0.57, 3.02] | .005 |
| HHCPQ12 | 80.09 | 78.24 | 1.84 | [0.91, 2.78] | < .001 |
| HHCPQ13 | 83.23 | 82.14 | 1.10 | [0.27, 1.92] | .010 |

For both the ILS and PLS, the retained households had higher percentages rating police favorably on each of questions 7 through 13 than did the new households in sample. (HHCPQ13 for the ILS is the only comparison that is not statistically significant at the .05 level.) This finding is consistent with the retained households having lower estimated TBC rates.

6B.4 Estimates of Change

The first step in estimating change from Year 1 to Year 2 was to compute summary statistics from each year. Because the stratification was largely the same for Year 1 and Year 2, the differences in the summary statistics between Year 1 and Year 2 pairs exploited the block design to provide an efficient estimate of change. In other words, the estimates for the areas were the same for the two years so that the paired differences took into account the experimental design. The only real difference in the designs between the two years was in the Los Angeles substrata.

The Year 2 survey dropped Form B, complicating estimates of change. The approach used here was to compute differences between statistics from the entire data set from Year 2 (all used Form A) and from observations using Form A only from Year 1. For each CBSA stratum, the change statistic was calculated as the percentage TBC in Year 2 minus the percentage TBC in Year 1 from Form A. Each percentage was calculated using the final raked weights. This approach avoided issues associated with differential effects of the forms (Form A and Form B).³²

Table 6B-10 displays the average of the change statistics over the 49 CBSA strata. The table shows different patterns for estimating change in TBC rates with the two instruments. The PLS shows a decrease, on average, in property crime between 2015 and 2016, while the ILS indicates an increase. The Year 2 PLS instrument had added a question on the date of the most recent motor vehicle theft that was inadvertently omitted in Year 1, which may have contributed to lower observed rates. Both instruments indicated that there was an increase in violent crime between 2015 and 2016, but the increase was higher for the PLS than for the ILS, although the difference was statistically significant only at the .05 level for HHTBVIOL1 and PTBVIOL1.

Table 6B-10. Average percentage point change from Year 1 to Year 2 for TBC variables, ILS and PLS

| TBC variable | Average change, PLS | Average change, ILS | Difference: PLS change – ILS change | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|---------------------|---------------------|-------------------------------------|--|--------------------------------------|
| HHTBPROP1 | -2.04 | 0.47 | -2.51 | [-3.27, -1.75] | < .001 |
| HHTBPROP2 | -3.05 | 0.64 | -3.69 | [-4.67, -2.70] | < .001 |
| HHTBMVTHEFT | -0.18 | 0.24 | -0.42 | [-0.68, -0.16] | .002 |
| HHTBVIOL1 | 1.09 | 0.36 | 0.74 | [0.28, 1.19] | .002 |

³² An alternative was to perform statistical tests to see whether the Year 2 minus Year 1 difference in TBC rates differed for the PLS and ILS. This difference would be calculated for the blocking units of the CBSA strata, and the average differences across those CBSA strata would be compared. This method was not implemented because the Year 1 form differences were confounded with the year-to-year differences.

| TBC variable | Average change, PLS | Average change, ILS | Difference: PLS change – ILS change | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|---------------------|---------------------|-------------------------------------|--|--------------------------------------|
| HHTBVIOL2 | 1.02 | 0.61 | 0.40 | [-0.18, 0.99] | .170 |
| HHTBSERVIOL | 0.36 | 0.31 | 0.05 | [-0.37, 0.46] | .820 |
| PTBVIOL1 | 0.67 | 0.27 | 0.40 | [0.05, 0.74] | .026 |
| PTBVIOL2 | 0.76 | 0.44 | 0.32 | [-0.10, 0.73] | .130 |
| PTBSERVIOL | 0.24 | 0.25 | -0.01 | [-0.31, 0.29] | .940 |

For examining change in the CPQ variables, the percentages for questions 1 through 6 were recalculated from Year 1 using the same variable definition as for Year 2, given in Table 6B-6. Question 13 had different question-wording and response options in the 2015 and 2016 surveys. In 2015, a respondent to the question “How would you rate the job the local police are doing in your community?” could choose among response options “excellent,” “good,” “fair,” “poor,” or “don’t know.” In 2016, the question “Taking everything into account, how would you rate the job the local police are doing?” had response options “very good job,” “somewhat good job,” “neither good nor bad job,” “somewhat bad job,” and “very bad job.”

It is reasonable to anticipate differences between the years, particularly because the 2016 question follows six other questions about the local police, while the 2015 question follows only the questions of whether the respondent had contacted the local police and, if so, what the level of satisfaction was. Nevertheless, the difference between Year 1 and Year 2 on this question was the same for the ILS and PLS, so it was included in the comparison of change estimates.

Table 6B-11 shows the averages, across the 49 CBSA strata, of the change estimates for the PLS and ILS instruments. The average changes from Year 1 to Year 2 were small (less than 2 percentage points) for all of the community questions. The larger difference between Year 1 and Year 2 for question 13 can be explained by the differences in question wording and response options. For all of these questions, the change estimate from the PLS was not statistically significantly different from the change estimate from the ILS.

Table 6B-11. Average percentage point change from Year 1 to Year 2 for CPQ variables, ILS and PLS

| CPQ variable | Average change, PLS | Average change, ILS | Difference: PLS change – ILS change | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|---------------------|---------------------|-------------------------------------|--|--------------------------------------|
| HHCPQ1 | -0.13 | 0.07 | -0.21 | [-1.13, 0.71] | .65 |
| HHCPQ2 | -0.76 | 0.01 | -0.77 | [-1.82, 0.28] | .15 |
| HHCPQ3 | -1.04 | -0.11 | -0.93 | [-2.01, 0.15] | .09 |
| HHCPQ4 | 0.77 | 1.80 | -1.03 | [-2.17, 0.12] | .08 |
| HHCPQ5 | 0.66 | 0.66 | 0.00 | [-0.93, 0.94] | .99 |

| CPQ variable | Average change, PLS | Average change, ILS | Difference: PLS change – ILS change | 95% confidence interval for difference | p-value for test that difference = 0 |
|--------------|---------------------|---------------------|-------------------------------------|--|--------------------------------------|
| HCOPQ6 | 0.10 | -0.02 | 0.11 | [-1.01, 1.24] | .84 |
| HCOPQ13 | 4.86 | 3.72 | 1.14 | [-0.04, 2.32] | .06 |

Table 6B-12 displays the correlations between the TBC rates for Year 1 and Year 2. These were calculated as the correlations between the 40 CBSA-level statistics. Each of the CBSA-level statistics was calculated using the weights. Three correlations are displayed: the correlation between the TBC rate in the CBSA from Year 1 and the TBC rate from Year 2, calculated using the PLS respondents; the correlation between the TBC rate in the CBSA from Year 1 and the TBC rate from Year 2, calculated using the ILS respondents; and the correlation between the Year 2 minus Year 1 difference in rates from the PLS, and the Year 2 minus Year 1 difference in rates from the ILS.

Table 6B-12. Correlations among Year 1 and Year 2 TBC rates and TBC changes

| TBC variable | Correlation of PLS Year 1 and PLS Year 2 | p-value for correlation | Correlation of ILS Year 1 and ILS Year 2 | p-value for correlation | Correlation of PLS change and ILS change | p-value for correlation |
|--------------|--|-------------------------|--|-------------------------|--|-------------------------|
| HHTBPROP1 | 0.892 | < .001 | 0.813 | < .001 | -0.016 | .924 |
| HHTBPROP2 | 0.875 | < .001 | 0.771 | < .001 | -0.168 | .301 |
| HHTBMVTHEFT | 0.608 | < .001 | 0.488 | .001 | -0.163 | .316 |
| HHTBVIOL1 | 0.061 | .707 | 0.073 | .653 | 0.117 | .474 |
| HHTBVIOL2 | 0.298 | .062 | 0.123 | .450 | 0.279 | .081 |
| HHTBSERVIOL | 0.027 | .870 | 0.069 | .671 | -0.027 | .868 |
| PTBVIOL1 | -0.004 | .978 | 0.169 | .296 | 0.066 | .686 |
| PTBVIOL2 | 0.268 | .094 | 0.196 | .225 | 0.173 | .286 |
| PTBSERVIOL | 0.015 | .925 | 0.135 | .405 | -0.013 | .935 |

Table 6B-12 shows high correlations between the Year 1 TBC and the Year 2 TBC for property crime, for both the PLS and ILS. However, the correlations between the Year 1 TBC and Year 2 TBC for violent crime are low and are not statistically significantly different from zero. The scatterplots in Appendix F support these results. For property crime, the CBSA-level statistics for Year 2 appear linearly related to the Year 1 statistics. For violent crime, however, there are no apparent relationships between the Year 1 and Year 2 TBC statistics. Violent crime is a relatively rare event, and many of the CBSAs had only a handful of violent crimes reported on the questionnaires (see Table 6B-2). Thus, adding one or two violent victimizations to a CBSA would result in a different rate and reduce the correlation.

There were no statistically significant correlations between the change estimates from the PLS and ILS for any of the TBC variables. This result was unsurprising because the estimates of change for a one-year period were almost all very close to zero and not statistically significant.

Table 6B-13 shows analogous correlations for the CPQs. For these, the Year 1 and Year 2 statistics from both the PLS and ILS showed high correlations. The correlations between the change estimates from the two instruments, however, were relatively small and mostly non-significant.

Again, this was expected given the estimates of change were close to zero, as shown in Table 6B-11. It should be noted that these correlations are at the CBSA level. The next section considers correlations at the household and adult level, which will inform whether the overlap sample reduced variances for estimates of change.

Table 6B-13. Correlations among Year 1 and Year 2 CPQ rates and CPQ changes

| CPQ variable | Correlation of PLS Year 1 and PLS Year 2 | | Correlation of ILS Year 1 and ILS Year 2 | | Correlation of PLS change and ILS change | | p-value for correlation |
|--------------|--|----------------------------|--|----------------------------|---|----------------------------|----------------------------|
| | | p-value for correlation | | p-value for correlation | | p-value for correlation | |
| HHCPQ1 | 0.743 | < .001 | 0.732 | < .001 | 0.152 | .350 | |
| HHCPQ2 | 0.834 | < .001 | 0.761 | < .001 | 0.360 | .022 | |
| HHCPQ3 | 0.882 | < .001 | 0.813 | < .001 | 0.257 | .110 | |
| HHCPQ4 | 0.857 | < .001 | 0.859 | < .001 | -0.009 | .955 | |
| HHCPQ5 | 0.762 | < .001 | 0.744 | < .001 | 0.700 | < .001 | |
| HHCPQ6 | 0.659 | < .001 | 0.786 | < .001 | -0.133 | .412 | |
| HHCPQ13 | 0.536 | < .001 | 0.448 | .004 | 0.410 | .009 | |

6B.5 Does Retaining Addresses Reduce Variances?

Tables 6B-4 and 6B-5 demonstrated that the TBC rates were lower for households with OVERLAP = 1. The original rationale for conducting the experiment with retained addresses, however, was that returning to the same addresses in Year 2 might result in a smaller variance for estimates of change. It would be expected that for many of the addresses, the same persons would reside at the address in Year 1 and Year 2 and that their responses to the CPQs, and perhaps also their victimization experiences, would be positively correlated between Year 1 and Year 2.

Two methods were used to investigate whether using the same sampled addresses for Year 1 and Year 2 resulted in lower variance than using independent samples for the two years. The first method looked at the estimated variance of the change using the overlap sample and compared this to the variance that would have been expected if the addresses in the two years from the overlap

sample were independent. The second method compares the variance of the estimated change from the overlap sample with the variance of the estimated change from the non-overlap sample.

For method 1, let \hat{p}_1 be an estimated rate from Year 1 from the households with OVERLAP = 1, and let \hat{p}_2 be a corresponding estimated rate from Year 2. The variance of the change estimate is $V(\hat{p}_2 - \hat{p}_1) = V(\hat{p}_2) + V(\hat{p}_1) - 2 \text{Cov}(\hat{p}_1, \hat{p}_2)$. If the sets of households in Year 1 and Year 2 were independent, then the variance of the change estimate would be $V(\hat{p}_2 - \hat{p}_1) = V(\hat{p}_2) + V(\hat{p}_1)$. The ratio of (estimated variance for change achieved from the overlap sample) ÷ (sum of the estimated variances of the two individual-year rates) can thus be formed.³³ If the ratio is close to 1, then the estimated covariance between the Year 1 and Year 2 estimates is close to zero and there is no precision benefit from retaining the same addresses for Year 2. If the ratio is less than one, then there is evidence that the overlap sample has smaller variance than two independent samples.

This ratio (estimated variance for change achieved from the overlap sample) ÷ (sum of the estimated variances of the two individual-year rates from the overlap sample) was calculated separately for each CBSA in the sample, then the summary statistics of the distribution of this ratio was calculated across the 40 CBSAs. Table 6B-14 shows the summary statistics of the variance ratios for the TBC indicators, and Table 6B-15 shows the summary statistics for the CPQs.

Table 6B-14. Summary statistics describing distribution of the ratio (estimated variance for change achieved from the overlap sample) ÷ (sum of the estimated variances of the two individual-year rates from the overlap sample) for the TBC variables

| TBC variable | Minimum | 25 th percentile | Median | Mean | 75 th percentile | Maximum |
|--------------|---------|-----------------------------|--------|------|-----------------------------|---------|
| HHTBPROP1 | 0.75 | 0.91 | 0.99 | 0.97 | 1.02 | 1.10 |
| HHTBPROP2 | 0.79 | 0.89 | 0.99 | 0.97 | 1.04 | 1.14 |
| HHTBMVTHEFT | 0.69 | 0.98 | 1.00 | 0.99 | 1.01 | 1.11 |
| HHTBVIOL1 | 0.68 | 0.95 | 1.00 | 1.02 | 1.10 | 1.26 |
| HHTBVIOL2 | 0.78 | 0.96 | 1.01 | 1.00 | 1.06 | 1.23 |
| HHTBSERVIOL | 0.63 | 0.98 | 1.00 | 1.02 | 1.06 | 1.30 |
| PTBVIOL1 | 0.69 | 0.96 | 0.99 | 1.00 | 1.04 | 1.39 |
| PTBVIOL2 | 0.61 | 0.94 | 1.01 | 0.99 | 1.06 | 1.28 |
| PTBSERVIOL | 0.65 | 0.96 | 1.00 | 0.99 | 1.02 | 1.42 |

³³The estimated variance of the difference from the overlap sample is calculated by concatenating the records from Year 1 and Year 2, and adding a variable year that takes on the value 1 for the records in Year 1, and the value 2 for the records in Year 2. A linear regression of the binary variable of interest, with independent variable year, then gives the change estimate as the slope of the variable year, and the variance of the slope is the variance of the change estimate.

Table 6B-15. Summary statistics describing distribution of the ratio (estimated variance for change achieved from the overlap sample) ÷ (sum of the estimated variances of the two individual-year rates from the overlap sample) for the CPQs

| CPQ variable | Minimum | 25 th percentile | Median | Mean | 75 th percentile | Maximum |
|--------------|---------|-----------------------------|--------|------|-----------------------------|---------|
| HHCPQ1 | 0.75 | 0.97 | 1.04 | 1.02 | 1.10 | 1.21 |
| HHCPQ2 | 0.80 | 0.92 | 0.99 | 1.00 | 1.07 | 1.19 |
| HHCPQ3 | 0.68 | 0.92 | 0.99 | 0.99 | 1.07 | 1.28 |
| HHCPQ4 | 0.83 | 0.94 | 1.00 | 1.00 | 1.07 | 1.21 |
| HHCPQ5 | 0.78 | 0.92 | 0.98 | 0.99 | 1.04 | 1.20 |
| HHCPQ6 | 0.70 | 0.93 | 1.01 | 1.01 | 1.10 | 1.25 |
| HHCPQ13 | 0.83 | 0.97 | 1.01 | 1.02 | 1.07 | 1.17 |

In Tables 6B-14 and 6B-15, the measures of the center of the distribution (means and medians of the variance ratios) were both close to 1. This finding suggests that for a “typical” CBSA, the variances were essentially the same as would have been expected with independent samples in the two years. These tables show no evidence of a reduction in variance for change estimates from retaining addresses in the sample.

For the second method of examining possible variance reductions from retaining addresses, comparing the variance from the overlap and non-overlap samples requires special consideration, because half of the Year 1 addresses that were randomized to Form A were designated as overlap-sample addresses, amounting to a quarter of the Year 1 sample. This means that in Year 2, a quarter of the sample was retained addresses and three-quarters of the sample was new (non-retained) addresses. To put the overlap sample (retained addresses in Year 2) and non-overlap sample (new addresses in Year 2) on equal footing with respect to sample size, the non-overlap comparison sample was constructed as follows. Within each CBSA stratum (using the stratification from Year 2), the Year 1 addresses for the non-overlap sample were the addresses sent Form A in Year 1 that were not selected for the overlap sample in Year 2. These addresses made up about a quarter of the total Year 1 sample, to correspond with the quarter of the Year 1 sample that was retained in the overlap sample for Year 2. A third of the Year 2 respondents in the non-overlap sample were then randomly selected from each CBSA stratum, giving a subsample that represented a quarter of the sampled addresses in Year 2 that responded. The estimate of change from Year 1 to Year 2 was calculated separately for each CBSA from the two samples.

The results from Tables 6B-16 and 6B-17 also show no advantage, from a variance perspective, of retaining addresses in the sample for Year 2. In fact, for the CPQs in Table 6B-17, all of the medians

and means of the variance ratios were at least 1 nominally, indicating that, if anything, the non-overlap sample had a smaller variance for estimating change. This result can be explained in part by the different Year 2 response rates for the overlap and non-overlap samples. The Year 2 sample size was larger for the non-overlap comparison sample (taking as third of the respondents) than for the overlap sample. Indeed, the total sample size across all 40 CBSAs for the overlap sample was 16,071, while the total sample size for the non-overlap comparison sample was 18,342, which was 14 percent higher.

Table 6B-16. Summary statistics describing distribution of the ratio (estimated variance for change estimate from the overlap sample) ÷ (estimated variance for change estimate from the non-overlap sample) for the TBC variables

| TBC variable | Minimum | 25 th percentile | Median | Mean | 75 th percentile | Maximum |
|--------------|---------|-----------------------------|--------|------|-----------------------------|---------|
| HHTBPROP1 | 0.62 | 0.81 | 0.97 | 0.96 | 1.06 | 1.79 |
| HHTBPROP2 | 0.54 | 0.82 | 0.95 | 0.96 | 1.03 | 1.53 |
| HHTBMVTHEFT | 0.27 | 0.66 | 1.10 | 1.52 | 1.77 | 5.48 |
| HHTBVIOL1 | 0.31 | 0.67 | 0.96 | 1.15 | 1.41 | 4.82 |
| HHTBVIOL2 | 0.28 | 0.78 | 1.04 | 1.05 | 1.26 | 2.13 |
| HHTBSERVIOL | 0.28 | 0.73 | 0.95 | 1.22 | 1.50 | 3.64 |
| PTBVIOL1 | 0.17 | 0.63 | 1.00 | 1.16 | 1.65 | 3.53 |
| PTBVIOL2 | 0.25 | 0.69 | 1.02 | 1.11 | 1.51 | 2.45 |
| PTBSERVIOL | 0.10 | 0.60 | 0.97 | 1.47 | 1.51 | 14.43 |

Table 6B-17. Summary statistics describing distribution of the ratio (estimated variance for change estimate from the overlap sample) ÷ (estimated variance for change estimate from the non-overlap sample) for the CPQs

| CPQ variable | Minimum | 25 th percentile | Median | Mean | 75 th percentile | Maximum |
|--------------|---------|-----------------------------|--------|------|-----------------------------|---------|
| HHCPQ1 | 0.62 | 0.97 | 1.08 | 1.08 | 1.15 | 1.60 |
| HHCPQ2 | 0.73 | 0.94 | 1.06 | 1.06 | 1.13 | 1.49 |
| HHCPQ3 | 0.67 | 0.89 | 1.00 | 1.03 | 1.18 | 1.53 |
| HHCPQ4 | 0.70 | 0.98 | 1.09 | 1.10 | 1.22 | 1.62 |
| HHCPQ5 | 0.70 | 0.86 | 1.00 | 1.02 | 1.18 | 1.44 |
| HHCPQ6 | 0.58 | 0.95 | 1.10 | 1.15 | 1.33 | 2.03 |
| HHCPQ13 | 0.54 | 0.95 | 1.08 | 1.09 | 1.20 | 1.83 |

6B.6 Persistence of Response and Victimization at Addresses in the Overlap Sample

To further explore the somewhat surprising result that retaining addresses does not appear to reduce the variance of change estimates, the relationship between Year 1 and Year 2 responses at the same address can be examined. This could be done only in the overlap sample, where the same addresses

were mailed questionnaires in two successive years. This ability to measure changes at individual addresses is often a major rationale for using longitudinal or panel survey designs.

The households at the address could differ in Year 1 and Year 2, but 90 percent of the respondents in the Year 2 overlap sample said they had not moved within the last year. Thus, the overlap sample should be able to detect whether respondents from addresses that reported victimizations in Year 1 were more likely to also report victimizations in Year 2, or whether respondents with positive views of police in Year 1 also had positive views in Year 2. The correlation of victimization status at the household or adult level has a direct role in the variance of estimates of change.

As noted in Section 4.4, the addresses in the overlap sample had a lower response rate in Year 2. Thus, to examine persistence of victimization, the missing data patterns in the overlap sample from Year 1 to Year 2 needed to be considered.

The first analysis displays the gross flows in victimization from Year 1 to Year 2. ANYVICTIM is defined as 1 if the anyone in the household residing at the address had been victimized by any crime and as 0 otherwise. Table 6B-18 shows the cross-tabulation of ANYVICTIM in Year 1 and ANYVICTIM in Year 2, including the addresses from which there was a response in one year but not the other, but excluding addresses with no response in either year.

Table 6B-18. Relationship between victimization and missingness in Year 1 and Year 2 for the overlap sample

| | | ANYVICTIM, Year 2 | | | |
|-------------------|---------|-------------------|-------|---------|--------|
| | | No | Yes | Missing | Total |
| ANYVICTIM, Year 1 | No | 9,275 | 993 | 8,081 | 18,349 |
| | Yes | 1,319 | 650 | 2,068 | 4,037 |
| | Missing | 3,147 | 687 | N/A | 3,834 |
| | Total | 13,741 | 2,330 | 10,149 | 26,220 |

Table 6B-18 shows that addresses with a victimization in Year 1 were more likely to have missing data in Year 2 than were addresses with no victimization in Year 1: 2,068 of the 4,037 (51.2 percent) addresses in the overlap sample that reported at least one Year 1 victimization were missing in Year 2. By contrast, 8,081 of the 18,349 non-victim addresses in Year 1 (44.0 percent) had missing data for Year 2.

Looking only at addresses that have responses from both years, 993 of the 10,268 non-victim addresses in Year 1 (9.7 percent) had a victimization in Year 2. However, 650 of the 1,969 victim

addresses in Year 1 (33.0 percent) had a victimization in Year 2. This finding shows that victimization was persistent, since those who were victimized in Year 1 had about three times the rate of being victimized in Year 2 compared to those not victimized in Year 1. As might be expected, the rate of being victimized for those responding in Year 2 but not Year 1 (17.9 percent) falls between the rates of the other two groups.

Similar results held for the gross flows of the individual TBC variables. The full gross flow tables for the other TBC variables and the CPQs are shown in Appendix I.

Table 6B-19 shows the Year 2 missing data status of the sampled addresses where a response was obtained in Year 1, separately by the victimization status in Year 1. The percentages and counts in Table 6B-19 were calculated using unweighted data. For every type of victimization, the addresses with at least one victimization in Year 1 were much more likely to be missing in Year 2. For each variable, a test that the percentage missing was equal for the victims and non-victims in Year 1 was carried out using the Cochran-Mantel-Haenszel test statistic, which accounts for the CBSA strata. All of the p-values for the variables in Table 6B-19 were less than .001.

Table 6B-19. Percentage of victim and non-victim addresses from Year 1 that were missing in Year 2

| TBC variable | Number non-victim addresses, Year 1 | Number victim addresses, Year 1 | Percent Year 1 non-victim addresses missing in Year 2 (%) | Percent Year 1 victim addresses missing in Year 2 (%) |
|--------------|-------------------------------------|---------------------------------|---|---|
| ANYVICTIM | 18,349 | 4,037 | 44.0 | 51.2 |
| HHTBPROP1 | 19,384 | 3,002 | 44.4 | 51.1 |
| HHTBPROP2 | 18,795 | 3,591 | 44.2 | 51.1 |
| HHTBMVTHEFT | 22,171 | 215 | 45.2 | 58.6 |
| HHTBVIOL1 | 21,886 | 500 | 45.0 | 60.6 |
| HHTBVIOL2 | 21,491 | 895 | 44.8 | 58.3 |
| HHTBSERVIOL | 21,995 | 391 | 45.0 | 62.4 |

Table 6B-20 shows a similar analysis for the CPQs, displaying the Year 2 missing data status of the sampled addresses where a response was obtained in Year 1 separately by the response to the CPQ in Year 1. Recall that the HHCPQ variables were coded so that a “1” response indicated a higher level of perceived safety, less fear of crime, or a more positive view of police. Table 6B-20 shows that the addresses with a “1” response in Year 1 are less likely to have missing data in Year 2 than the addresses with a “0” response in Year 1. All of the differences in percentage missing are statistically significant at the 0.01 level.

Table 6B-20. Percentage of addresses that had unit nonresponse or were missing the response to the question in Year 2, by addresses that responded “1” or “0” to the question in Year 1

| CPQ variable | Number addresses with response “0,” Year 1 | Number addresses with response “1,” Year 1 | Percent Year 1 addresses with response “0” missing in Year 2 (%) | Percent Year 1 addresses with response “1” missing in Year 2 (%) |
|--------------|---|---|--|--|
| HHCPQ1 | 2,587 | 19,460 | 54.3 | 44.3 |
| HHCPQ2 | 10,908 | 11,095 | 47.6 | 43.9 |
| HHCPQ3 | 4,871 | 17,212 | 48.4 | 44.8 |
| HHCPQ4 | 7,185 | 14,930 | 47.4 | 44.5 |
| HHCPQ5 | 4,953 | 14,524 | 49.8 | 47.1 |
| HHCPQ6 | 1,815 | 13,918 | 60.6 | 53.0 |
| HHCPQ13 | 3,614 | 16,071 | 53.0 | 45.2 |

Tables 6B-21 and 6B-22 look at the persistence in response among addresses in the overlap sample that answered a question in both years. Table 6B-21 looks at persistence in victimization among these addresses, and Table 6B-22 looks at persistence in the response to the CPQs. All of the differences in percentages are highly significant, with p-values less than .0001. These findings are consistent with the expectation that the responses across years at the household level are positively correlated and could help reduce the variance of estimates of change.

Table 6B-21. Percentage of victim and non-victim addresses from Year 1 that reported victimization of same type in Year 2

| TBC variable | Number Year 1 non-victim addresses, with response in Year 2 | Number Year 1 victim addresses, with response in Year 2 | Percent Year 1 non-victim addresses, with victimization in Year 2 (%) | Percent Year 1 victim addresses, with victimization in Year 2 (%) |
|--------------|---|---|---|---|
| ANYVICTIM | 10,268 | 1,969 | 9.7 | 33.0 |
| HHTBPROP1 | 10,768 | 1,469 | 7.2 | 27.3 |
| HHTBPROP2 | 10,481 | 1,756 | 8.3 | 31.3 |
| HHTBMVTHEFT | 12,148 | 89 | 0.5 | 10.1 |
| HHTBVIOL1 | 12,040 | 197 | 1.5 | 15.2 |
| HHTBVIOL2 | 11,864 | 373 | 2.6 | 20.9 |
| HHTBSERVIOL | 12,090 | 147 | 1.0 | 14.3 |

Table 6B-22. Percentage of addresses that had a response of “1” to the question in Year 2, by addresses that responded “1” or “0” to the question in Year 1

| CPQ variable | Number addresses with response “0” in Year 1 that had a response in Year 2 | Number addresses with response “1” in Year 1 that had a response in Year 2 | Percent Year 1 addresses with response “0” in Year 1 that had response “1” In Year 2 (%) | Percent Year 1 addresses with response “1” in Year 1 that had response “1” In Year 2 (%) |
|--------------|--|--|--|--|
| HHCPQ1 | 1,182 | 10,835 | 45.8 | 95.1 |
| HHCPQ2 | 5,718 | 6,228 | 22.9 | 78.6 |
| HHCPQ3 | 2,515 | 9,508 | 41.1 | 88.5 |
| HHCPQ4 | 3,782 | 8,283 | 36.6 | 85.1 |
| HHCPQ5 | 2,484 | 7,682 | 44.0 | 86.6 |
| HHCPQ6 | 715 | 6,543 | 58.3 | 93.5 |
| HHCPQ13 | 1,697 | 8,812 | 62.9 | 92.9 |

6B.7 Comparison of ILS and PLS with NCVS Results

The 2016 LACS statistics were compared to accumulated data from the 2014-2016 NCVS. As in the calculations of the 3-year 2013-2015 statistics used for comparison with the 2015 LACS statistics, the NCVS TBC statistics were calculated as households and persons touched by crime during the 6 months asked about in the NCVS questionnaire, not a 12-month period as in the LACS, and 3 years of data were accumulated in the NCVS to compensate for the small sample size for some CBSAs. The TBC rates were calculated for each CBSA for which NCVS data were available at the Census Bureau. The statistics were calculated by concatenating the data files for the four quarters of years 2014 through 2016 and then calculating the TBC percentages for each CBSA using SAS PROC SURVEYFREQ with the NCVS final weights. The second-stage sampling units were used to calculate the variance of each CBSA-level estimate.

Five summary statistics were calculated from the NCVS for each CBSA in the sample, as described in Chapter 6A: NCVS_HH_PROPERTY, NCVS_HH_MVTHEFT, NCVS_HH_VIOLENT, NCVS_PER_VIOLENT, and NCVS_PER_SERVIOL.

To avoid disclosure of the NCVS rates for the CBSAs, this section presents only correlation coefficients relating the NCVS summary statistics to the LACS summary statistics calculated for each CBSA. These results underwent Disclosure Review Board review at the Census Bureau before being included in this report.

Table 6B-23 shows the Pearson correlation coefficients relating the 2014-2016 NCVS TBC estimates for each CBSA with the Year 2 estimates calculated using the final weights for the ILS and PLS.

Table 6B-23. Pearson correlation coefficients for 2014-2016 NCVS and 2016 LACS CBSA-level summary statistics

| NCVS variable | LACS variable | ILS | PLS |
|------------------|---------------|---------|---------|
| NCVS_HH_PROPERTY | HHTBPROP1 | 0.69*** | 0.67*** |
| NCVS_HH_PROPERTY | HHTBPROP2 | 0.68*** | 0.65*** |
| NCVS_HH_MVTHEFT | HHTBMVTHEFT | 0.51** | 0.47** |
| NCVS_HH_VIOLENT | HHTBVIOL1 | 0.23 | 0.38* |
| NCVS_HH_VIOLENT | HHTBVIOL2 | 0.30* | 0.64*** |
| NCVS_HH_VIOLENT | HHTBSERVIOL | 0.08 | 0.24 |
| NCVS_PER_VIOLENT | PTBVIOL1 | 0.22 | 0.35* |
| NCVS_PER_VIOLENT | PTBVIOL2 | 0.22 | 0.62*** |
| NCVS_PER_SERVIOL | PTBSERVIOL | 0.07 | 0.29 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

The correlation patterns for the Year 2 LACS estimates with the NCVS are similar to those presented from Year 1 in Chapter 6A. Both the ILS and PLS have high correlations with the NCVS property crime TBC statistics. For violent crime, the PLS has higher correlations than the ILS, particularly for the variables that included attempts (VIOL2). This same pattern occurred for Form A of each instrument in the Year 1 correlations from Table 6B-17. (Recall that all mailings in Year 2 used Form A, with the community questions at the beginning of the instrument.)

One goal of the LACS is to be able to measure change in victimization or attitudes in a CBSA. Victimization rates tend to change little in successive years, and detecting change, particularly for violent victimization rates, generally requires very large sample sizes because the incidence is low.

The change in TBC rates for the LACS was calculated for each crime variable by subtracting the 2015 TBC rate from the 2016 TBC rate.³⁴ For the NCVS, the one-year change was calculated by subtracting the TBC rate from the four quarters of data in 2015 from the TBC rate from the four quarters of data in 2016. This was done by concatenating the 2015 and 2016 records, each with its appropriate survey weight, and finding the regression coefficient of the variable YEAR, which took

³⁴ Subtracting the two rates gives the correct point estimate for change, but the standard error for a change estimate needs to account for the possible dependence from households in the overlap sample. This is best done using a regression analysis. For the correlations, however, only point estimates were needed.

on value 1 for 2016 and 0 for 2015. The second-stage sampling units were used to estimate the standard error of the change estimate for each CBSA. Because some of the CBSAs had small sample sizes in both years (due to the approximate self-weighting in the NCVS design), some of the CBSA-level change estimates have high standard errors.

Table 6B-24 gives the Pearson correlation coefficients for the estimates of change. None of the correlations was statistically significantly different from zero. This result does not necessarily mean that the LACS instruments cannot detect change, but that a much larger sample size would be needed in each CBSA for both the NCVS and the LACS to be able to detect any correlation among the TBC changes given the small expected change rate. The sampling error for the CBSA-level estimates, for both the NCVS and LACS, attenuates the estimated correlation between the 40 pairs of CBSA-level TBC rates.

Table 6B-24. Pearson correlation coefficients for 2016-minus-2015 NCVS change and 2016-minus-2015 LACS change statistics

| NCVS variable | LACS variable | ILS | PLS |
|------------------|---------------|-------|-------|
| NCVS_HH_PROPERTY | HHTBPROP1 | -0.24 | -0.06 |
| NCVS_HH_PROPERTY | HHTBPROP2 | -0.22 | 0.03 |
| NCVS_HH_MVTHEFT | HHTBMVTHEFT | 0.05 | 0.12 |
| NCVS_HH_VIOLENT | HHTBVIOL1 | 0.26 | -0.10 |
| NCVS_HH_VIOLENT | HHTBVIOL2 | 0.18 | -0.07 |
| NCVS_HH_VIOLENT | HHTBSERVIOL | 0.24 | -0.15 |
| NCVS_PER_VIOLENT | PTBVIOL1 | 0.17 | -0.20 |
| NCVS_PER_VIOLENT | PTBVIOL2 | 0.12 | -0.15 |
| NCVS_PER_SERVIOL | PTBSERVIOL | -0.06 | -0.04 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

6.B.8 Summary

The LACS Field Test in Year 2 confirmed important findings from Year 1 with respect to the questionnaires (with larger sample sizes due to dropping the forms experiment from Year 1) that—

- the PLS produces higher levels of households touched by property crime than the ILS
- the PLS produces higher levels of persons touched by violent crime, both excluding and including threats, than the ILS
- the PLS and ILS TBC rates for property crime are highly correlated across CBSAs. The correspondence for violent crime is lower, and the correlation is not statistically significant for most of the violent crime statistics.

- Both the ILS and PLS are highly correlated with the NCVS for property crime. The correlations are lower for violent crime, but the PLS has higher and statistically significant correlations. This is true for violent crime at both the household and person levels.

The LACS Field Test in Year 2 also provided evidence that—

- for the CPQ items, the ILS and PLS are highly correlated and produced approximately the same estimates
- for estimating change from Year 1 to Year 2, the ILS and PLS gave similar estimates of violent crime but differences were found for property crime. The property crime differences may be partially due to the change in the PLS instrument between years.
- correlations with change estimates in the NCVS are not significant for either the ILS or the PLS, which may be due in large part to the estimates being close to zero and to small sample sizes.

In addition, the Year 2 design found evidence of the following methodological and operational features of the survey design:

- The FedEx and incentive treatments had no statistically significant main effects on the responses to either victimization or CPQ items.
- The overlap experiment showed that retaining addresses in the sample gave significantly lower estimates of TBC than obtained from the new sample.
- Retaining addresses also resulted in more favorable responses with respect to some of the CPQ items, consistent with the lower TBC rates.
- Retaining addresses did not result in lower estimates of change despite there being relatively high correlations of the responses of households on victimization and CPQ items from year-to-year. The lack of a variance reduction for estimates of change may be due at least in part to the reduced response rate associated with retained addresses.

7. Jurisdiction-Level Data

The LACS design specified larger samples in Year 1 in Philadelphia, Los Angeles, and Chicago. These samples were stratified by subregions aligned with city police jurisdictions. This chapter compares the regional statistics for each of these cities with local crime statistics for the region originating from the police departments. In Year 2, large samples were again selected in Philadelphia and Chicago, but not in Los Angeles to reduce costs. This chapter presents analysis of the Year 1 data only to illustrate the potential to do within-CBSA analysis with the LACS. The final section gives a brief discussion of the Year 2 samples in Philadelphia and Chicago.

There are a number of reasons why the survey estimates would be expected to differ those from those of the police jurisdictions. First, the LACS assigns crimes to where the respondent lives, while the police reports assign them to where they occurred. Thus, a robbery in the central city of a person who lives in a northern suburb is counted in the northern suburb for the LACS but in the central city for the police statistics. While this may be a problem for the UCR comparisons in Section 6A.5, it is likely to be even more of a problem for within-CBSA comparisons, because there is much more travel and commuting within CBSAs. Second, the police statistics for property crime include nonresidential burglaries and thefts, which are not measured in the LACS. Some of the police statistics for violent crime include homicide, which is not measured in a household mail survey such as the LACS; however, homicide rates tend to be correlated with other types of violent crime. Third, the police statistics include crimes against all persons, including children, while the LACS is limited to violent crimes against adults. Finally, the survey covers crimes not reported to police, which are not in the police statistics.

Although the crime statistics obtained from local jurisdictions are all presented as rates of crime per 1,000 persons, these should not be compared across cities. The three sites use different definitions for violent and property crimes, and the data are collected for different time periods. These issues impair analyses of administrative data from police jurisdictions for studying differences by CBSA. One of the advantages of the LACS is that it provides a consistent basis for such analyses.

The estimates for each subarea of these three CBSAs, for the variables in Tables 6A-3 and 6A-4, and for all instruments and forms, along with 95 percent confidence intervals, are given in Appendix I.

7.1 Philadelphia

The Philadelphia Police Department maintains a list of crimes reported to police from 2006 to the present.³⁵ The 2015 data were compared to the LACS data collected in 2015. Serious violent crime was defined as rape, robbery, and aggravated assault. Violent crime included serious violent crime plus simple assault. And property crime included burglary, theft, and motor vehicle theft.

Table G-1 in Appendix J gives summary statistics for the subareas of Philadelphia from the LACS, along with the estimated crime rates obtained from the Philadelphia Police Department website. The Philadelphia CBSA has seven subareas: six within the city (Central, East, South, Southwest, Northeast, and Northwest), and the Remainder subarea, which includes areas outside the city of Philadelphia.

Local area statistics from the Philadelphia Police Department are available for the first six subareas. The police-department property crime rate was used as the comparison for the LACS property crime variables; the police-department violent crime rate was used as the comparison for the LACS variables with VIOL1 and VIOL2, and the police-department serious violent crime rate was used as the comparison for the LACS serious violent crime variables.

The estimates of TBC rates from the LACS were not expected to be exactly proportional to the estimated police-department crime rates across local areas because of the differences in measurement discussed at the beginning of this chapter. But a reasonable expectation would be that the LACS and police-department statistics rank the subareas in approximately the same order. Table 7-1 shows the Spearman correlation coefficient³⁶ for the TBC rates across the six city subareas for each form and instrument with the police-department crime estimate for those subareas. If the

³⁵ See Philadelphia Police Department (n.d.). *Crime maps & stats*. Retrieved June 2, 2017, from <https://www.phillypolice.com/crime-maps-stats/>. Incidents were extracted for each of the years 2014, 2015, and 2016 and were classified as property crimes or violent crimes using the UCR codes. Incidents with UCR codes of 200 through 400 (rape, robbery, aggravated assault) and 800 (other assault) were classified as violent crime, and codes of 500 through 700 (burglary, theft, motor vehicle theft) were classified as property crime. Incidents with codes of 200 through 400 were classified as serious violent crime. The incidents were assigned to the sub-regions of Philadelphia using the police district in the database. For each sub-region and year, the crime rate per 1,000 population was calculated as the number of incidents of the crime type in the sub-region divided by the sub-region's population (in thousands), where the population for the sub-region was obtained from the 2010 Census.

³⁶ The Spearman correlation coefficient is calculated by finding the ranks of the LACS statistic from highest to lowest, then finding the ranks of the police-department statistic from highest to lowest and calculating the Pearson correlation of the two sets of ranks.

ranking of subareas from high to low crime is exactly the same for the two measures, the Spearman correlation would be 1. If the ranking is exactly opposite (i.e., the lowest crime subarea for the LACS is the highest crime subarea for the police-department measure), the Spearman correlation would be -1. Only very high estimated correlations will be statistically significant because these are based on only six pairs of data points. The Spearman correlation is used mainly as an indicator of the patterns of similarity.

Table 7-1. Spearman correlations of LACS measures of TBC with crime rates from the Philadelphia Police Department

| Variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------|-----------|-------|-------|-----------|-------|-------|
| HHTBPROP1 | 0.37 | 0.31 | 0.54 | -0.03 | -0.03 | 0.60 |
| HHTBPROP2 | 0.37 | 0.03 | 0.54 | -0.03 | -0.03 | -0.14 |
| HHTBMVTHEFT | -0.09 | -0.26 | -0.03 | 0.54 | 0.54 | -0.03 |
| HHTBVIOL1 | 0.60 | 0.71 | 0.14 | 0.54 | 0.37 | 0.60 |
| HHTBVIOL2 | 0.60 | 0.60 | 0.37 | 0.77 | 0.66 | 0.60 |
| HHTBSERVIOL | 0.77 | 0.77 | 0.31 | 0.43 | 0.09 | 0.49 |
| PTBVIOL1 | 0.89* | 0.71 | 0.66 | 0.49 | 0.14 | 0.83* |
| PTBVIOL2 | 0.77 | 0.71 | 0.43 | 0.94** | 0.60 | 0.89* |
| PTBSERVIOL | 0.94** | 0.77 | 0.71 | 0.26 | -0.03 | 0.49 |

* p-value < .05.

** p-value < .01.

Table 7-1 shows that for property crime there is little evidence that the LACS statistics match up with the police-department statistics. This may be the result of reporting to police, but a more likely explanation is that the police statistics for property crime include crimes against establishments, which may be more likely to be located in some areas of the cities than in others. Although PLS A appears to have the same ranking as the police statistics for motor vehicle theft, the rates are so low in some of the subareas that the result is unreliable. For violent crime, the correlations are mixed, with the ILS having some relationship to the police statistics. However, the estimates are based on relatively small sample sizes for such rare events.

Table 7-2 looks at the Spearman correlations of the subarea estimates across the different forms and questionnaires. These correlations used the estimates from all seven subareas, including the Remainder area that is outside of the city of Philadelphia. Again, the correlations for property crime appear to be higher than those for violent crime statistics.

Table 7-2. Spearman correlations of TBC measures among different instruments and forms, Philadelphia

| Variable | ILS, both with PLS, both | ILS A with ILS B | PLS A with PLS B | ILS A with PLS A | ILS B with PLS B |
|-------------|--------------------------|------------------|------------------|------------------|------------------|
| HHTBPROP1 | 0.86* | 0.71 | 0.68 | 0.86* | 0.75 |
| HHTBPROP2 | 0.86* | 0.68 | 0.68 | 0.93** | 0.36 |
| HHTBMVTHEFT | 0.21 | 0.21 | 0.29 | -0.43 | 0.96*** |
| HHTBVIOL1 | 0.64 | 0.21 | 0.71 | 0.29 | 0.14 |
| HHTBVIOL2 | 0.79* | 0.43 | 0.43 | 0.61 | 0.71 |
| HHTBSERVIOL | 0.64 | 0.11 | 0.50 | 0.11 | 0.14 |
| PTBVIOL1 | 0.46 | 0.36 | 0.68 | -0.04 | 0.36 |
| PTBVIOL2 | 0.89** | 0.61 | 0.75 | 0.64 | 0.71 |
| PTBSERVIOL | 0.46 | 0.46 | 0.32 | 0.00 | 0.54 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

7.2 Chicago

Data on the Chicago strata included incidents that occurred each year from 2001, for each Chicago community area.³⁷ From these data, three counts were found for each community area: serious violent crime was defined as the total number of criminal sexual assaults, robberies, aggravated assaults, and aggravated batteries in each area; violent crime was defined as the total number of serious violent crimes plus the number of simple assaults and simple batteries; and property crime was defined as the total number of burglaries, larcenies, and motor vehicle thefts. These counts were summed for the communities belonging to each of the Chicago strata, then divided by population (in thousands) to obtain a crime rate for each of serious violent crime, violent crime, and property crime.

Table G-2 gives summary statistics for the subareas of Chicago, along with the estimated crime rates obtained from the Chicago Police Department website. The Chicago CBSA has four subareas: Central, North, South, and Remainder (outside the city of Chicago). The police-department property crime rate was used as the comparison for the LACS property crime variables. The police-department violent crime rate was used as the comparison for the LACS variables with VIOL1 and

³⁷ See Chicago Data Portal. (n.d.). *Crimes - 2001 to present: Public safety*. Retrieved June 2, 2017, from <https://data.cityofchicago.org/Public-Safety/Crimes-2001-to-present/ijzp-q8t2>. The incidents were classified as serious violent crimes, violent crimes, and property crimes using the Illinois UCR code in the data file. They were classified into the sub-regions using the community area information.

VIOL2. And the police-department serious violent crime rate was used as the comparison for the LACS serious violent crime variables.

Table 7-3 gives the Spearman correlations across city subareas of the Chicago Police Department rates with the rates from each of the instruments and forms. Because there were only three areas that were ranked, not much should be read into the relationship. All instruments, except PLS Form B, appeared to rank the areas similar to the police-department records to some degree.

Table 7-3. Spearman correlations of LACS measures of TBC with crime rates from the Chicago Police Department

| Variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------|-----------|-------|-------|-----------|-------|-------|
| HHTBPROP1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | -0.5 |
| HHTBPROP2 | 0.5 | -0.5 | 1*** | 0.5 | 0.5 | -0.5 |
| HHTBMVTHEFT | 1*** | 1*** | 0.5 | -0.5 | 0.5 | -0.5 |
| HHTBVIOL1 | 1*** | 1*** | 0.5 | 1*** | 0.5 | 1*** |
| HHTBVIOL2 | 1*** | 1*** | 0.5 | 0.5 | 1*** | -1*** |
| HHTBSERVIOL | 1*** | 1*** | 1*** | 1*** | 0.5 | 1*** |
| PTBVIOL1 | 1*** | 1*** | 1*** | 1*** | 0.5 | 1*** |
| PTBVIOL2 | 1*** | 1*** | 0.5 | 1*** | 1*** | 0.5 |
| PTBSERVIOL | 1*** | 1*** | 1*** | 1*** | 0.5 | 1*** |

* p-value < .05.

** p-value < .01.

*** P-value < .001.

Table 7-4 gives the Spearman correlations of the subarea estimates across the different forms and questionnaires. These correlations used the estimates from all four subareas, including the Remainder area that is outside of the city of Chicago. The correlations are relatively unstable due to small sample sizes, but there is a high concordance in ranking for the ILS and PLS, when both Forms are considered together. Much of this is due to the agreement of Form A of the two instruments.

Table 7-4. Spearman correlations of TBC measures among different instruments and forms, Chicago

| Variable | ILS, both with PLS, both | ILS A with ILS B | PLS A with PLS B | ILS A with PLS A | ILS B with PLS B |
|-------------|--------------------------|------------------|------------------|------------------|------------------|
| HHTBPROP1 | 1*** | 0.4 | 0.2 | 1*** | 0.8 |
| HHTBPROP2 | 0.4 | 0.4 | 0.2 | 0.8 | 0.4 |
| HHTBMVTHEFT | 0.4 | 0.4 | 0.2 | 0.6 | -0.8 |
| HHTBVIOL1 | 1*** | 0.8 | 0.8 | 0.8 | 0.8 |
| HHTBVIOL2 | 0.8 | 0.8 | 0.2 | 1*** | 0.4 |
| HHTBSERVIOL | 1*** | 1*** | 0.8 | 0.8 | 1*** |
| PTBVIOL1 | 1*** | 1*** | 0.8 | 0.8 | 1*** |
| PTBVIOL2 | 1*** | 0.8 | 0.8 | 1*** | 0.4 |
| PTBSERVIOL | 1*** | 1*** | 0.8 | 0.8 | 1*** |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

7.3 Los Angeles

Data for the police jurisdictions were not available from the Los Angeles Police Department's website. Although the website provided links to crime-mapping sites, the data were not in a form amenable to creating summary statistics for the strata in the LACS. The Los Angeles Police Department used to provide an online summary of crime by police division, but the most recent year for which that report is available is 2011.³⁸

Instead, police jurisdiction data for Los Angeles were obtained from the *Los Angeles Times* crime mapping project.³⁹ It maps crimes to neighborhoods by using electronic records obtained from the Los Angeles Police Department and the Los Angeles County Sheriff's Department. The statistics included counts and rates of violent and property crime in over 200 neighborhoods in Los Angeles County from September 7, 2015, through March 6, 2016. The *Los Angeles Times*-defined neighborhoods were then matched with the LACS sampling strata. Twenty neighborhoods fell

³⁸ See Los Angeles Police Department (n.d.). *Statistical digest, 2011*.

http://www.lapdonline.org/crime_mapping_and_compsstat/content_basic_view/9098. The rates for Part 1 offenses in 2011 (per 1,000 population) were 27.5 for the Central Bureau, 36.7 for the South Bureau, 27.1 for the West Bureau, and 23.8 for the Valley Bureau (p. 1-3). Part 1 offenses include murder and nonnegligent homicide, forcible rape, robbery, aggravated assault, burglary, motor vehicle theft, larceny-theft, and arson.

³⁹ See Los Angeles Times. (n.d.). *Violent crime* [Interactive map of violent crime in Los Angeles neighborhoods]. Retrieved April 21, 2016, from <http://maps.latimes.com/neighborhoods/violent-crime/neighborhood/list/>. See also Los Angeles Times. (n.d.). *Property crime* [Interactive map of property crime in Los Angeles neighborhoods]. Retrieved April 21, 2016, from <http://maps.latimes.com/neighborhoods/property-crime/neighborhood/list/>. As these statistics also include incidents reported by the Los Angeles County Sheriff's Department, they will differ from statistics that may be available from the Los Angeles Police Department.

entirely within the Central stratum, 23 were entirely within the South stratum, 32 were entirely within the West stratum, and 33 were entirely within the Valley stratum. The remaining 6 neighborhoods of the 114 that covered the city of Los Angeles spanned two strata. The crimes from these neighborhoods were apportioned to the covering strata in proportion to their population from the 2010 Census. Because the data were from a 6-month period, the crime rate per 1,000 population was calculated by taking a population-weighted average of the crime rates per capita for the neighborhoods constituting the sampling stratum (using the population from the 2010 Census) and multiplying the result by 2.

For the police jurisdiction data, violent crime was defined as homicide, rape, aggravated assault, and robbery. Property crime was defined as burglary, theft, grand theft auto, and theft from a vehicle.

Table G-3 gives summary statistics for the subareas of Los Angeles, along with the estimated crime rates obtained from the *Los Angeles Times* website. The Los Angeles CBSA has five subareas: Central, West, South, Valley, and Remainder (outside the city of Los Angeles). The police-department property crime rate was used as the comparison for the LACS property crime variables. The police-department violent crime rate was used as the comparison for the LACS violent and serious violent crime variables.

Table 7-5 gives the Spearman correlations across the four city subareas of the local law enforcement jurisdiction rates with the rates from each of the instruments and forms. Like Chicago, Los Angeles has a small number of areas to support analysis of ranks. The same pattern occurred for Los Angeles as for Chicago and Philadelphia, with the rankings from the LACS and police being highly correlated for violent statistics but not for property crime.

Table 7-5. Spearman correlations of LACS measures of TBC with law enforcement agency crime rates from the *Los Angeles Times* website

| Variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------|-----------|-------|-------|-----------|-------|-------|
| HHTBPROP1 | 0 | 0 | 0.4 | -0.2 | 0.4 | -0.4 |
| HHTBPROP2 | 0 | 0 | 0 | 0.4 | 0.4 | -0.2 |
| HHTBMVTHEFT | 0.4 | 1*** | -0.4 | 0.2 | 0.2 | 0.2 |
| HHTBVIOL1 | 1*** | 1*** | 1*** | 0.8 | 1*** | 0.4 |
| HHTBVIOL2 | 1*** | 1*** | 1*** | 1*** | 0.8 | 0.4 |
| HHTBSERVIOL | 1*** | 1*** | 1*** | 0.8 | 0.8 | 0.4 |
| PTBVIOL1 | 1*** | 1*** | 0.8 | 0.8 | 0.4 | 0.8 |
| PTBVIOL2 | 0.8 | 0.8 | 0.8 | 0.4 | 0.6 | 0.4 |
| PTBSERVIOL | 1*** | 1*** | 0.8 | 1*** | -0.4 | 0.4 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

Table 7-6 looks at the Spearman correlations of the subarea estimates across the different forms and questionnaires. These correlations used the estimates from all five subareas, including the Remainder area that is outside the city of Los Angeles.

Table 7-6. Spearman correlations of TBC measures among different instruments and forms, Los Angeles

| Variable | ILS, both with PLS, both | ILS A with ILS B | PLS A with PLS B | ILS A with PLS A | ILS B with PLS B |
|-------------|-----------------------------|---------------------|---------------------|---------------------|---------------------|
| HHTBPROP1 | 0.7 | -0.3 | -0.1 | -0.2 | -0.4 |
| HHTBPROP2 | 0.6 | -0.4 | 0.2 | -0.2 | -0.1 |
| HHTBMVTHEFT | 0.1 | -0.1 | 0.7 | 0.1 | -0.3 |
| HHTBVIOL1 | 0.8 | 0.9* | 0.3 | 0.9* | 0.3 |
| HHTBVIOL2 | 1*** | 0.9* | 0 | 0.8 | 0.4 |
| HHTBSERVIOL | 0.7 | 0.4 | 0 | 0.3 | 0.1 |
| PTBVIOL1 | 0.8 | 0.6 | 0.1 | 0.3 | 0.2 |
| PTBVIOL2 | 0.9* | 0.9* | -0.3 | 0.7 | 0.1 |
| PTBSERVIOL | 0.9* | 0.6 | -0.7 | -0.2 | -0.1 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

7.4 Year 2 Within-Jurisdiction Analyses

In Year 2 of the LACS, larger samples stratified by sub-region were taken only in the Chicago and Philadelphia CBSAs. The Los Angeles CBSA, which had a larger sample in Year 1, was not given a supplemental sample in Year 2. This section repeats some of the Year 1 analysis with estimates from the Chicago and Philadelphia samples.

The 2016 estimates for each sub-region of Chicago and Philadelphia for both instruments, along with 95 percent confidence intervals, are given in Appendix J, which also displays the change estimates for the sub-regions of these cities. Because of the small sample sizes, the rarity of victimization incidents, and the likely stability in crime rates over just a one-year period, the precision of the change estimates is low for the sub-regions. Only a handful of change estimates are statistically significantly different from zero.

Table 7-7 gives the Spearman rank correlations of the TBC rates for the sub-regions of Philadelphia. The police agency variable for property crime was correlated with the LACS instruments for variables HHTBPROP1, HHTBPROP2, and HHTBMVTHEFT. The police agency variable for serious violent crime was correlated with the LACS instruments for HHTBSERVIOL and PTBSERVIOL. And the police agency variable for violent crime was correlated with the LACS instruments for the remaining variables.

Table 7-7. Spearman correlations of 2016 LACS measures of TBC with 2016 crime rates from the Philadelphia Police Department

| LACS variable | Correlation of ILS with police agency variable | Correlation of PLS with police agency variable | Correlation of ILS with PLS |
|---------------|--|--|-----------------------------|
| HHTBPROP1 | 0.20 | -0.14 | 0.89** |
| HHTBPROP2 | 0.71 | -0.14 | 0.39 |
| HHTBMVTHEFT | -0.43 | 0.94** | 0.29 |
| HHTBVIOL1 | 0.66 | 0.60 | 0.86* |
| HHTBVIOL2 | 0.14 | 0.26 | 0.50 |
| HHTBSERVIOL | 0.37 | 0.37 | 0.96*** |
| PTBVIOL1 | 0.60 | 0.71 | 0.79* |
| PTBVIOL2 | 0.26 | 0.54 | 0.54 |
| PTBSERVIOL | 0.60 | 0.83* | 0.89** |

* P-value < .05.

** P-value < .01.

*** P-value < .001.

Table 7-8 gives the Spearman rank correlations for Chicago. The unusual correlations such as 1.0 are due to the small number of sub-regions that are being ranked and these statistics may not be very informative.

Table 7-8. Spearman correlations of 2016 LACS measures of TBC with 2016 crime rates from the Chicago Police Department

| LACS variable | Correlation of ILS with police agency variable | Correlation of PLS with police agency variable | Correlation of ILS with PLS |
|---------------|--|--|-----------------------------|
| HHTBPROP1 | 0.5 | 0.5 | 0.4 |
| HHTBPROP2 | 1*** | 0.5 | 0.8 |
| HHTBMVTHEFT | -0.5 | -0.5 | 1*** |
| HHTBVIOL1 | 1*** | -1*** | 0.2 |
| HHTBVIOL2 | 0.5 | -1*** | 0.4 |
| HHTBSERVIOL | 1*** | 1*** | 1*** |
| PTBVIOL1 | 1*** | -1*** | 0.2 |
| PTBVIOL2 | 0.5 | -0.5 | 0.8 |
| PTBSERVIOL | 1*** | 0.5 | 0.8 |

* p-value < .05.

** p-value < .01.

*** p-value < .001.

7.5 Summary

Although there are limited numbers of areas for comparing the TBC estimates at the local jurisdiction level, a few patterns emerge for all three of the oversampled cities in Year 1. To see these patterns more clearly, Table 7-9 presents a weighted average of the Spearman correlations in Tables 7-1, 7-3, and 7-5, where the weights are the number of areas in each individual table. Table 7-10 presents a weighted average of the correlations in Tables 7-2, 7-4, and 7-6.

- In general, both the ILS and PLS appear to agree with the local jurisdiction statistics on the relative ordering of the subareas for violent crime. Overall, the correlations of the rank orderings are higher for the ILS than the PLS.
- Neither instrument consistently has high correlation with the local jurisdiction statistics for property crime. This mirrors the low correlations found for property crime across CBSAs. Repeating the analyses but restricting to LACS incidents that were reported to police would likely increase the correlations as was shown earlier.
- The two instruments are largely consistent with each other for ranking these local jurisdictions with respect to TBC rates, for both property and violent crime.

Table 7-9. Weighted average of Spearman correlations of LACS measures of TBC with local jurisdiction crime statistics for Philadelphia, Chicago, and Los Angeles

| Variable | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------|-----------|-------|-------|-----------|-------|-------|
| HHTBPROP1 | 0.29 | 0.26 | 0.49 | 0.04 | 0.22 | 0.04 |
| HHTBPROP2 | 0.29 | -0.10 | 0.48 | 0.22 | 0.22 | -0.24 |
| HHTBMVTHEFT | 0.31 | 0.42 | -0.02 | 0.2 | 0.43 | -0.07 |
| HHTBVIOL1 | 0.82 | 0.87 | 0.49 | 0.73 | 0.59 | 0.63 |
| HHTBVIOL2 | 0.82 | 0.82 | 0.59 | 0.78 | 0.78 | 0.17 |
| HHTBSERVIOL | 0.89 | 0.89 | 0.68 | 0.68 | 0.40 | 0.58 |
| PTBVIOL1 | 0.95 | 0.87 | 0.78 | 0.70 | 0.30 | 0.86 |
| PTBVIOL2 | 0.83 | 0.80 | 0.56 | 0.79 | 0.69 | 0.65 |
| PTBSERVIOL | 0.97 | 0.89 | 0.8 | 0.66 | -0.02 | 0.58 |

Table 7-10. Weighted average of Spearman correlations of TBC measures among different instruments and forms for Philadelphia, Chicago, and Los Angeles

| Variable | ILS, both with PLS, both | ILS A with ILS B | PLS A with PLS B | ILS A with PLS A | ILS B with PLS B |
|-------------|-----------------------------|---------------------|---------------------|---------------------|---------------------|
| HHTBPROP1 | 0.85 | 0.32 | 0.32 | 0.56 | 0.40 |
| HHTBPROP2 | 0.66 | 0.27 | 0.41 | 0.54 | 0.23 |
| HHTBMVTHEFT | 0.22 | 0.16 | 0.40 | -0.01 | 0.13 |
| HHTBVIOL1 | 0.78 | 0.57 | 0.60 | 0.61 | 0.36 |
| HHTBVIOL2 | 0.86 | 0.67 | 0.24 | 0.77 | 0.54 |
| HHTBSERVIOL | 0.75 | 0.42 | 0.42 | 0.34 | 0.34 |
| PTBVIOL1 | 0.70 | 0.6 | 0.53 | 0.28 | 0.47 |
| PTBVIOL2 | 0.92 | 0.75 | 0.43 | 0.75 | 0.44 |
| PTBSERVIOL | 0.73 | 0.64 | 0.12 | 0.14 | 0.46 |

8. LACS Project Summary

The LACS was envisioned as a low-cost approach to produce subnational estimates on criminal victimization, including crimes not reported to police, as well as estimates on perceptions of community and policing issues. This chapter summarizes the efforts to develop and implement the LACS, such as developing alternative questionnaires and data collection methods, which were experimentally tested in 2015 and 2016 (Year 1 and Year 2) administrations in the 40 largest CBSAs in the country. Much of the focus of this technical report is on evaluating those experiments.

A key overall finding is that a cost-effective subnational LACS is feasible. This report discusses methods and features of the survey that enhanced the utility of the LACS. This finding is in stark contrast to the earlier pilot test of a survey conducted primarily by telephone that was intended to more closely replicate the NCVS. That approach proved infeasible but did suggest that the mail approach described here had potential.

An important goal of the LACS was to develop a relatively inexpensive design and methodology that could be administered by local jurisdictions or their vendors. These local jurisdictions can be states, metropolitan areas, cities, or even police jurisdictions. The Field Test examined metropolitan areas (CBSAs) but included even more local areas associated with police jurisdictions in a few of the CBSAs.

A related goal was to produce estimates that would be valuable to local areas and complement estimates from the NCVS. Data on police-reported crimes are already available at the local level, even though reporting practices vary by jurisdiction. The LACS was designed to produce both victimization estimates for crimes reported to police and crimes that were not reported. The value and validity of these estimates are greatly enhanced if they are positively correlated with those from the NCVS. The earlier pilot test found that replicating the NCVS at the local level was infeasible but that having highly correlated estimates at the local level is potentially very valuable.

Two primary intended uses of the LACS are to support the estimation of change over time at a local level and to provide a mechanism for consistent inter-area comparisons. Finally, the LACS also has the potential to address local areas' emerging needs for estimates of public perceptions of police performance and community safety.

Since the LACS could not replicate the NCVS process and estimates, the LACS design process had some freedom to experiment with instrument design to facilitate data collection using a self-administered mail survey.⁴⁰ Consequently, there are important differences between the LACS and core NCVS that have profound effects on the data. The most relevant differences follow:

- The core NCVS uses a face-to-face interview first and then subsequent interviews by telephone where possible, while the LACS uses mail self-administered data collection.
- The NCVS is a panel survey with the same address interviewed every 6 months about incidents in the last 6 months, while the LACS is a cross-sectional survey and uses a 12-month recall period. Thus, the core has bounded recall for many interviews, while the LACS has only unbounded recall.
- The NCVS asks all household members age 12 or older to respond for themselves although some proxies are allowed, while the LACS asks one adult member to respond for all adults in the household.
- The NCVS includes all persons age 12 or older, while the LACS reports on no more than four persons per household who are age 18 or older.
- The NCVS contains details on all victimization incidents but with less detail on series crimes, while the LACS contains fewer, less detailed victimization incidents. This difference means that the LACS supports estimates for a reduced set of type-of-crime codes and fewer characteristics of victimization. The difference also implies that the LACS can report only whether households or adults are touched by specific crimes rather than the number of victimization incidents.

The Field Test examined two questionnaire approaches, the ILS and PLS, with each thought to have strengths and limitations. The ILS uses the general structure of the NCVS with victimization probes and questions about reported incidents, but with less detail and with limits on the number of incidents. The PLS asks about each adult and his or her victimizations, changing the focus from the incident to the person. The PLS more closely mimics the structure of the ACS instrument. Both the ILS and PLS were tested experimentally in Year 1 and Year 2, with some modifications in the instruments.

In Year 1, another instrument experiment was conducted with each instrument. The test involved two different forms that differed only in the placement of questions about neighborhood safety.

⁴⁰ The same approach could be used with a data collection scheme that sampled addresses and mailed materials to push the respondents to the internet. But this mixed-mode design would have been more difficult for local areas to implement and was not tested.

These questions were placed before the victimization questions for Form A and after them for Form B of both the ILS and PLS. The findings for Year 1 showed that Form A was a superior design, and the form experiment was not continued in Year 2.

Year 2 included a set of experiments (in addition to the ILS/PLS experiment) to study the operational features of the design. One of these experiments tested whether sampling the same addresses in Year 2 (essentially making the design more like a panel than cross-sectional survey) would be useful. Another experiment in Year 2 considered different levels of incentives.

The Field Test used a randomized complete block design in the 40 largest CBSAs, with oversamples in three cities (two in Year 2). This design was used to improve the statistical power to examine the effects of the experimental manipulations. The instruments (ILS/PLS) and forms (A/B) were the experimental factors in Year 1, and the CBSAs and subareas were the blocking factors. In Year 2, the instruments and operational treatments were the experimental factors, and the CBSAs and subareas were the blocking factors.

Large samples were used for both years, but a key to being able to assess the effects for a “typical” local area was the number of CBSAs. Having 40 CBSAs with approximately the same sample size in each CBSA (except the oversampled CBSAs) provided substantially more power for the inferences than did a smaller number of CBSAs with a larger within-CBSA sample size.

8.1 Major Findings from Year 1

The Year 1 LACS Field Test sample included almost 230,000 addresses, and nearly 94,000 households completed the survey. The overall response rate was 47.1 percent using AAPOR RR3. This level of response is considerably higher than could be achieved using other low-cost data collection methods such as telephone or the internet. For a survey on a sensitive topic conducted in the 40 largest CBSAs, this rate is considered a success.

The response rates varied substantially by CBSA, as expected. There is little doubt that collecting survey data presents greater challenges in some areas. The observed response patterns were not unusual for sample surveys. Some potential nonresponse biases associated with these differential response rates might be mitigated by nonresponse adjustments using data available from the sampling frame.

The ILS and PLS instruments had comparable response rates, but there was a difference by form. The response rates for Form B were lower than those for Form A for the ILS, but the form had little effect on response rates for the PLS. Based on the response rates and general instrument performance, Form A had advantages over Form B.

The findings from another experiment with sending both English- and Spanish-language instruments to households outside linguistically isolated areas and not associated with Hispanic surnames were somewhat mixed. While mailing in both languages increased response rates, it was unclear if the percentage of Hispanic respondents increased due to the provision of the bilingual materials.

With respect to the CPQs, the ILS and PLS gave very similar estimates. With respect to victimization, the findings were as follows:

- The PLS recorded higher levels of households touched by property crime and persons touched by violent crime (excluding and including threats) than the ILS.
- PLS Form A had higher levels of both property and violent TBC rates than PLS Form B, but there were no statistically significant differences between the ILS forms.
- Both the ILS and PLS had positive correlations with UCR statistics for motor vehicle theft, but the correlations were generally less than 0.5. For violent crime, ILS Form A had significantly positive correlations with UCR statistics, and both PLS forms were significantly correlated with the UCR.
- When victimizations from the ILS and PLS were restricted to those reported to police, the high correlations for motor vehicle theft persisted. The PLS measures of property crime had higher correlations with the police statistics and were statistically significant. The ILS measures of police-reported crime did not have higher correlations with the police statistics compared to all crime measures.
- All forms of the ILS and PLS were highly correlated with the NCVS for property crime. The correlations were somewhat lower for violent crime but were still statistically significant. For the adult-level measures of violent crime, ILS Form B had higher correlations than ILS Form A, but the number of violent crimes in this comparison was very small.

Based on these findings, the experiments with both the ILS and PLS were continued in Year 2, but the instruments were modified to address some issues identified in Year 1. Both the response rate analysis and the analysis of victimizations led to eliminating Form B from Year 2. Form A for both the PLS and ILS performed as well or better than Form B for most of the evaluation criteria.

The changes to the instruments to deal with observed reporting issues in Year 1 are described in Appendix J. The changes are important because they affect the ability to estimate change over time for some characteristics.

8.2 Major Findings from Year 2

The Year 2 Field Test sample included 217,250 addresses, and more than 71,000 households completed the instrument. The overall response rate was 40.9 percent using AAPOR RR3. While the response rate was somewhat less than Year 1's, much of the difference was due to experiments conducted in Year 2. Using the comparable mailing protocol used in Year 1, the response rates in Year 2 were 3 to 4 percentage points lower on average. The overall response rate of about 41 percent was still relatively high by current response-rate standards. As in Year 1, the response rates varied substantially by CBSA in Year 2.

The ILS and PLS instruments had nearly identical response rates in Year 2, consistent with the performance of the instruments in Year 1 for Form A. The bilingual form experiment was continued from Year 1. The findings from mailing the instruments in both languages to households in linguistically isolated areas and not associated with Hispanic surnames increased response rates slightly in Year 1 but not in Year 2. The percentage of Hispanic respondents did not increase from the provision of the bilingual materials in either year, so this approach does not seem warranted in this application.

Most of the important findings from Year 1 with respect to the questionnaires were confirmed in Year 2. The PLS produced higher levels of households touched by property crime and touched by violent crime than the ILS. Both the ILS and PLS were highly correlated with the NCVS for property crime and violent crime, but the PLS had higher and statistically significant correlations for violent crime. For the CPQ items, the ILS and PLS were highly correlated and produced approximately the same estimates.

For estimating change from Year 1 to Year 2, the ILS and PLS gave similar estimates of violent crime, but differences were found for property crime. The property crime differences may be partially due to a change in the PLS instrument between years.

The Year 2 methodological and operational experiments showed the following:

- The FedEx experiment and incentive experiment did not have significant main effects on the responses to either victimization or CPQ items.
- The overlap experiment showed that retaining addresses in the sample gave lower response rates than did a new sample, and gave lower estimates of TBC than obtained from the new sample.
- Retaining addresses also resulted in having more favorable responses with respect to some of the CPQs, consistent with the lower TBC rates. Retaining addresses did not result in lower estimates of change despite finding relatively high correlations of the responses of households on victimization and CPQ items from year to year.

Overall, the two years of data collection found that the PLS had subtle advantages compared to the ILS, so the PLS is recommended for future local area studies. The main advantages of the PLS are the higher correlations with the NCVS and the suggestion that the PLS captures more crimes not reported to police than does the ILS. The greater detail on incidence that the ILS captures may be useful in some applications, but the ILS still cannot produce incidence rates, so both the PLS and ILS can estimate only TBC rates. The ILS structure that requires linking incident reports to adults in the roster is also more complex and may prove more difficult for implementation purposes. The PLS instrument is simpler than the ILS.

Appendix A

Survey Instruments

This appendix includes the following survey instruments that were used in both year 1 and year 2:

- Year 1 Incident Level Survey, Form A
- Year 1 Incident Level Survey, Form B
- Year 1 Person Level Survey, Form A
- Year 1 Person Level Survey, Form B
- Year 2 Incident Level Survey
- Year 2 Person Level Survey

Appendix A

Survey Instruments

Year 1 Incident Level Survey, Form A



American Crime Survey

A Survey Sponsored by
The Bureau of Justice Statistics



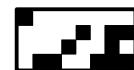
Title 42, Section 3732, United States Code, authorizes the Bureau of Justice Statistics, Department of Justice, to collect information using this survey and requires us to keep all information about you and your household strictly confidential. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB number. The valid OMB control number for this information collection is 1121-0351. Comments regarding any other aspect of this data collection may be sent to the DOJ Clearance Officer at the Bureau of Justice Statistics, 810 Seventh Street, NW Washington, DC 20531 or by calling survey support staff toll-free 1-855-863-6354.

Start Here

- Please use a black or blue pen to complete this form.
- Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

1. **On the whole, how much of the time is the community where you live safe?**
 - Always safe
 - Mostly safe
 - Sometimes safe
 - Rarely safe
 - Never safe
2. **Is there any place within a mile of your home where you would be afraid to walk alone at night?**
 - Yes
 - No
3. **How often does fear of crime prevent you from doing things you would like to do?**
 - Very often
 - Somewhat often
 - Rarely
 - Never
4. **When you leave your home, how often do you think about it being broken into or vandalized while you're away?**
 - Very often
 - Somewhat often
 - Rarely
 - Never

5. **In the last 3 years, do you believe your community has:**
 - Become safer
 - Stayed the same
 - Become less safe
 - Don't know
6. **Overall, how much of the time is the place where you work safe?**
 - Always safe
 - Mostly safe
 - Sometimes safe
 - Rarely safe
 - Never safe
 - Does not apply; do not work
7. **While living at this address, have you ever contacted the local police department for assistance?**
 - Yes
 - No ➔ GO TO 9
8. **If so, how satisfied were you with the police response?**
 - Very satisfied
 - Mostly satisfied
 - Somewhat satisfied
 - Not at all satisfied
9. **How would you rate the job the local police department is doing in your community?**
 - Excellent
 - Good
 - Fair
 - Poor
 - Don't know



Your Household

A. Do you own or rent the place where you're living?

- Own
- Rent
- Other, describe below

B. How long have you lived at this address?

- 1 year or less
- Less than 5 years, more than 1 year
- 5 years or more

C. Including yourself, how many people age 18 or older live in this household? Be sure to include yourself, all family members, roommates, and boarders.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

number of people age 18 or older

D. How many children ages 0-17 live in this household?

Please include small children and infants.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

number of children ages 0-17

► Continue answering about the adults in this household on the next page.



(YOU) Adult 1

- Starting with you, complete each column for each person age 18 or older living in this household. You will be Adult 1.

The information you provide will help you with some later questions.

1. What is your first name? For later questions this is Adult number 1.

First Name

2. What is your age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Are you male or female?

- Male
 Female

4. Are you of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is your race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is your highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering the next column for the second adult. If you are the only adult, continue with Section A on page 5.

Adult 2

- These questions ask about the second adult living in this household. This will be Adult 2.

1. What is Adult 2's first name? For later questions this is Adult number 2.

First Name

2. What is Adult 2's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 2 male or female?

- Male
 Female

4. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 2's race?

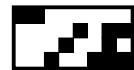
Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 2's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering on the next page for the third adult. If there are no other adults, continue with Section A on page 5.



Adult 3

- These questions ask about the third adult living in this household. This will be Adult 3.

1. What is Adult 3's first name? For later questions this is Adult number 3.

First Name

2. What is Adult 3's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 3 male or female?

- Male
 Female

4. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 3's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 3's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering the next column for the fourth adult. If there are no other adults, continue with Section A on the next page.

Adult 4

- These questions ask about the fourth adult living in this household. This will be Adult 4.

1. What is Adult 4's first name? For later questions this is Adult number 4.

First Name

2. What is Adult 4's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 4 male or female?

- Male
 Female

4. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 4's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 4's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- Continue with Section A on the next page.



Section A: Violent Crimes

► A 'violent crime' is when another person who is physically present with you does something unlawful to you or another household member.

--*Violent crimes may have happened at home, on the street, at work or school, or anywhere else.*

--*Include crimes where the offender was someone you know, a stranger, or even a family member.*

1. In the past 12 months, were you or anyone else you listed attacked, mugged, or threatened with violence?

- Yes
 No

2. In the past 12 months, did anyone ATTEMPT to attack you or anyone else you listed?

- Yes
 No

3. In the past 12 months, did anyone force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

- Yes
 No

4. In the past 12 months, did anyone ATTEMPT to force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

- Yes
 No

► If you marked 'YES' for any question above (1, 2, 3, or 4), continue with question 5 on the next page. Otherwise, skip to Section B on page 11.



Violent Crimes: Most Recent Incident

You reported that you or someone else you listed experienced a violent crime in the past 12 months. Please start with the most recent incident.

If there were none, please go to Section B on page 11.

5. In what month and year did the most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

year

6. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 3 and 4.

Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

Adult # **First Name** (Refer to Adults listed on pages 3 and 4.)

| | |
|--|--|
| | |
| | |
| | |
| | |

7. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
|--|
| |
|--|

8. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

9. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

10. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 12
- By sight only → GO TO 12
- Victim did not know the offender(s) → GO TO 12

11. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or step parent
- Own child or step-child
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

12. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

13. Did the offender attack the victim?

- Yes → GO TO 16 on the next page
- No



14. Did the offender ATTEMPT to attack the victim?

- Yes ➔ GO TO 16
- No

15. Did the offender threaten the victim with harm in any way?

- Yes
- No

16. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No ➔ GO TO 20

17. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 20
- No

18. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 20
- No

19. Was the victim sexually assaulted in some other way?

- Yes
- No

20. Did the victim suffer any injuries as a result of this incident?

- Yes
- No ➔ GO TO 22 in the next column

21. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

22. Did anyone report this crime to the police?

- Yes
- No ➔ GO TO 25

23. Did the police come once the incident was reported to them?

- Yes
- No ➔ GO TO 25

24. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else

- I don't know what the police did

25. Was anything stolen or taken during this incident?

- Yes
- No ➔ GO TO 27

26. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- A motor vehicle that the victim was in or near
- Something else

27. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime
- No ➔ GO TO Section B, page 11

Violent Crimes: Next Most Recent Incident

These questions are about the next most recent violent crime that happened to you or someone else you listed in the past 12 months.

If there were no other violent crimes, please go to Section B on page 11.

28. In what month and year did the next most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

29. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 3 and 4. Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

Adult # **First Name** (Refer to Adults listed on pages 3 and 4.)

| | |
|--|--|
| | |
| | |
| | |
| | |

30. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
|--|
| |
|--|

31. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

32. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

33. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 35
- By sight only → GO TO 35
- Victim did not know the offender(s) → GO TO 35

34. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or step parent
- Own child or step-child
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

35. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

36. Did the offender attack the victim?

- Yes → GO TO 39 on the next page
- No



37. Did the offender ATTEMPT to attack the victim?

- Yes ➔ GO TO 39
- No

38. Did the offender threaten the victim with harm in any way?

- Yes
- No

39. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No ➔ GO TO 43

40. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 43
- No

41. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 43
- No

42. Was the victim sexually assaulted in some other way?

- Yes
- No

43. Did the victim suffer any injuries as a result of this incident?

- Yes
- No ➔ GO TO 45 in the next column

44. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

45. Did anyone report this crime to the police?

- Yes
- No ➔ GO TO 48

46. Did the police come once the incident was reported to them?

- Yes
- No ➔ GO TO 48

47. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else

- I don't know what the police did

48. Was anything stolen or taken during this incident?

- Yes
- No ➔ GO TO 50

49. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- A motor vehicle that the victim was in or near
- Something else

50. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime
- No ➔ GO TO Section B, page 11

Violent Crimes: Third Most Recent Incident

51. Other than the incidents that you have already reported, in what month and year did the third most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

52. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 3 and 4. Then write in that person's first name.

Adult # **First Name** (Refer to Adults listed on pages 3 and 4.)

| | |
|--|--|
| | |
| | |
| | |
| | |

53. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
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| |
| |
| |
| |

54. Did anyone report this crime to the police?

- Yes
 No

55. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime in the next column
 No ➔ GO TO Section B on the next page

Violent Crimes: Fourth Most Recent Incident

56. Other than the incidents that you have already reported, in what month and year did the fourth most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

57. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 3 and 4. Then write in that person's first name.

Adult # **First Name** (Refer to Adults listed on pages 3 and 4.)

| | |
|--|--|
| | |
| | |
| | |
| | |

58. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
|--|
| |
| |
| |
| |

59. Did anyone report this crime to the police?

- Yes
 No

60. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

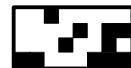
- Yes
 No ➔ GO TO Section B on the next page

61. You've already described four violent crimes. Other than those incidents, how many more violent crimes happened to you or someone else you listed in the past 12 months?

| | |
|--|--|
| | |
|--|--|

additional violent crime incidents

Draft



Section B: Theft and Break-ins

This section will ask about times in the past 12 months where someone may have stolen something, tried to steal something, or broken into this home.

Do not include any incidents you reported in the previous section as a violent crime.

62. In the past 12 months, did you or others in this household have anything stolen?

--It could have been something you wear or carry, like a wallet or purse, watch, or jewelry.

--It could have been electronic equipment, like a phone, tablet, or MP3 player.

- Yes
 No

63. In the past 12 months, was a car or other motor vehicle stolen or used without permission?

- Yes
 No

64. In the past 12 months, was anything stolen from a car?

--It could have been hubcaps or other parts, a radio or stereo, gasoline, personal items, or anything else.

- Yes
 No

65. In the past 12 months, was anything stolen from this house or apartment, from the yard, or from any other building that is part of your home, like a garage or shed?

--Think only of things that belong to you or others in this household.

- Yes
 No

66. In the past 12 months, so far as you know, did anyone ATTEMPT to steal something that belonged to you or others in this household?

- Yes
 No

67. In the past 12 months, did anyone break into this home, or attempt to break in, whether or not anything was stolen?

- Yes
 No

68. In the past 12 months, did you or others in this household have anything stolen while at work, or while away from your home?

- Yes
 No

► If you marked 'YES' for any of these questions (62 through 68), continue with the next page. Otherwise, skip to Section C on page 16.



Theft and Break-ins: Most Recent Incident

These next questions are about a theft or break-in that happened to you or others in this household in the past 12 months. If there was more than one, please start with the most recent.

If there were no thefts or break-ins, please go to Section C on page 16.

69. In what month and year did the most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

70. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|----------------------|
| <input type="text"/> |

71. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- If the incident occurred in this home continue with question 72, otherwise go to question 75 in the next column.

72. Did the offender actually get inside the home, structure, or building?

- Yes ➔ GO TO 74 in the next column
- No

73. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No ➔ GO TO 75

74. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

75. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes ➔ GO TO 77
- No

76. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

77. Was a car or other motor vehicle stolen during this incident?

- Yes ➔ GO TO 79
- No

78. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

79. What was the total value of the property that was taken?

\$.00

80. Did you or anyone else report this incident to the police?

- Yes
- No

81. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes ➔ GO TO 82 on the next page
- No ➔ GO TO Section C on page 16



Theft and Break-ins: Next Most Recent Incident

These are about the next most recent theft or break-in in the past 12 months.

If there were no thefts or break-ins, please go to Section C on page 16.

82. In what month and year did the next most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

83. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|----------------------|
| <input type="text"/> |

84. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 85, otherwise go to question 88 in the next column.

85. Did the offender actually get inside the home, structure, or building?

- Yes ➔ GO TO 87 in the next column
- No

86. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No ➔ GO TO 88

87. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

88. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes ➔ GO TO 90
- No

89. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

90. Was a car or other motor vehicle stolen during this incident?

- Yes ➔ GO TO 92
- No

91. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

92. What was the total value of the property that was taken?

\$.00

93. Did you or anyone else report this incident to the police?

- Yes
- No

94. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes ➔ GO TO 95 on the next page
- No ➔ GO TO Section C on page 16



Theft and Break-ins: Third Most Recent Incident

These questions are about the third most recent theft or break-in in the past 12 months.

If there were no thefts or break-ins, please go to Section C on page 16.

95. In what month and year did the third most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

96. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|----------------------|
| <input type="text"/> |

97. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 98, otherwise go to question 101 in the next column.

98. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO 100 in the next column
- No

99. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO 101

100. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

101. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO 103
- No

102. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

103. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO 105
- No

104. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

105. What was the total value of the property that was taken?

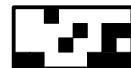
\$.00

106. Did you or anyone else report this incident to the police?

- Yes
- No

107. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO 108 on the next page
- No → GO TO Section C on page 16



Theft and Break-ins: Fourth Most Recent Incident

These questions are about the fourth most recent theft or break-in in the past 12 months.

If there were no thefts or break-ins, please go to Section C on page 16.

108. In what month and year did the fourth most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | | | |
|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| month | year | | |

109. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|--|
| |
| |
| |
| |
| |

110. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- If the incident occurred in this home continue with question 111, otherwise go to question 114 in the next column.

111. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO 113 in the next column
- No

112. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO 114

113. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

114. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO 116
- No

115. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

116. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO 118
- No

117. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

118. What was the total value of the property that was taken?

\$.00

119. Did you or anyone else report this incident to the police?

- Yes
- No

120. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO 121
- No → GO TO Section C on the next page

121. You've already described four thefts or break-ins. Other than those incidents, how many more thefts or break-ins happened to you or others in this household in the past 12 months?

additional thefts or break-ins

Section C: Other Crimes

These last few questions will ask you about other kinds of crimes that you or someone else you listed may have experienced, such as, identity theft or vandalism.

Do not include any incidents you may have reported in the previous sections.

122. In the last 12 months has this home or the property of anyone in this household been vandalized?

--Think about any vandalism done to your home, or to any motor vehicles owned by members of this household in the last 12 months.

- Yes
 No ➔ GO TO 124

123. How many times in the last 12 months has this happened?

| | |
|--|--|
| | |
|--|--|

 number of vandalism incidents

124. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use any existing credit cards?

- Yes
 No ➔ GO TO 126

125. How many times in the last 12 months has this happened?

--Count multiple uses of the same card number before discovery as one time.

| | |
|--|--|
| | |
|--|--|

 number of times

126. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use other accounts without permission?

--Include accounts such as cell phones, bank accounts, debit cards, or check cards.

- Yes
 No ➔ GO TO 128 in the next column

127. How many times in the last 12 months has this happened?

--Count multiple uses of an account before discovery as one time.

| | |
|--|--|
| | |
|--|--|

 number of times

128. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use their personal information to obtain new credit cards or loans, or for other fraudulent purposes?

- Yes
 No ➔ GO TO 130

129. How many times in the last 12 months has this happened?

--Count multiple times before discovery as one time.

| | |
|--|--|
| | |
|--|--|

 number of times

130. Which category best fits the approximate total income of all persons in your household over the past 12 months?

--Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- \$0 to \$10,000
 \$10,001 to \$20,000
 \$20,001 to \$30,000
 \$30,001 to \$40,000
 \$40,001 to \$50,000
 \$50,001 to \$60,000
 \$60,001 to \$75,000
 \$75,001 to \$100,000
 \$100,001 to \$150,000
 \$150,001 or more

Thank you for completing this survey. Please return it in the postage-paid envelope provided.



Appendix A

Survey Instruments

Year 1 Incident Level Survey, Form B



American Crime Survey

A Survey Sponsored by
The Bureau of Justice Statistics



Title 42, Section 3732, United States Code, authorizes the Bureau of Justice Statistics, Department of Justice, to collect information using this survey and requires us to keep all information about you and your household strictly confidential. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB number. The valid OMB control number for this information collection is 1121-0351. Comments regarding any other aspect of this data collection may be sent to the DOJ Clearance Officer at the Bureau of Justice Statistics, 810 Seventh Street, NW Washington, DC 20531 or by calling survey support staff toll-free 1-855-863-6354.

Start Here

- Please use a black or blue pen to complete this form.
- Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

A. Do you own or rent the place where you're living?

- Own
- Rent
- Other, describe below

B. How long have you lived at this address?

- 1 year or less
- Less than 5 years, more than 1 year
- 5 years or more

C. Including yourself, how many people age 18 or older live in this household? Be sure to include yourself, all family members, roommates, and boarders.

number of people age 18 or older

D. How many children ages 0-17 live in this household?

Please include small children and infants.

number of children ages 0-17

- Continue answering about the adults in this household on the next page.



(YOU) Adult 1

- Starting with you, complete each column for each person age 18 or older living in this household. You will be Adult 1.

The information you provide will help you with some later questions.

1. What is your first name? For later questions this is Adult number 1.

First Name

2. What is your age?

| | |
|--|--|
| | |
|--|--|

3. Are you male or female?

- Male
 Female

4. Are you of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is your race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is your highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering the next column for the second adult. If you are the only adult, continue with Section A on page 4.

Adult 2

- These questions ask about the second adult living in this household. This will be Adult 2.

1. What is Adult 2's first name? For later questions this is Adult number 2.

First Name

2. What is Adult 2's age?

| | |
|--|--|
| | |
|--|--|

3. Is Adult 2 male or female?

- Male
 Female

4. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 2's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 2's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering on the next page for the third adult. If there are no other adults, continue with Section A on page 4.



Adult 3

- These questions ask about the third adult living in this household. This will be Adult 3.

1. What is Adult 3's first name? For later questions this is Adult number 3.

First Name

2. What is Adult 3's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 3 male or female?

- Male
 Female

4. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 3's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 3's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering the next column for the fourth adult. If there are no other adults, continue with Section A on the next page.

Adult 4

- These questions ask about the fourth adult living in this household. This will be Adult 4.

1. What is Adult 4's first name? For later questions this is Adult number 4.

First Name

2. What is Adult 4's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 4 male or female?

- Male
 Female

4. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 4's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 4's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- Continue with Section A on the next page.



Section A: Violent Crimes

► A 'violent crime' is when another person who is physically present with you does something unlawful to you or another household member.

--*Violent crimes may have happened at home, on the street, at work or school, or anywhere else.*

--*Include crimes where the offender was someone you know, a stranger, or even a family member.*

1. In the past 12 months, were you or anyone else you listed attacked, mugged, or threatened with violence?

- Yes
 No

2. In the past 12 months, did anyone ATTEMPT to attack you or anyone else you listed?

- Yes
 No

3. In the past 12 months, did anyone force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

- Yes
 No

4. In the past 12 months, did anyone ATTEMPT to force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?

- Yes
 No

► If you marked 'YES' for any question above (1, 2, 3, or 4), continue with question 5 on the next page. Otherwise, skip to Section B on page 10.



Violent Crimes: Most Recent Incident

You reported that you or someone else you listed experienced a violent crime in the past 12 months. Please start with the most recent incident.

If there were none, please go to Section B on page 10.

5. In what month and year did the most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

year

6. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 2 and 3.

Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

Adult # **First Name** (Refer to Adults listed on pages 2 and 3.)

| | |
|--|--|
| | |
| | |
| | |
| | |

7. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
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| |
| |
| |
| |
| |
| |
| |
| |

8. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

9. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

10. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 12
- By sight only → GO TO 12
- Victim did not know the offender(s) → GO TO 12

11. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or step parent
- Own child or step-child
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

12. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

13. Did the offender attack the victim?

- Yes → GO TO 16 on the next page
- No



14. Did the offender ATTEMPT to attack the victim?

- Yes ➔ GO TO 16
- No

15. Did the offender threaten the victim with harm in any way?

- Yes
- No

16. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No ➔ GO TO 20

17. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 20
- No

18. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 20
- No

19. Was the victim sexually assaulted in some other way?

- Yes
- No

20. Did the victim suffer any injuries as a result of this incident?

- Yes
- No ➔ GO TO 22 in the next column

21. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

22. Did anyone report this crime to the police?

- Yes
- No ➔ GO TO 25

23. Did the police come once the incident was reported to them?

- Yes
- No ➔ GO TO 25

24. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else

- I don't know what the police did

25. Was anything stolen or taken during this incident?

- Yes
- No ➔ GO TO 27

26. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- A motor vehicle that the victim was in or near
- Something else

27. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime
- No ➔ GO TO Section B, page 10

Violent Crimes: Next Most Recent Incident

These questions are about the next most recent violent crime that happened to you or someone else you listed in the past 12 months.

If there were no other violent crimes, please go to Section B on page 10.

28. In what month and year did the next most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

29. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 2 and 3.

Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

Adult # **First Name** (Refer to Adults listed on pages 2 and 3.)

| | |
|--|--|
| | |
| | |
| | |
| | |

30. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
|--|
| |
|--|

31. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

32. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

33. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 35
- By sight only → GO TO 35
- Victim did not know the offender(s) → GO TO 35

34. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or step parent
- Own child or step-child
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

35. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

36. Did the offender attack the victim?

- Yes → GO TO 39 on the next page
- No



37. Did the offender ATTEMPT to attack the victim?

- Yes ➔ GO TO 39
- No

38. Did the offender threaten the victim with harm in any way?

- Yes
- No

39. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
- No ➔ GO TO 43

40. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 43
- No

41. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 43
- No

42. Was the victim sexually assaulted in some other way?

- Yes
- No

43. Did the victim suffer any injuries as a result of this incident?

- Yes
- No ➔ GO TO 45 in the next column

44. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
- No

45. Did anyone report this crime to the police?

- Yes
- No ➔ GO TO 48

46. Did the police come once the incident was reported to them?

- Yes
- No ➔ GO TO 48

47. What did the police do while they were there?

Mark all that apply.

- Took a report
- Searched/looked around
- Took evidence (e.g. fingerprints)
- Questioned witnesses or suspects
- Promised to investigate
- Arrested someone
- Something else

- I don't know what the police did

48. Was anything stolen or taken during this incident?

- Yes
- No ➔ GO TO 50

49. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
- Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
- A motor vehicle that the victim was in or near
- Something else

50. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime
- No ➔ GO TO Section B, page 10



Violent Crimes: Third Most Recent Incident

51. Other than the incidents that you have already reported, in what month and year did the third most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
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| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

52. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 2 and 3. Then write in that person's first name.

Adult # **First Name** (Refer to Adults listed on pages 2 and 3.)

| | |
|--|--|
| | |
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| | |
| | |

53. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
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| |
| |
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| |

54. Did anyone report this crime to the police?

- Yes
 No

55. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime in the next column
 No ➔ GO TO Section B on the next page

Violent Crimes: Fourth Most Recent Incident

56. Other than the incidents that you have already reported, in what month and year did the fourth most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

57. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 2 and 3. Then write in that person's first name.

Adult # **First Name** (Refer to Adults listed on pages 2 and 3.)

| | |
|--|--|
| | |
| | |
| | |
| | |

58. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
|--|
| |
| |
| |
| |

59. Did anyone report this crime to the police?

- Yes
 No

60. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes
 No ➔ GO TO Section B on the next page

61. You've already described four violent crimes. Other than those incidents, how many more violent crimes happened to you or someone else you listed in the past 12 months?

| | |
|--|--|
| | |
|--|--|

additional violent crime incidents

Section B: Theft and Break-ins

This section will ask about times in the past 12 months where someone may have stolen something, tried to steal something, or broken into this home.

Do not include any incidents you reported in the previous section as a violent crime.

62. In the past 12 months, did you or others in this household have anything stolen?

--It could have been something you wear or carry, like a wallet or purse, watch, or jewelry.

--It could have been electronic equipment, like a phone, tablet, or MP3 player.

- Yes
 No

63. In the past 12 months, was a car or other motor vehicle stolen or used without permission?

- Yes
 No

64. In the past 12 months, was anything stolen from a car?

--It could have been hubcaps or other parts, a radio or stereo, gasoline, personal items, or anything else.

- Yes
 No

65. In the past 12 months, was anything stolen from this house or apartment, from the yard, or from any other building that is part of your home, like a garage or shed?

--Think only of things that belong to you or others in this household.

- Yes
 No

66. In the past 12 months, so far as you know, did anyone ATTEMPT to steal something that belonged to you or others in this household?

- Yes
 No

67. In the past 12 months, did anyone break into this home, or attempt to break in, whether or not anything was stolen?

- Yes
 No

68. In the past 12 months, did you or others in this household have anything stolen while at work, or while away from your home?

- Yes
 No

► If you marked 'YES' for any of these questions (62 through 68), continue with the next page. Otherwise, skip to Section C on page 15.



Theft and Break-ins: Most Recent Incident

These next questions are about a theft or break-in that happened to you or others in this household in the past 12 months. If there was more than one, please start with the most recent.

If there were no thefts or break-ins, please go to Section C on page 15.

69. In what month and year did the most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

70. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|----------------------|
| <input type="text"/> |

71. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- If the incident occurred in this home continue with question 72, otherwise go to question 75 in the next column.

72. Did the offender actually get inside the home, structure, or building?

- Yes ➔ GO TO 74 in the next column
- No

73. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No ➔ GO TO 75

74. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

75. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes ➔ GO TO 77
- No

76. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

77. Was a car or other motor vehicle stolen during this incident?

- Yes ➔ GO TO 79
- No

78. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

79. What was the total value of the property that was taken?

\$.00

80. Did you or anyone else report this incident to the police?

- Yes
- No

81. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes ➔ GO TO 82 on the next page
- No ➔ GO TO Section C on page 15



Theft and Break-ins: Next Most Recent Incident

These are about the next most recent theft or break-in in the past 12 months.

If there were no thefts or break-ins, please go to Section C on page 15.

82. In what month and year did the next most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

month year

83. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|----------------------|
| <input type="text"/> |

84. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 85, otherwise go to question 88 in the next column.

85. Did the offender actually get inside the home, structure, or building?

- Yes ➔ GO TO 87 in the next column
- No

86. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No ➔ GO TO 88

87. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

88. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes ➔ GO TO 90
- No

89. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

90. Was a car or other motor vehicle stolen during this incident?

- Yes ➔ GO TO 92
- No

91. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

92. What was the total value of the property that was taken?

\$.00

93. Did you or anyone else report this incident to the police?

- Yes
- No

94. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes ➔ GO TO 95 on the next page
- No ➔ GO TO Section C on page 15



Theft and Break-ins: Third Most Recent Incident

These questions are about the third most recent theft or break-in in the past 12 months.

If there were no thefts or break-ins, please go to Section C on page 15.

95. In what month and year did the third most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

96. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

| |
|------|
| |

97. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 98, otherwise go to question 101 in the next column.

98. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO 100 in the next column
- No

99. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO 101

100. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

101. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes → GO TO 103
- No

102. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

103. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO 105
- No

104. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

105. What was the total value of the property that was taken?

\$.00

106. Did you or anyone else report this incident to the police?

- Yes
- No

107. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO 108 on the next page
- No → GO TO Section C on page 15



Theft and Break-ins: Fourth Most Recent Incident

These questions are about the fourth most recent theft or break-in in the past 12 months.

If there were no thefts or break-ins, please go to Section C on page 15.

108. In what month and year did the fourth most recent incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> |
| month | year | | | |

109. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

110. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

- If the incident occurred in this home continue with question 111, otherwise go to question 114 in the next column.

111. Did the offender actually get inside the home, structure, or building?

- Yes ➔ GO TO 113 in the next column
- No

112. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No ➔ GO TO 114

113. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

114. Was something stolen or taken without permission that belonged to you or others in this household?

- Yes ➔ GO TO 116
- No

115. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

116. Was a car or other motor vehicle stolen during this incident?

- Yes ➔ GO TO 118
- No

117. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

118. What was the total value of the property that was taken?

\$.00

119. Did you or anyone else report this incident to the police?

- Yes
- No

120. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes ➔ GO TO 121
- No ➔ GO TO Section C on the next page

121. You've already described four thefts or break-ins. Other than those incidents, how many more thefts or break-ins happened to you or others in this household in the past 12 months?

additional thefts or break-ins



Section C: Other Crimes

These questions will ask you about other kinds of crimes that you or someone else you listed may have experienced, such as, identity theft or vandalism.

Do not include any incidents you may have reported in the previous sections.

122. In the last 12 months has this home or the property of anyone in this household been vandalized?

--Think about any vandalism done to your home, or to any motor vehicles owned by members of this household in the last 12 months.

- Yes
 No ➔ GO TO 124

123. How many times in the last 12 months has this happened?

| | |
|--|--|
| | |
|--|--|

 number of vandalism incidents

124. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use any existing credit cards?

- Yes
 No ➔ GO TO 126

125. How many times in the last 12 months has this happened?

--Count multiple uses of the same card number before discovery as one time.

| | |
|--|--|
| | |
|--|--|

 number of times

126. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use other accounts without permission?

--Include accounts such as cell phones, bank accounts, debit cards, or check cards.

- Yes
 No ➔ GO TO 128 in the next column

127. How many times in the last 12 months has this happened?

--Count multiple uses of an account before discovery as one time.

| | |
|--|--|
| | |
|--|--|

 number of times

128. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use their personal information to obtain new credit cards or loans, or for other fraudulent purposes?

- Yes
 No ➔ GO TO 130

129. How many times in the last 12 months has this happened?

--Count multiple times before discovery as one time.

| | |
|--|--|
| | |
|--|--|

 number of times

130. Which category best fits the approximate total income of all persons in your household over the past 12 months?

--Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- \$0 to \$10,000
 \$10,001 to \$20,000
 \$20,001 to \$30,000
 \$30,001 to \$40,000
 \$40,001 to \$50,000
 \$50,001 to \$60,000
 \$60,001 to \$75,000
 \$75,001 to \$100,000
 \$100,001 to \$150,000
 \$150,001 or more



Your Community

1. On the whole, how much of the time is the community where you live safe?

- Always safe
- Mostly safe
- Sometimes safe
- Rarely safe
- Never safe

2. Is there any place within a mile of your home where you would be afraid to walk alone at night?

- Yes
- No

3. How often does fear of crime prevent you from doing things you would like to do?

- Very often
- Somewhat often
- Rarely
- Never

4. When you leave your home, how often do you think about it being broken into or vandalized while you're away?

- Very often
- Somewhat often
- Rarely
- Never

5. In the last 3 years, do you believe your community has:

- Become safer
- Stayed the same
- Become less safe
- Don't know

6. Overall, how much of the time is the place where you work safe?

- Always safe
- Mostly safe
- Sometimes safe
- Rarely safe
- Never safe
- Does not apply; do not work

7. While living at this address, have you ever contacted the local police department for assistance?

- Yes
- No ➔ GO TO 9

8. If so, how satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

9. How would you rate the job the local police department is doing in your community?

- Excellent
- Good
- Fair
- Poor
- Don't know

Thank you for completing this survey. Please return it in the postage-paid envelope provided.



Appendix A Survey Instruments

Year 1 Person Level Survey, Form A



American Crime Survey

A Survey Sponsored by
The Bureau of Justice Statistics



Title 42, Section 3732, United States Code, authorizes the Bureau of Justice Statistics, Department of Justice, to collect information using this survey and requires us to keep all information about you and your household strictly confidential. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB number. The valid OMB control number for this information collection is 1121-0351. Comments regarding any other aspect of this data collection may be sent to the DOJ Clearance Officer at the Bureau of Justice Statistics, 810 Seventh Street, NW Washington, DC 20531 or by calling survey support staff toll-free 1-855-863-6354.

Start Here

- Please use a black or blue pen to complete this form.
- Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

1. On the whole, how much of the time is the community where you live safe?
 - Always safe
 - Mostly safe
 - Sometimes safe
 - Rarely safe
 - Never safe
2. Is there any place within a mile of your home where you would be afraid to walk alone at night?
 - Yes
 - No
3. How often does fear of crime prevent you from doing things you would like to do?
 - Very often
 - Somewhat often
 - Rarely
 - Never
4. When you leave your home, how often do you think about it being broken into or vandalized while you're away?
 - Very often
 - Somewhat often
 - Rarely
 - Never

5. In the past 3 years, do you believe your community has:
 - Become safer
 - Stayed the same
 - Become less safe
 - Don't know
6. Overall, how much of the time is the place where you work safe?
 - Always safe
 - Mostly safe
 - Sometimes safe
 - Rarely safe
 - Never safe
 - Does not apply; do not work
7. While living at this address, have you ever contacted the local police department for assistance?
 - Yes ➔ GO TO 8
 - No ➔ GO TO 9
8. If yes, how satisfied were you with the police response?
 - Very satisfied
 - Mostly satisfied
 - Somewhat satisfied
 - Not at all satisfied
9. How would you rate the job the local police department is doing in your community?
 - Excellent
 - Good
 - Fair
 - Poor
 - Don't know



23. Please describe what was stolen during the most recent theft.

24. Thinking about everything that may have been stolen from your home or from members of your household in the past 12 months, what would you say was the total value of everything that was taken?

- Nothing was taken
- Less than \$10
- \$10 - \$49
- \$50 - \$249
- \$250 - \$999
- \$1,000 or more

25. In the past 12 months, were any of these thefts reported to the police?

- Yes
- No
- Does not apply, nothing stolen

26. Do you own or rent the place where you're living?

- Own
- Rent
- Other, describe below

27. How long have you lived at this address?

- 1 year or less
- Less than 5 years, more than 1 year
- 5 years or more

28. Including yourself — How many people age 18 or older live in this household? Include yourself, family members, roommates, and boarders.

Number of people age 18 or older

29. How many children ages 0-17 live in this household? Please include small children and infants.

Number of people ages 0-17

30. Which category best fits the approximate total income of all persons in your household over the past 12 months?

Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- \$0 to \$10,000
- \$10,001 to \$20,000
- \$20,001 to \$30,000
- \$30,001 to \$40,000
- \$40,001 to \$50,000
- \$50,001 to \$60,000
- \$60,001 to \$75,000
- \$75,001 to \$100,000
- \$100,001 to \$150,000
- \$150,000 or more

You are Adult 1. Please answer questions 31 to 80 for yourself (Adult 1).

Physical Attacks

31. In the last 12 months, has anyone physically attacked you?

- Yes → GO TO 32
- No → GO TO 41

32. In the last 12 months, were you physically attacked more than once?

- Yes
- No

33. Did the person(s) who attacked you have a weapon?

- Yes → GO TO 34
- No → GO TO 35
- Don't Know → GO TO 35



34. What type of weapon(s) did they have?

35. In the last 12 months, were you injured during an attack?

- Yes
- No

36. In the last 12 months, was anything stolen from you during an attack?

- Yes
- No

37. At the time, what was your relationship with the person or persons who attacked you?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

38. In the past 12 months, were any of these attacks reported to the police?

- Yes
- No

39. In what month and year did the most recent attack occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

40. Please describe the most recent attack: *what happened and where it happened.*

Threats

41. In the last 12 months, has anyone threatened you with physical violence?

- Yes ➔ GO TO 42
- No ➔ GO TO 50

42. In the last 12 months, were you threatened on more than one occasion?

- Yes
- No

43. Did the person(s) who threatened you have a weapon?

- Yes ➔ GO TO 44
- No ➔ GO TO 45
- Don't know ➔ GO TO 45

44. What type of weapon(s) did they have?

45. In the last 12 months, was anything stolen when you were threatened?

- Yes
- No

46. At the time, what was your relationship with the person or persons who threatened you with physical violence?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

47. In the past 12 months, were any of these threats reported to the police?

- Yes
- No



48. In what month and year did the most recent threat occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | | | | |
|----------------------|----------------------|----------|----------|----------------------|
| <input type="text"/> | <input type="text"/> | 2 | 0 | <input type="text"/> |
| month | | year | | |

49. Please describe the most recent threat: what happened and where it happened.

55. At the time, what was your relationship with the person or persons who forced you to have unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

56. In the past 12 months, was any of the forced unwanted sexual activity reported to the police?

- Yes
- No

57. In what month and year did the most recent forced unwanted sexual activity occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> |
| month | | year | | |

58. Please describe the most recent forced unwanted sexual activity: what happened and where it happened.

Unwanted Sexual Activity

50. In the last 12 months, did anyone force you to have any type of unwanted sexual activity?

- Yes → GO TO 51
- No → GO TO 59

51. Were you forced to have unwanted sexual activity more than once?

- Yes
- No

52. Did the person(s) who forced you to have unwanted sexual activity have a weapon?

- Yes → GO TO 53
- No → GO TO 54
- Don't know → GO TO 54

53. What type of weapon(s) did they have?

54. In the last 12 months, were you injured during forced unwanted sexual activity?

- Yes
- No

Threats of Unwanted Sexual Activity

59. In the last 12 months, did anyone threaten you with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force you but did not succeed.

- Yes → GO TO 60
- No → GO TO 68



60. In the last 12 months, were you threatened with unwanted sexual activity more than once?

Yes
 No

61. Did the person(s) who threatened you with forced unwanted sexual activity have a weapon?

Yes → GO TO 62
 No → GO TO 63
 Don't know → GO TO 63

62. What type of weapon(s) did they have?

63. Were you injured during the threat of forced unwanted sexual activity?

Yes
 No

64. At the time, what was your relationship with the person or persons who threatened you with forced unwanted sexual activity?

Please mark all that apply.

Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

65. In the past 12 months, were any of the threats of forced unwanted sexual activity reported to the police?

Yes
 No

66. In what month and year did the most recent threat of forced unwanted sexual activity occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | |
|-------|------|
| | |
| month | year |

67. Please describe the most recent threat of unwanted sexual activity: *what happened and where it happened.*

Other Thefts Not Described Earlier

68. Besides what you may have told us about earlier, did you have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

Yes → GO TO 69
 No → GO TO 72

69. In what month and year did your most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | |
|-------|------|
| | |
| month | year |

70. Please describe what was stolen in the most recent theft:

71. In the past 12 months, were any of the other things stolen reported to the police?

Yes
 No

72. In the last 12 months, did you have a credit or debit card stolen or used without your permission?

Yes
 No



73. In the last 12 months, did you have a bank account used without your permission?
- Yes
 No
74. In the last 12 months, did anyone steal your private information or use it to get a credit card or a loan?
- Yes
 No
75. In the past 12 months, did you or anyone else tell the police about any unauthorized use of your financial accounts or personal information?
- Yes
 No
- About You - Adult 1**
76. What is your gender?
- Male
 Female
77. What is your age?
78. Are you of Hispanic or Latino origin?
- Yes, Hispanic or Latino
 No, not Hispanic or Latino
79. What is your race?
Please mark all that apply.
- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander
80. What is the highest grade of school completed, or the highest degree you have received?
- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

Adult 2

Please answer questions 81 to 130 about Adult 2.
If you are the only adult in the household, please mail the completed survey back in the postage-paid envelope.

Physical Attacks

81. In the last 12 months, has anyone physically attacked Adult 2?
- Yes → GO TO 82
 No → GO TO 91
82. In the last 12 months, was Adult 2 physically attacked more than once?
- Yes
 No
83. Did the person(s) who attacked Adult 2 have a weapon?
- Yes → GO TO 84
 No → GO TO 85
 Don't Know → GO TO 85
84. What type of weapon(s) did they have?
85. In the last 12 months, was Adult 2 injured during an attack?
- Yes
 No
86. In the last 12 months, was anything stolen from Adult 2 during an attack?
- Yes
 No



- 87. At the time, what was Adult 2's relationship with the person or persons who attacked him/her?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

- 88. In the past 12 months, were any of these attacks on Adult 2 reported to the police?**

- Yes
- No

- 89. In what month and year did the most recent attack on Adult 2 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

month

year

- 90. Please describe the most recent attack on Adult 2: what happened and where it happened.**

| |
|--|
| |
| |
| |
| |
| |

Threats

- 91. In the last 12 months, has anyone threatened Adult 2 with physical violence?**

- Yes ➔ GO TO 92
- No ➔ GO TO 100

- 92. In the last 12 months, was Adult 2 threatened on more than one occasion?**

- Yes
- No

- 93. Did the person(s) who threatened Adult 2 have a weapon?**

- Yes ➔ GO TO 94
- No ➔ GO TO 95
- Don't know ➔ GO TO 95

- 94. What type of weapon(s) did they have?**

- 95. In the last 12 months, was anything stolen when Adult 2 was threatened?**

- Yes
- No

- 96. At the time, what was Adult 2's relationship with the person or persons who threatened Adult 2 with physical violence?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

- 97. In the past 12 months, were any of these threats on Adult 2 reported to the police?**

- Yes
- No

- 98. In what month and year did the most recent threat on Adult 2 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

month

year



99. Please describe the most recent threat on Adult 2:
what happened and where it happened.

A large, empty rectangular frame with a thick black border, centered on a white background. The frame is oriented horizontally and occupies most of the page.

Unwanted Sexual Activity

- 100. In the last 12 months, did anyone force Adult 2 to have any type of unwanted sexual activity?**

- Yes → GO TO 101
 - No → GO TO 109

- 101. Was Adult 2 forced to have unwanted sexual activity more than once?**

- Yes
 - No

- 102. Did the person(s) who forced Adult 2 to have unwanted sexual activity have a weapon?**

- Yes → GO TO 103
 - No → GO TO 104
 - Don't know → GO TO 104

- 103. What type of weapon(s) did they have?**

| |
|--|
| |
|--|

- 104. In the last 12 months, was Adult 2 injured during forced unwanted sexual activity?**

- Yes
 - No

- 105. At the time, what was Adult 2's relationship with the person or persons who forced Adult 2 to have unwanted sexual activity?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 - Former spouse, partner, boyfriend or girlfriend
 - Other family member or relative
 - Other friend or acquaintance
 - Did not know the person

- 106. In the past 12 months, was any of the forced unwanted sexual activity on Adult 2 reported to the police?**

- Yes
 No

- 107. In what month and year did the most recent forced unwanted sexual activity on Adult 2 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

The diagram consists of two groups of rectangular boxes. The left group, labeled 'month', contains two boxes. The right group, labeled 'year', contains four boxes.

- 108.** Please describe the most recent forced unwanted sexual activity on Adult 2: what happened and where it happened.

Threats of Unwanted Sexual Activity

- 109.** In the last 12 months, did anyone threaten Adult 2 with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force Adult 2 but did not succeed.

- Yes → GO TO 110
 No → GO TO 118



110. In the last 12 months, was Adult 2 threatened with unwanted sexual activity more than once?

- Yes
- No

111. Did the person(s) who threatened Adult 2 with forced unwanted sexual activity have a weapon?

- Yes ➔ GO TO 112
- No ➔ GO TO 113
- Don't know ➔ GO TO 113

112. What type of weapon(s) did they have?

113. Was Adult 2 injured during the threat of forced unwanted sexual activity?

- Yes
- No

114. At the time, what was Adult 2's relationship with the person or persons who threatened Adult 2 with forced unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

115. In the past 12 months, were any of the threats of forced unwanted sexual activity on Adult 2 reported to the police?

- Yes
- No

116. In what month and year did the most recent threat of forced unwanted sexual activity on Adult 2 occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

117. Please describe the most recent threat of unwanted sexual activity on Adult 2: what happened and where it happened.

Other Thefts Not Described Above

118. Besides what you may have told us about earlier, did Adult 2 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes ➔ GO TO 119
- No ➔ GO TO 122

119. In what month and year did Adult 2's most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

120. Please describe what was stolen from Adult 2 in the most recent theft:

121. In the past 12 months, were any of the other things stolen from Adult 2 reported to the police?

- Yes
- No



122. In the last 12 months, did Adult 2 have a credit or debit card stolen or used without his/her permission?

- Yes
- No

123. In the last 12 months, did Adult 2 have a bank account used without his/her permission?

- Yes
- No

124. In the last 12 months, did anyone steal Adult 2's private information or use it to get a credit card or a loan?

- Yes
- No

125. In the past 12 months, did Adult 2 or anyone else tell the police about any unauthorized use of Adult 2's financial accounts or personal information?

- Yes
- No

About Adult 2

126. What gender is Adult 2?

- Male
- Female

127. How old is Adult 2?

128. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

129. What race is Adult 2?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

130. What is the highest grade of school completed, or the highest degree Adult 2 has received?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

**Please answer questions 131 to 180 about Adult 3.
If you are the only 2 adults in the household, please mail the completed survey back in the postage-paid envelope.**

Physical Attacks

131. In the last 12 months, has anyone physically attacked Adult 3?

- Yes ➔ GO TO 132
- No ➔ GO TO 141

132. In the last 12 months, was Adult 3 physically attacked more than once?

- Yes
- No

133. Did the person(s) who attacked Adult 3 have a weapon?

- Yes ➔ GO TO 134
- No ➔ GO TO 135
- Don't Know ➔ GO TO 135

134. What type of weapon(s) did they have?

135. In the last 12 months, was Adult 3 injured during an attack?

- Yes
- No



149. Please describe the most recent threat on Adult 3: what happened and where it happened.

Unwanted Sexual Activity

150. In the last 12 months, did anyone force Adult 3 to have any type of unwanted sexual activity?

- Yes → GO TO 151
 No → GO TO 159

151. Was Adult 3 forced to have unwanted sexual activity more than once?

- Yes
 No

152. Did the person(s) who forced Adult 3 to have unwanted sexual activity have a weapon?

- Yes → GO TO 153
 No → GO TO 154
 Don't know → GO TO 154

153. What type of weapon(s) did they have?

154. In the last 12 months, was Adult 3 injured during forced unwanted sexual activity?

- Yes
 No

155. At the time, what was Adult 3's relationship with the person or persons who forced Adult 3 to have unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

156. In the past 12 months, was any of the forced unwanted sexual activity on Adult 3 reported to the police?

- Yes
 No

157. In what month and year did the most recent forced unwanted sexual activity on Adult 3 occur?

If you are unsure, make your best guess — including the month the incident occurred.

month year

158. Please describe the most recent forced unwanted sexual activity on Adult 3: what happened and where it happened.

Threats of Unwanted Sexual Activity

159. In the last 12 months, did anyone threaten Adult 3 with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force Adult 3 but did not succeed.

- Yes → GO TO 160
 No → GO TO 168



160. In the last 12 months, was Adult 3 threatened with unwanted sexual activity more than once?

- Yes
- No

161. Did the person(s) who threatened Adult 3 with forced unwanted sexual activity have a weapon?

- Yes → GO TO 162
- No → GO TO 163
- Don't know → GO TO 163

162. What type of weapon(s) did they have?

163. Was Adult 3 injured during the threat of forced unwanted sexual activity?

- Yes
- No

164. At the time, what was Adult 3's relationship with the person or persons who threatened Adult 3 with forced unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

165. In the past 12 months, were any of the threats of forced unwanted sexual activity on Adult 3 reported to the police?

- Yes
- No

166. In what month and year did the most recent threat of forced unwanted sexual activity on Adult 3 occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

month

year

167. Please describe the most recent threat of unwanted sexual activity on Adult 3: what happened and where it happened.

| |
|----------------------|
| <input type="text"/> |

Other Thefts Not Described Above

168. Besides what you may have told us about earlier, did Adult 3 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes → GO TO 169
- No → GO TO 172

169. In what month and year did Adult 3's most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

170. Please describe what was stolen from Adult 3 in the most recent theft:

| |
|----------------------|
| <input type="text"/> |
| <input type="text"/> |
| <input type="text"/> |

171. In the past 12 months, were any of the other things stolen from Adult 3 reported to the police?

- Yes
- No

172. In the last 12 months, did Adult 3 have a credit or debit card stolen or used without his/her permission?

- Yes
- No



Adult 4

173. In the last 12 months, did Adult 3 have a bank account used without his/her permission?

- Yes
- No

174. In the last 12 months, did anyone steal Adult 3's private information or use it to get a credit card or a loan?

- Yes
- No

175. In the past 12 months, did Adult 3 or anyone else tell the police about any unauthorized use of Adult 3's financial accounts or personal information?

- Yes
- No

About Adult 3

176. What gender is Adult 3?

- Male
- Female

177. How old is Adult 3?

178. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

179. What race is Adult 3?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

180. What is the highest grade of school completed, or the highest degree Adult 3 has received?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

Please answer questions 181 to 230 about Adult 4.
If you are the only 3 adults in the household, please mail the completed survey back in the postage-paid envelope.

Physical Attacks

181. In the last 12 months, has anyone physically attacked Adult 4?

- Yes → GO TO 182
- No → GO TO 191

182. In the last 12 months, was Adult 4 physically attacked more than once?

- Yes
- No

183. Did the person(s) who attacked Adult 4 have a weapon?

- Yes → GO TO 184
- No → GO TO 185
- Don't Know → GO TO 185

184. What type of weapon(s) did they have?

185. In the last 12 months, was Adult 4 injured during an attack?

- Yes
- No

186. In the last 12 months, was anything stolen from Adult 4 during an attack?

- Yes
- No



199. Please describe the most recent threat on Adult 4:
what happened and where it happened.

A large, empty rectangular frame with a thick black border, centered on a white background. The frame is oriented vertically and appears to be a placeholder for an image or diagram.

Unwanted Sexual Activity

- 200. In the last 12 months, did anyone force Adult 4 to have any type of unwanted sexual activity?**

- Yes → GO TO 201
 - No → GO TO 209

- 201. Was Adult 4 forced to have unwanted sexual activity more than once?**

- Yes
 No

- 202. Did the person(s) who forced Adult 4 to have unwanted sexual activity have a weapon?**

- Yes → GO TO 203
 - No → GO TO 204
 - Don't know → GO TO 204

- 203. What type of weapon(s) did they have?**

ANSWER

- 204. In the last 12 months, was Adult 4 injured during forced unwanted sexual activity?**

- Yes
 No

- 205. At the time, what was Adult 4's relationship with the person or persons who forced Adult 4 to have unwanted sexual activity?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 - Former spouse, partner, boyfriend or girlfriend
 - Other family member or relative
 - Other friend or acquaintance
 - Did not know the person

- 206.** In the past 12 months, was any of the forced unwanted sexual activity on Adult 4 reported to the police?

- Yes
 No

- 207.** In what month and year did the most recent forced unwanted sexual activity on Adult 4 occur?

If you are unsure, make your best guess — including the month the incident occurred.

The image shows two separate groups of empty rectangular boxes. The first group contains two boxes side-by-side. The second group contains three boxes side-by-side. These boxes are intended for children to draw their answers in.

month

year

- 208.** Please describe the most recent forced unwanted sexual activity on Adult 4: what happened and where it happened.

Threats of Unwanted Sexual Activity

- 209.** In the last 12 months, did anyone threaten Adult 4 with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force Adult 4 but did not succeed.

- Yes → GO TO 210
 - No → GO TO 218



210. In the last 12 months, was Adult 4 threatened with unwanted sexual activity more than once?

- Yes
- No

211. Did the person(s) who threatened Adult 4 with forced unwanted sexual activity have a weapon?

- Yes ➔ GO TO 212
- No ➔ GO TO 213
- Don't know ➔ GO TO 213

212. What type of weapon(s) did they have?

213. Was Adult 4 injured during the threat of forced unwanted sexual activity?

- Yes
- No

214. At the time, what was Adult 4's relationship with the person or persons who threatened Adult 4 with forced unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

215. In the past 12 months, were any of the threats of forced unwanted sexual activity on Adult 4 reported to the police?

- Yes
- No

216. In what month and year did the most recent threat of forced unwanted sexual activity on Adult 4 occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

217. Please describe the most recent threat of unwanted sexual activity on Adult 4: *what happened and where it happened.*

| |
|----------------------|
| <input type="text"/> |

Other Thefts Not Described Above

218. Besides what you may have told us about earlier, did Adult 4 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes ➔ GO TO 219
- No ➔ GO TO 222

219. In what month and year did Adult 4's most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| month | year |

220. Please describe what was stolen from Adult 4 in the most recent theft:

| |
|----------------------|
| <input type="text"/> |
| <input type="text"/> |
| <input type="text"/> |

221. In the past 12 months, were any of the other things stolen from Adult 4 reported to the police?

- Yes
- No

222. In the last 12 months, did Adult 4 have a credit or debit card stolen or used without his/her permission?

- Yes
- No



- 223.** In the last 12 months, did Adult 4 have a bank account used without his/her permission?

Yes
 No

224. In the last 12 months, did anyone steal Adult 4's private information or use it to get a credit card or a loan?

Yes
 No

225. In the past 12 months, did Adult 4 or anyone else tell the police about any unauthorized use of Adult 4's financial accounts or personal information?

Yes
 No

Other Adults

- 231.** Are there more than 4 adults living at your home?

Yes → **GO TO 232**

No → **Survey is complete**

232. Did any of the other adults in this home experience a crime in the last 12 months?

Yes → **GO TO 233**

No → **Survey is complete**

233. Please describe the crime(s):

About Adult 4

- 226. What gender is Adult 4?**

Male
 Female

227. How old is Adult 4?

228. Is Adult 4 of Hispanic or Latino origin?

Yes, Hispanic or Latino
 No, not Hispanic or Latino

229. What race is Adult 4?
Please mark all that apply.

White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

230. What is the highest grade of school completed, or the highest degree Adult 4 has received?

Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

Thank you.

**Please return survey in the
envelope provided.**



Year 1 Person Level Survey, Form B version



American Crime Survey

A Survey Sponsored by
The Bureau of Justice Statistics



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Start Here

- ▶ Please use a black or blue pen to complete this form.
- ▶ Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

1. In the last 12 months, did anyone break into your home or get in without permission? *Include garages and storage units on your property.*
 Yes ➔ GO TO 2
 No ➔ GO TO 10
2. In the last 12 months, was your home broken into or entered without permission more than once? *Include garages and storage units on your property.*
 Yes
 No
3. Was someone at home any time in the last 12 months when someone broke in or entered your home without permission? *Include garages and storage units on your property.*
 Yes ➔ GO TO 4
 No ➔ GO TO 5
4. When someone was home, did they see the offender?
 Yes
 No
5. Was anything stolen when someone broke in or entered your home without permission any time in the last 12 months?
 Yes ➔ GO TO 6
 No ➔ GO TO 7

6. What was stolen in the last 12 months?

7. In the last 12 months, was any break-in or entry without permission reported to the police?

- Yes
 No

8. In what month and year did the most recent break-in occur?

If you are unsure, make your best guess — including the month the incident occurred.

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| month | | year | | |

9. Please describe the most recent break-in: *what happened and where it happened.*

10. In the last 12 months, did anyone try to break into your home, but not succeed?

- Yes
 No, no attempted break-ins

11. In the last 12 months, was a car, truck, or other motor vehicle belonging to anyone in your household ...

Yes No

The vehicle was vandalized or broken into

Something was stolen from the vehicle

The vehicle itself was stolen



12. Besides what you told us about earlier, was anything else stolen from your home, yard, or vehicle in the last 12 months?

Yes → GO TO 13
 No → GO TO 15

13. In what month and year did the most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

14. Please describe what was stolen during the most recent theft.

15. Thinking about everything that may have been stolen from your home or from members of your household in the past 12 months, what would you say was the total value of everything that was taken?

Nothing was taken
 Less than \$10
 \$10 - \$49
 \$50 - \$249
 \$250 - \$999
 \$1,000 or more

16. In the past 12 months, were any of these thefts reported to the police?

Yes
 No
 Does not apply, nothing stolen

Your Household

17. Do you own or rent the place where you're living?

Own
 Rent
 Other, describe below

18. How long have you lived at this address?

1 year or less
 Less than 5 years, more than 1 year
 5 years or more

19. Including yourself — How many people age 18 or older live in this household? Include yourself, family members, roommates, and boarders.

Number of people age 18 or older

20. How many children ages 0-17 live in this household? Please include small children and infants.

Number of children ages 0-17

21. Which category best fits the approximate total income of all persons in your household over the past 12 months?

Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

\$0 to \$10,000
 \$10,001 to \$20,000
 \$20,001 to \$30,000
 \$30,001 to \$40,000
 \$40,001 to \$50,000
 \$50,001 to \$60,000
 \$60,001 to \$75,000
 \$75,001 to \$100,000
 \$100,001 to \$150,000
 \$150,000 or more



36. In the last 12 months, was anything stolen when you were threatened?

Yes
 No

37. At the time, what was your relationship with the person or persons who threatened you with physical violence?

Please mark all that apply.

Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

38. In the past 12 months, were any of these threats reported to the police?

Yes
 No

39. In what month and year did the most recent threat occur?

If you are unsure, make your best guess — including the month the incident occurred.

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year

40. Please describe the most recent threat: what happened and where it happened.

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Unwanted Sexual Activity

41. In the last 12 months, did anyone force you to have any type of unwanted sexual activity?

Yes → GO TO 42
 No → GO TO 50

42. Were you forced to have unwanted sexual activity more than once?

Yes
 No

43. Did the person(s) who forced you to have unwanted sexual activity have a weapon?

Yes → GO TO 44
 No → GO TO 45
 Don't know → GO TO 45

44. What type of weapon(s) did they have?

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45. In the last 12 months, were you injured during forced unwanted sexual activity?

Yes
 No

46. At the time, what was your relationship with the person or persons who forced you to have unwanted sexual activity?

Please mark all that apply.

Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

47. In the past 12 months, was any of the forced unwanted sexual activity reported to the police?

Yes
 No

48. In what month and year did the most recent forced unwanted sexual activity occur?

If you are unsure, make your best guess — including the month the incident occurred.

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49. Please describe the most recent forced unwanted sexual activity: *what happened and where it happened.*

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Threats of Unwanted Sexual Activity

50. In the last 12 months, did anyone threaten you with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force you but did not succeed.

Yes ➔ GO TO 51
 No ➔ GO TO 59

51. In the last 12 months, were you threatened with unwanted sexual activity more than once?

Yes
 No

52. Did the person(s) who threatened you with forced unwanted sexual activity have a weapon?

Yes ➔ GO TO 53
 No ➔ GO TO 54
 Don't know ➔ GO TO 54

53. What type of weapon(s) did they have?

54. Were you injured during the threat of forced unwanted sexual activity?

Yes

No

55. At the time, what was your relationship with the person or persons who threatened you with forced unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 - Former spouse, partner, boyfriend or girlfriend
 - Other family member or relative
 - Other friend or acquaintance
 - Did not know the person

56. In the past 12 months, were any of the threats of forced unwanted sexual activity reported to the police?

- Yes
 No

- 57. In what month and year did the most recent threat of forced unwanted sexual activity occur?**

If you are unsure, make your best guess — including the month the incident occurred.

The image consists of two separate groups of rectangular boxes. The left group contains two boxes side-by-side. The right group contains four boxes arranged in a horizontal row.

month

year

58. Please describe the most recent threat of unwanted sexual activity: what happened and where it happened.

A large, empty rectangular frame with a thick black border, centered on a white background. The frame is oriented vertically and appears to be a placeholder for an image or diagram.

Other Thefts Not Described Earlier

59. Besides what you may have told us about earlier, did you have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes → GO TO 60
 - No → GO TO 63



60. In what month and year did your most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

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year

61. Please describe what was stolen in the most recent theft:

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62. In the past 12 months, were any of the other things stolen reported to the police?

- Yes
 No

63. In the last 12 months, did you have a credit or debit card stolen or used without your permission?

- Yes
 No

64. In the last 12 months, did you have a bank account used without your permission?

- Yes
 No

65. In the last 12 months, did anyone steal your private information or use it to get a credit card or a loan?

- Yes
 No

66. In the past 12 months, did you or anyone else tell the police about any unauthorized use of your financial accounts or personal information?

- Yes
 No

About You - Adult 1

67. What is your gender?

- Male
 Female

68. What is your age?

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69. Are you of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

70. What is your race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

71. What is the highest grade of school completed, or the highest degree you have received?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

Please answer questions 72 to 121 about Adult 2.
If you are the only adult in the household, please skip to question 225.

Physical Attacks

72. In the last 12 months, has anyone physically attacked Adult 2?

- Yes ➔ GO TO 73
 No ➔ GO TO 82

73. In the last 12 months, was Adult 2 physically attacked more than once?

- Yes
 No



74. Did the person(s) who attacked Adult 2 have a weapon?

- Yes → GO TO 75
- No → GO TO 76
- Don't Know → GO TO 76

75. What type of weapon(s) did they have?

76. In the last 12 months, was Adult 2 injured during an attack?

- Yes
- No

77. In the last 12 months, was anything stolen from Adult 2 during an attack?

- Yes
- No

78. At the time, what was Adult 2's relationship with the person or persons who attacked him/her?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

79. In the past 12 months, were any of these attacks on Adult 2 reported to the police?

- Yes
- No

80. In what month and year did the most recent attack on Adult 2 occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

81. Please describe the most recent attack on Adult 2: what happened and where it happened.

Threats

82. In the last 12 months, has anyone threatened Adult 2 with physical violence?

- Yes → GO TO 83
- No → GO TO 91

83. In the last 12 months, was Adult 2 threatened on more than one occasion?

- Yes
- No

84. Did the person(s) who threatened Adult 2 have a weapon?

- Yes → GO TO 85
- No → GO TO 86
- Don't know → GO TO 86

85. What type of weapon(s) did they have?

86. In the last 12 months, was anything stolen when Adult 2 was threatened?

- Yes
- No



87. At the time, what was Adult 2's relationship with the person or persons who threatened Adult 2 with physical violence?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

88. In the past 12 months, were any of these threats on Adult 2 reported to the police?

- Yes
- No

89. In what month and year did the most recent threat on Adult 2 occur?

If you are unsure, make your best guess — including the month the incident occurred.

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year

90. Please describe the most recent threat on Adult 2: what happened and where it happened.

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Unwanted Sexual Activity

91. In the last 12 months, did anyone force Adult 2 to have any type of unwanted sexual activity?

- Yes ➔ GO TO 92
- No ➔ GO TO 100

92. Was Adult 2 forced to have unwanted sexual activity more than once?

- Yes
- No

93. Did the person(s) who forced Adult 2 to have unwanted sexual activity have a weapon?

- Yes ➔ GO TO 94
- No ➔ GO TO 95
- Don't know ➔ GO TO 95

94. What type of weapon(s) did they have?

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95. In the last 12 months, was Adult 2 injured during forced unwanted sexual activity?

- Yes
- No

96. At the time, what was Adult 2's relationship with the person or persons who forced Adult 2 to have unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

97. In the past 12 months, was any of the forced unwanted sexual activity on Adult 2 reported to the police?

- Yes
- No

98. In what month and year did the most recent forced unwanted sexual activity on Adult 2 occur?

If you are unsure, make your best guess — including the month the incident occurred.

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year



99. Please describe the most recent forced unwanted sexual activity on Adult 2: *what happened and where it happened.*

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Threats of Unwanted Sexual Activity

100. In the last 12 months, did anyone threaten Adult 2 with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force Adult 2 but did not succeed.

Yes → GO TO 101

No → GO TO 109

101. In the last 12 months, was Adult 2 threatened with unwanted sexual activity more than once?

Yes

No

- 102. Did the person(s) who threatened Adult 2 with forced unwanted sexual activity have a weapon?**

Yes → GO TO 103
 No → GO TO 104
 Don't know → GO TO 104

- 103. What type of weapon(s) did they have?**

- 104. Was Adult 2 injured during the threat of forced unwanted sexual activity?**

Yes

No

- 105. At the time, what was Adult 2's relationship with the person or persons who threatened Adult 2 with forced unwanted sexual activity?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 - Former spouse, partner, boyfriend or girlfriend
 - Other family member or relative
 - Other friend or acquaintance
 - Did not know the person

- 106. In the past 12 months, were any of the threats of forced unwanted sexual activity on Adult 2 reported to the police?**

- Yes
 No

- 107. In what month and year did the most recent threat of forced unwanted sexual activity on Adult 2 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

If you are unsure, make your best guess — including the month the incident occurred.

The diagram consists of two parts. On the left, under the label "month", there are two adjacent boxes. On the right, under the label "year", there are four adjacent boxes arranged in a single row.

- 108. Please describe the most recent threat of unwanted sexual activity on Adult 2: what happened and where it happened.**

Other Thefts Not Described Above

- 109. Besides what you may have told us about earlier, did Adult 2 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)**

- Yes → GO TO 110
 - No → GO TO 113



110. In what month and year did Adult 2's most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

111. Please describe what was stolen from Adult 2 in the most recent theft:

112. In the past 12 months, were any of the other things stolen from Adult 2 reported to the police?

- Yes
 No

113. In the last 12 months, did Adult 2 have a credit or debit card stolen or used without his/her permission?

- Yes
 No

114. In the last 12 months, did Adult 2 have a bank account used without his/her permission?

- Yes
 No

115. In the last 12 months, did anyone steal Adult 2's private information or use it to get a credit card or a loan?

- Yes
 No

116. In the past 12 months, did Adult 2 or anyone else tell the police about any unauthorized use of Adult 2's financial accounts or personal information?

- Yes
 No

About Adult 2

117. What gender is Adult 2?

- Male
 Female

118. How old is Adult 2?

119. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

120. What race is Adult 2?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

121. What is the highest grade of school completed, or the highest degree Adult 2 has received?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

Please answer questions 122 to 171 about Adult 3.

If there are only 2 adults in the household, please skip to question 225.

Physical Attacks

122. In the last 12 months, has anyone physically attacked Adult 3?

- Yes ➔ GO TO 123
 No ➔ GO TO 132



123. In the last 12 months, was Adult 3 physically attacked more than once?

- Yes
- No

124. Did the person(s) who attacked Adult 3 have a weapon?

- Yes ➔ GO TO 125
- No ➔ GO TO 126
- Don't Know ➔ GO TO 126

125. What type of weapon(s) did they have?

126. In the last 12 months, was Adult 3 injured during an attack?

- Yes
- No

127. In the last 12 months, was anything stolen from Adult 3 during an attack?

- Yes
- No

128. At the time, what was Adult 3's relationship with the person or persons who attacked him/her?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

129. In the past 12 months, were any of these attacks on Adult 3 reported to the police?

- Yes
- No

130. In what month and year did the most recent attack on Adult 3 occur?

If you are unsure, make your best guess — including the month the incident occurred.

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month

year

131. Please describe the most recent attack on Adult 3: what happened and where it happened.

Threats

132. In the last 12 months, has anyone threatened Adult 3 with physical violence?

- Yes ➔ GO TO 133
- No ➔ GO TO 141

133. In the last 12 months, was Adult 3 threatened on more than one occasion?

- Yes
- No

134. Did the person(s) who threatened Adult 3 have a weapon?

- Yes ➔ GO TO 135
- No ➔ GO TO 136
- Don't know ➔ GO TO 136

135. What type of weapon(s) did they have?

136. In the last 12 months, was anything stolen when Adult 3 was threatened?

- Yes
- No



- 137. At the time, what was Adult 3's relationship with the person or persons who threatened Adult 3 with physical violence?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

- 138. In the past 12 months, were any of these threats on Adult 3 reported to the police?**

- Yes
- No

- 139. In what month and year did the most recent threat on Adult 3 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

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month year

- 140. Please describe the most recent threat on Adult 3: what happened and where it happened.**

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Unwanted Sexual Activity

- 141. In the last 12 months, did anyone force Adult 3 to have any type of unwanted sexual activity?**

- Yes → GO TO 142
- No → GO TO 150

- 142. Was Adult 3 forced to have unwanted sexual activity more than once?**

- Yes
- No

- 143. Did the person(s) who forced Adult 3 to have unwanted sexual activity have a weapon?**

- Yes → GO TO 144
- No → GO TO 145
- Don't know → GO TO 145

- 144. What type of weapon(s) did they have?**

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- 145. In the last 12 months, was Adult 3 injured during forced unwanted sexual activity?**

- Yes
- No

- 146. At the time, what was Adult 3's relationship with the person or persons who forced Adult 3 to have unwanted sexual activity?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

- 147. In the past 12 months, was any of the forced unwanted sexual activity on Adult 3 reported to the police?**

- Yes
- No

- 148. In what month and year did the most recent forced unwanted sexual activity on Adult 3 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

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month year



- 149.** Please describe the most recent forced unwanted sexual activity on Adult 3: *what happened and where it happened.*

Threats of Unwanted Sexual Activity

150. In the last 12 months, did anyone threaten Adult 3 with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force Adult 3 but did not succeed.

Yes → GO TO 151
 No → GO TO 159

151. In the last 12 months, was Adult 3 threatened with unwanted sexual activity more than once?

Yes
 No

152. Did the person(s) who threatened Adult 3 with forced unwanted sexual activity have a weapon?

Yes → GO TO 153
 No → GO TO 154
 Don't know → GO TO 154

153. What type of weapon(s) did they have?

- 154. Was Adult 3 injured during the threat of forced unwanted sexual activity?**

Yes

No

- 155. At the time, what was Adult 3's relationship with the person or persons who threatened Adult 3 with forced unwanted sexual activity?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 - Former spouse, partner, boyfriend or girlfriend
 - Other family member or relative
 - Other friend or acquaintance
 - Did not know the person

- 156. In the past 12 months, were any of the threats of forced unwanted sexual activity on Adult 3 reported to the police?**

- Yes
 No

- 157. In what month and year did the most recent threat of forced unwanted sexual activity on Adult 3 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

The diagram consists of two groups of boxes. The first group, labeled "month", contains two empty boxes. The second group, labeled "year", contains four empty boxes arranged in a horizontal row.

158. Please describe the most recent threat of unwanted sexual activity on Adult 3: *what happened and where it happened.*

Other Thefts Not Described Above

- 159. Besides what you may have told us about earlier, did Adult 3 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)**

- Yes → GO TO 160
 - No → GO TO 163



160. In what month and year did Adult 3's most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

161. Please describe what was stolen from Adult 3 in the most recent theft:

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162. In the past 12 months, were any of the other things stolen from Adult 3 reported to the police?

- Yes
 No

163. In the last 12 months, did Adult 3 have a credit or debit card stolen or used without his/her permission?

- Yes
 No

164. In the last 12 months, did Adult 3 have a bank account used without his/her permission?

- Yes
 No

165. In the last 12 months, did anyone steal Adult 3's private information or use it to get a credit card or a loan?

- Yes
 No

166. In the past 12 months, did Adult 3 or anyone else tell the police about any unauthorized use of Adult 3's financial accounts or personal information?

- Yes
 No

About Adult 3

167. What gender is Adult 3?

- Male
 Female

168. How old is Adult 3?

169. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

170. What race is Adult 3?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

171. What is the highest grade of school completed, or the highest degree Adult 3 has received?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

Please answer questions 172 to 221 about Adult 4.

If there are only 3 adults in the household, please skip to question 225.

Physical Attacks

172. In the last 12 months, has anyone physically attacked Adult 4?

- Yes ➔ GO TO 173
 No ➔ GO TO 182

173. In the last 12 months, was Adult 4 physically attacked more than once?

- Yes
 No



174. Did the person(s) who attacked Adult 4 have a weapon?

- Yes ➔ GO TO 175
- No ➔ GO TO 176
- Don't Know ➔ GO TO 176

175. What type of weapon(s) did they have?

176. In the last 12 months, was Adult 4 injured during an attack?

- Yes
- No

177. In the last 12 months, was anything stolen from Adult 4 during an attack?

- Yes
- No

178. At the time, what was Adult 4's relationship with the person or persons who attacked him/her?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

179. In the past 12 months, were any of these attacks on Adult 4 reported to the police?

- Yes
- No

180. In what month and year did the most recent attack on Adult 4 occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

181. Please describe the most recent attack on Adult 4: *what happened and where it happened.*

Threats

182. In the last 12 months, has anyone threatened Adult 4 with physical violence?

- Yes ➔ GO TO 183
- No ➔ GO TO 191

183. In the last 12 months, was Adult 4 threatened on more than one occasion?

- Yes
- No

184. Did the person(s) who threatened Adult 4 have a weapon?

- Yes ➔ GO TO 185
- No ➔ GO TO 186
- Don't know ➔ GO TO 186

185. What type of weapon(s) did they have?

186. In the last 12 months, was anything stolen when Adult 4 was threatened?

- Yes
- No



187. At the time, what was Adult 4's relationship with the person or persons who threatened Adult 4 with physical violence?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

188. In the past 12 months, were any of these threats on Adult 4 reported to the police?

- Yes
- No

189. In what month and year did the most recent threat on Adult 4 occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

190. Please describe the most recent threat on Adult 4: what happened and where it happened.

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Unwanted Sexual Activity

191. In the last 12 months, did anyone force Adult 4 to have any type of unwanted sexual activity?

- Yes ➔ GO TO 192
- No ➔ GO TO 200

192. Was Adult 4 forced to have unwanted sexual activity more than once?

- Yes
- No

193. Did the person(s) who forced Adult 4 to have unwanted sexual activity have a weapon?

- Yes ➔ GO TO 194
- No ➔ GO TO 195
- Don't know ➔ GO TO 195

194. What type of weapon(s) did they have?

195. In the last 12 months, was Adult 4 injured during forced unwanted sexual activity?

- Yes
- No

196. At the time, what was Adult 4's relationship with the person or persons who forced Adult 4 to have unwanted sexual activity?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

197. In the past 12 months, was any of the forced unwanted sexual activity on Adult 4 reported to the police?

- Yes
- No

198. In what month and year did the most recent forced unwanted sexual activity on Adult 4 occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

199. Please describe the most recent forced unwanted sexual activity on Adult 4: *what happened and where it happened.*

Threats of Unwanted Sexual Activity

- 200.** In the last 12 months, did anyone threaten Adult 4 with any type of forced unwanted sexual activity? Include times when someone threatened or tried to force Adult 4 but did not succeed.

- Yes → GO TO 201
 - No → GO TO 209

- 201. In the last 12 months, was Adult 4 threatened with unwanted sexual activity more than once?**

- Yes
 No

- 202. Did the person(s) who threatened Adult 4 with forced unwanted sexual activity have a weapon?**

- Yes → GO TO 203
 - No → GO TO 204
 - Don't know → GO TO 204

- 203. What type of weapon(s) did they have?**

ANSWER The answer is 1000.

- 204. Was Adult 4 injured during the threat of forced unwanted sexual activity?**

- Yes
 No

- 205. At the time, what was Adult 4's relationship with the person or persons who threatened Adult 4 with forced unwanted sexualactivity? Please mark all that apply.**

- Spouse, partner, boyfriend or girlfriend
 - Former spouse, partner, boyfriend or girlfriend
 - Other family member or relative
 - Other friend or acquaintance
 - Did not know the person

- 206. In the past 12 months, were any of the threats of forced unwanted sexual activity on Adult 4 reported to the police?**

- Yes
 - No

- 207. In what month and year did the most recent threat of forced unwanted sexual activity on Adult 4 occur?**

If you are unsure, make your best guess — including the month the incident occurred.

The image shows two separate groups of three empty rectangular boxes each. The first group is on the left, and the second group is on the right, separated by a small gap.

month

year

- 208. Please describe the most recent threat of unwanted sexual activity on Adult 4: what happened and where it happened.**

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| |

Other Thefts Not Described Above

- 209. Besides what you may have told us about earlier, did Adult 4 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)**

- Yes → GO TO 210
 - No → GO TO 213

210. In what month and year did Adult 4's most recent theft occur?

If you are unsure, make your best guess — including the month the incident occurred.

month

year

211. Please describe what was stolen from Adult 4 in the most recent theft:

| |
|--|
| |
| |
| |

212. In the past 12 months, were any of the other things stolen from Adult 4 reported to the police?

- Yes
- No

213. In the last 12 months, did Adult 4 have a credit or debit card stolen or used without his/her permission?

- Yes
- No

214. In the last 12 months, did Adult 4 have a bank account used without his/her permission?

- Yes
- No

215. In the last 12 months, did anyone steal Adult 4's private information or use it to get a credit card or a loan?

- Yes
- No

216. In the past 12 months, did Adult 4 or anyone else tell the police about any unauthorized use of Adult 4's financial accounts or personal information?

- Yes
- No

About Adult 4

217. What gender is Adult 4?

- Male
- Female

218. How old is Adult 4?

219. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

220. What race is Adult 4?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

221. What is the highest grade of school completed, or the highest degree Adult 4 has received?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

222. Are there more than 4 adults living at your home?

- Yes ➔ GO TO 223
- No ➔ GO TO 225

223. Did any of the other adults in this home experience a crime in the last 12 months?

- Yes ➔ GO TO 224
- No ➔ GO TO 225



224. Please describe the crime(s):

225. On the whole, how much of the time is the community where you live safe?

- Always safe
 - Mostly safe
 - Sometimes safe
 - Rarely safe
 - Never safe

226. Is there any place within a mile of your home where you would be afraid to walk alone at night?

- Yes
 - No

227. How often does fear of crime prevent you from doing things you would like to do?

- Very often
 - Somewhat often
 - Rarely
 - Never

228. When you leave your home, how often do you think about it being broken into or vandalized while you're away?

- Very often
 - Somewhat often
 - Rarely
 - Never

229. In the past 3 years, do you believe your community has:

- Become safer
 - Stayed the same
 - Become less safe
 - Don't know

230. Overall, how much of the time is the place where you work safe?

- Always safe
 - Mostly safe
 - Sometimes safe
 - Rarely safe
 - Never safe
 - Does not apply; do not work

231. While living at this address, have you ever contacted the local police department for assistance?

- Yes → GO TO 232
 - No → GO TO 233

232. If yes, how satisfied were you with the police response?

- Very satisfied
 - Mostly satisfied
 - Somewhat satisfied
 - Not at all satisfied

233. How would you rate the job the local police department is doing in your community?

- Excellent
 - Good
 - Fair
 - Poor
 - Don't know

**Thank you. Please return survey in
the envelope provided.**



Appendix A Survey Instruments

Year 2 Incident Level Survey



American Crime Survey

A Survey Sponsored by
The Bureau of Justice Statistics



Title 42, Section 3732, United States Code, authorizes the Bureau of Justice Statistics, Department of Justice, to collect information using this survey and requires us to keep all information about you and your household strictly confidential. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB number. The valid OMB control number for this information collection is 1121-0351. Comments regarding any other aspect of this data collection may be sent to the DOJ Clearance Officer at the Bureau of Justice Statistics, 810 Seventh Street, NW Washington, DC 20531 or by calling survey support staff toll-free 1-855-863-6354.

Start Here

- Please use a black or blue pen to complete this form.
- Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

- 1. On the whole, how much of the time is the community where you live safe?**
 Always safe
 Mostly safe
 Sometimes safe
 Rarely safe
 Never safe
- 2. Is there any place within a mile of your home where you would be afraid to walk alone at night?**
 Yes
 No
- 3. How often does fear of crime prevent you from doing things you would like to do?**
 Very often
 Somewhat often
 Rarely
 Never
- 4. When you leave your home, how often do you think about it being broken into or vandalized while you're away?**
 Very often
 Somewhat often
 Rarely
 Never
- 5. In the last 3 years, do you believe your community has:**
 Become safer
 Stayed the same
 Become less safe
 Don't know

- 6. Overall, how much of the time is the place where you work safe?**
 Always safe
 Mostly safe
 Sometimes safe
 Rarely safe
 Never safe

 Does not apply; do not work
- 7. How would you rate the local police on treating people respectfully?**
 Very respectful
 Somewhat respectful
 Neither respectful nor disrespectful
 Somewhat disrespectful
 Very disrespectful
- 8. How much time and attention do the local police give to what people have to say before making their decisions?**
 Great deal of time
 A lot of time
 A moderate amount of time
 A little time
 No time at all
- 9. How consistent are the local police in applying the laws in the same way to everyone?**
 Very consistent
 Somewhat consistent
 Neither consistent nor inconsistent
 Somewhat inconsistent
 Very inconsistent
- 10. How would you rate the local police on treating people fairly, regardless of who they are?**
 Very fair
 Somewhat fair
 Neither fair nor unfair
 Somewhat unfair
 Very unfair



11. How much of the time can the local police be trusted to make decisions that are right?

- Always be trusted
- Usually can be trusted
- Sometimes can be trusted
- Rarely can be trusted
- Never can be trusted

12. How would you rate the local police on enforcing the law in ways that protect the rights of all of the people?

- Very good job
- Somewhat good job
- Neither good nor bad job
- Somewhat bad job
- Very bad job

13. Taking everything into account, how would you rate the job the local police are doing?

- Very good job
- Somewhat good job
- Neither good nor bad job
- Somewhat bad job
- Very bad job

Your Household

14. Do you own or rent the place where you're living?

- Own
- Rent
- Other, describe below

15. How long have you lived at this address?

- 1 year or less
- Less than 5 years, more than 1 year
- 5 years or more

16. Including yourself, how many people age 18 or older live in this household? Be sure to include yourself, all family members, roommates, and boarders age 18 and older.

number of people age 18 or older

17. How many children ages 0-17 live in this household? Please include small children and infants.

number of children ages 0-17

► Continue answering about the adults in this household on the next page.

The information about each adult is only used to determine how many people are affected by crime. Answer for each adult even if they have not experienced a crime.



(YOU) Adult 1

► These background questions are important in helping us understand who is affected by crime in American cities and suburbs. The person (adult) number and first name will be helpful later in identifying who in your household may have been affected by crime.

1. What is your first name? For later questions you are Adult number 1.

First Name

2. What is your age?

| | |
|--|--|
| | |
|--|--|

3. Are you male or female?

- Male
 Female

4. Are you of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is your race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is your highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

► If there are more adults living in this household, continue answering the next column for the second adult. If you are the only adult, continue with Section A on page 5.

Adult 2

1. What is Adult 2's first name? For later questions this is Adult number 2.

First Name

2. What is Adult 2's age?

| | |
|--|--|
| | |
|--|--|

3. Is Adult 2 male or female?

- Male
 Female

4. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 2's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 2's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

► If there are more adults living in this household, continue answering on the next page for the third adult. If there are no other adults, continue with Section A on page 5.



Adult 3

1. What is Adult 3's first name? For later questions this is Adult number 3.

First Name

2. What is Adult 3's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 3 male or female?

- Male
 Female

4. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 3's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 3's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- If there are more adults living in this household, continue answering the next column for the fourth adult. If there are no other adults, continue with Section A on the next page.

Adult 4

1. What is Adult 4's first name? For later questions this is Adult number 4.

First Name

2. What is Adult 4's age?

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|

3. Is Adult 4 male or female?

- Male
 Female

4. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
 No, not Hispanic or Latino

5. What is Adult 4's race?

Please mark all that apply.

- White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

6. What is Adult 4's highest grade or level of school completed?

- Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher

- Continue with Section A on the next page.



Section A: Violent Crimes

- A 'violent crime' is when another person who is physically present with you does something unlawful to you or another household member.
- Violent crimes may have happened at home, on the street, at work or school, or anywhere else.*
- Include crimes where the offender was someone you know, a stranger, or even a family member.*

1. In the past 12 months, were you or anyone else you listed attacked, mugged, or threatened with violence?
 Yes
 No
2. In the past 12 months, did anyone ATTEMPT to attack you or anyone else you listed?
 Yes
 No
3. In the past 12 months, did anyone force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?
 Yes
 No
4. In the past 12 months, did anyone ATTEMPT to force you or anyone else you listed to have sex with them, or to engage in unwanted sex-related activity?
 Yes
 No

- If you marked 'YES' for any question above (1, 2, 3, or 4), continue with question 5 on the next page.

Otherwise (1 through 4 all = 'NO') skip to Section B on page 12 about non-violent theft and break-in crimes.



Violent Crimes: Most Recent Incident

You reported that you or someone else age 18 or older living in your household experienced a violent crime in the past 12 months. Please answer these questions for the most recent time this happened.

If there were none, please go to Section B on page 12.

5. How long ago did the most recent violent crime happen to you or someone else age 18 or older living in this household? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

6. Who in your household did this happen to? Write in the first name and the adult number of the person or persons as recorded on pages 3 and 4.

Later questions will refer to this person or these persons as the "victim."

| First Name (Refer to Adults listed on pages 3 and 4) | Adult # |
|---|----------------|
| | |
| | |
| | |
| | |

7. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

| |
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| |

8. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

9. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

10. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 12
- By sight only → GO TO 12
- Victim did not know the offender(s) → GO TO 12

11. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or stepparent
- Own child or stepchild
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

12. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

13. Did the offender attack the victim?

- Yes → GO TO 16 on the next page
- No

14. Did the offender ATTEMPT to attack the victim?

- Yes → GO TO 16 on the next page
- No



15. Did the offender threaten the victim with harm in any way?

- Yes
 No

16. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
 No ➔ GO TO 20

17. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 20
 No

18. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 20
 No

19. Was the victim sexually assaulted in some other way?

- Yes
 No

20. Did the victim suffer any injuries as a result of this incident?

- Yes
 No ➔ GO TO 22

21. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
 No

22. Did anyone report this crime to the police?

- Yes
 No ➔ GO TO 26

23. Did the police come once the incident was reported to them?

- Yes
 No ➔ GO TO 26

24. What did the police do while they were there?

Mark all that apply.

- Took a report
 Searched/looked around
 Took evidence (e.g. fingerprints)
 Questioned witnesses or suspects
 Promised to investigate
 Arrested someone
 Something else

I don't know what the police did

25. How satisfied were you with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

26. Was anything stolen or taken during this incident?

- Yes
 No ➔ GO TO 28

27. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
 Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
 A motor vehicle that the victim was in or near
 Something else

28. In what month and year did the most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
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|--|--|--|--|
| | | | |
|--|--|--|--|

month

year

29. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the next most recent violent crime
 No ➔ GO TO Section B, page 12

Violent Crimes: Next Most Recent Incident

These questions are about the next most recent violent crime that happened to you or someone else age 18 or older living in your household in the past 12 months.

If there were no other violent crimes, please go to Section B on page 12.

30. How long ago did the next most recent violent crime happen to you or someone else age 18 or older living in this household? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

31. Who in your household did this happen to? Write in the first name and the adult number of the person or persons as recorded on pages 3 and 4.

Later questions will refer to this person or these persons as the "victim."

| First Name (Refer to Adults listed on pages 3 and 4) | Adult # |
|---|----------------|
| | |
| | |
| | |
| | |

32. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

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33. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

34. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

35. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 37
- By sight only → GO TO 37
- Victim did not know the offender(s) → GO TO 37

36. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or stepparent
- Own child or stepchild
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

37. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

38. Did the offender attack the victim?

- Yes → GO TO 41 on the next page
- No

39. Did the offender ATTEMPT to attack the victim?

- Yes → GO TO 41 on the next page
- No



40. Did the offender threaten the victim with harm in any way?

- Yes
 No

41. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
 No ➔ GO TO 45

42. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 45
 No

43. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 45
 No

44. Was the victim sexually assaulted in some other way?

- Yes
 No

45. Did the victim suffer any injuries as a result of this incident?

- Yes
 No ➔ GO TO 47

46. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
 No

47. Did anyone report this crime to the police?

- Yes
 No ➔ GO TO 51

48. Did the police come once the incident was reported to them?

- Yes
 No ➔ GO TO 51

49. What did the police do while they were there?

Mark all that apply.

- Took a report
 Searched/looked around
 Took evidence (e.g. fingerprints)
 Questioned witnesses or suspects
 Promised to investigate
 Arrested someone
 Something else

I don't know what the police did

50. How satisfied were you with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

51. Was anything stolen or taken during this incident?

- Yes
 No ➔ GO TO 53

52. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
 Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
 A motor vehicle that the victim was in or near
 Something else

53. In what month and year did the next most recent violent crime happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
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| | | | |
|--|--|--|--|

year

54. Other than this incident, did another violent crime happen to you or someone else you listed in the past 12 months?

- Yes ➔ Continue with the third most recent violent crime
 No ➔ GO TO Section B, page 12



Violent Crimes: Third Most Recent Incident

These questions are about the third most recent violent crime that happened to you or someone else age 18 or older living in your household in the past 12 months.

If there were no other violent crimes, please go to Section B on page 12.

55. How long ago did the third most recent violent crime happen to you or someone else age 18 or older living in this household? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

56. Who in your household did this happen to? Write in the first name and the adult number of the person or persons as recorded on pages 3 and 4.

Later questions will refer to this person or these persons as the "victim."

| First Name (Refer to Adults listed on pages 3 and 4) | Adult # |
|--|---------|
| | |
| | |
| | |
| | |

57. What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

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58. Where did it happen?

- In the victim's home or yard
- In the victim's neighborhood, but not their home or yard
- Somewhere else in this city
- Outside of this city

59. Was the victim confronted by the offender during this incident?

By confronted, we mean that the offender approached the victim, or had some contact with the victim.

- Yes
- No

60. How well did the victim know the offender?

If there was more than one victim or offender, answer for the offender the victim knew the best.

- Well known
- A casual acquaintance → GO TO 62
- By sight only → GO TO 62
- Victim did not know the offender(s) → GO TO 62

61. How did the victim know that offender?

- Spouse at time of incident
- Ex-spouse at time of incident
- Parent or stepparent
- Own child or stepchild
- Brother or sister
- Boyfriend or girlfriend
- Friend
- Some other relationship

62. Did the offender have a weapon such as a gun or a knife, or something to use as a weapon?

- Yes
- No
- Don't know

63. Did the offender attack the victim?

- Yes → GO TO 66 on the next page
- No

64. Did the offender ATTEMPT to attack the victim?

- Yes → GO TO 66 on the next page
- No



65. Did the offender threaten the victim with harm in any way?

- Yes
 No

66. Did the victim experience any type of unwanted sexual contact such as forced or coerced sexual intercourse, or any other sexual assault, including any attempted sexual contact by force?

- Yes
 No ➔ GO TO 70

67. Was the victim forced or coerced to have sexual intercourse?

- Yes ➔ GO TO 70
 No

68. Was there an attempt to force or coerce sexual intercourse from the victim?

- Yes ➔ GO TO 70
 No

69. Was the victim sexually assaulted in some other way?

- Yes
 No

70. Did the victim suffer any injuries as a result of this incident?

- Yes
 No ➔ GO TO 72

71. Did the victim stay overnight in a hospital as a result of these injuries?

- Yes
 No

72. Did anyone report this crime to the police?

- Yes
 No ➔ GO TO 76

73. Did the police come once the incident was reported to them?

- Yes
 No ➔ GO TO 76

74. What did the police do while they were there?

Mark all that apply.

- Took a report
 Searched/looked around
 Took evidence (e.g. fingerprints)
 Questioned witnesses or suspects
 Promised to investigate
 Arrested someone
 Something else

I don't know what the police did

75. How satisfied were you with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

76. Was anything stolen or taken during this incident?

- Yes
 No ➔ GO TO 78

77. What was stolen or taken?

Mark all that apply.

- Something the victim had in their possession or on their person (e.g. purse, wallet, or cell phone)
 Something someone else had in their possession or on their person (e.g. their purse, wallet, or cell phone)
 A motor vehicle that the victim was in or near
 Something else

78. In what month and year did the third most recent violent crime happen? If you are unsure, make your best guess—including the month the incident occurred.

| | |
|--|--|
| | |
|--|--|

month

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

year

79. You've already described three violent crimes. Other than those incidents, how many more violent crimes happened to you or someone else age 18 or older living in your household in the past 12 months?

| | |
|--|--|
| | |
|--|--|

additional violent crime incidents

Section B: Theft and Break-ins

This section will ask about times in the past 12 months where someone may have stolen something, tried to steal something, or broken into this home.

Do not include any incidents you reported in the previous section as a violent crime.

80. In the past 12 months, did you or others in this household have anything stolen?

--It could have been something you wear or carry, like a wallet or purse, watch, or jewelry.

--It could have been electronic equipment, like a phone, tablet, or MP3 player.

- Yes
 No

81. In the past 12 months, was a car or other motor vehicle stolen or used without permission?

- Yes
 No

82. In the past 12 months, was anything stolen from a car?

--It could have been hubcaps or other parts, a radio or stereo, gasoline, personal items, or anything else.

- Yes
 No

83. In the past 12 months, was anything stolen from this house or apartment, from the yard, or from any other building that is part of your home, like a garage or shed?

--Think only of things that belong to you or others in this household.

- Yes
 No

84. In the past 12 months, so far as you know, did anyone ATTEMPT to steal something that belonged to you or others in this household?

- Yes
 No

85. In the past 12 months, did anyone break into this home, or ATTEMPT to break in, whether or not anything was stolen?

- Yes
 No

86. In the past 12 months, did you or others in this household have anything stolen while at work, or while away from your home?

- Yes
 No

- If you marked 'YES' for any of these questions (80 through 86), continue with the next page.

Otherwise, skip to Section C on page 17.



Theft and Break-ins: Most Recent Incident

These next questions are about a theft or break-in that happened to you or someone else age 18 or older living in your household in the past 12 months. Please answer these questions for the most recent time this happened.

If there were no thefts or break-ins, please go to Section C on page 17.

87. How long ago did the most recent incident happen?

Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

88. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

89. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 90, otherwise go to question 93 in the next column.

90. Did the offender actually get inside the home, structure, or building?

- Yes ➔ GO TO 92 in the next column
- No

91. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No ➔ GO TO 93

92. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

93. Was something stolen or taken without permission that belonged to you or others in this household?

Include any stolen items that you may have recovered.

- Yes ➔ GO TO 95
- No

94. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

95. Was a car or other motor vehicle stolen during this incident?

- Yes ➔ GO TO 97
- No

96. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

97. What was the total value of the property that was taken?

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98. Did you or anyone else report this incident to the police?

- Yes
- No ➔ GO TO 100

99. How satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

100. In what month and year did this (the most recent) incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

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month

year

101. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes ➔ GO TO 102 on the next page
- No ➔ GO TO Section C on page 17



Theft and Break-ins: Next Most Recent Incident

These questions are about the next most recent theft or break-in that happened in the past 12 months.

If there were no other thefts or break-ins, please go to Section C on page 17.

102. How long ago did the next most recent incident happen?

Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

103. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

104. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 105, otherwise go to question 108 in the next column.

105. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO 107 in the next column
- No

106. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO 108

107. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

108. Was something stolen or taken without permission that belonged to you or others in this household?

Include any stolen items that you may have recovered.

- Yes → GO TO 110
- No

109. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

110. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO 112
- No

111. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

112. What was the total value of the property that was taken?

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113. Did you or anyone else report this incident to the police?

- Yes
- No → GO TO 115

114. How satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

115. In what month and year did this (the next most recent) incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

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month

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year

116. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO 117 on the next page
- No → GO TO Section C on page 17



Theft and Break-ins: Third Most Recent Incident

These questions are about the third most recent theft or break-in that happened in the past 12 months.

If there were no other thefts or break-ins, please go to Section C on page 17.

117. How long ago did the third most recent incident happen?

Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

118. What happened?

Provide as many details as you can recall, such as: where it happened, and what was stolen.

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119. Where did it happen?

- In this home or yard
- In this neighborhood
- Somewhere else in this city
- Outside of this city

► If the incident occurred in this home continue with question 120, otherwise go to question 123 in the next column.

120. Did the offender actually get inside the home, structure, or building?

- Yes → GO TO 122 in the next column
- No

121. Did the offender ATTEMPT to get inside the home, structure, or building?

- Yes
- No → GO TO 123

122. Was there any evidence, such as a broken lock or broken window, that the offender(s) got in by force or tried to get in by force?

- Yes
- No

123. Was something stolen or taken without permission that belonged to you or others in this household?

Include any stolen items that you may have recovered.

- Yes → GO TO 125
- No

124. Did the offender ATTEMPT to take something that belonged to you or others in this household?

- Yes
- No

125. Was a car or other motor vehicle stolen during this incident?

- Yes → GO TO 127
- No

126. Did anyone ATTEMPT to steal a car or other motor vehicle?

- Yes
- No

127. What was the total value of the property that was taken?

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128. Did you or anyone else report this incident to the police?

- Yes
- No → GO TO 130

129. How satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

130. In what month and year did this (the third most recent) incident happen?

If you are unsure, make your best guess—including the month the incident occurred.

| | |
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| | |
| month | year |

131. Did another theft or break-in happen to you or others in this household in the past 12 months?

- Yes → GO TO 132 on the next page
- No → GO TO Section C on page 17



Section C: Other Crimes

These last few questions will ask you about other kinds of crimes that you or someone else age 18 or older living in your household may have experienced, such as identity theft or vandalism.

Do not include any incidents you may have reported in the previous sections.

148. In the last 12 months has this home or the property of anyone in this household been vandalized?

--Think about any vandalism done to your home, or to any motor vehicles owned by members of this household in the last 12 months.

- Yes
 No → GO TO 150

149. How many times in the last 12 months has this happened?

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number of vandalism incidents

150. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use any existing credit cards without permission?

- Yes
 No → GO TO 152

151. How many times in the last 12 months has this happened?

--Count multiple uses of the same card number before discovery as one time.

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number of times

152. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use other accounts without permission?

--Include accounts such as cell phones, bank accounts, debit cards, or check cards.

- Yes
 No → GO TO 154 in the next column

153. How many times in the last 12 months has this happened?

--Count multiple uses of an account before discovery as one time.

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number of times

154. In the last 12 months have you or anyone you listed discovered or been told that someone used or attempted to use their personal information to obtain new credit cards or loans, or for other fraudulent purposes?

- Yes
 No → GO TO 156

155. How many times in the last 12 months has this happened?

--Count multiple times before discovery as one time.

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number of times

156. Which category best fits the approximate total income of all persons in your household over the past 12 months?

--Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- \$0 to \$20,000
 \$20,001 to \$50,000
 \$50,001 to \$100,000
 \$100,001 or more

Thank you for completing this survey. Please return it in the postage-paid envelope provided.



Appendix A

Survey Instruments

Year 2 Person Level Survey



American Crime Survey

A Survey Sponsored by
The Bureau of Justice Statistics



Title 42, Section 3732, United States Code, authorizes the Bureau of Justice Statistics, Department of Justice, to collect information using this survey and requires us to keep all information about you and your household strictly confidential. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB number. The valid OMB control number for this information collection is 1121-0351. Comments regarding any other aspect of this data collection may be sent to the DOJ Clearance Officer at the Bureau of Justice Statistics, 810 Seventh Street, NW Washington, DC 20531 or by calling survey support staff toll-free 1-855-863-6354.

Start Here

- Please use a black or blue pen to complete this form.
- Mark to indicate your answer. If you want to change your answer, darken the box and mark the correct answer.

1. On the whole, how much of the time is the community where you live safe?

- Always safe
- Mostly safe
- Sometimes safe
- Rarely safe
- Never safe

2. Is there any place within a mile of your home where you would be afraid to walk alone at night?

- Yes
- No

3. How often does fear of crime prevent you from doing things you would like to do?

- Very often
- Somewhat often
- Rarely
- Never

4. When you leave your home, how often do you think about it being broken into or vandalized while you're away?

- Very often
- Somewhat often
- Rarely
- Never

5. In the last 3 years, do you believe your community has:

- Become safer
- Stayed the same
- Become less safe

- Don't know

6. Overall, how much of the time is the place where you work safe?

- Always safe
- Mostly safe
- Sometimes safe
- Rarely safe
- Never safe

- Does not apply; do not work

7. How would you rate the local police on treating people respectfully?

- Very respectful
- Somewhat respectful
- Neither respectful nor disrespectful
- Somewhat disrespectful
- Very disrespectful

8. How much time and attention do the local police give to what people have to say before making their decisions?

- Great deal of time
- A lot of time
- A moderate amount of time
- A little time
- No time at all

9. How consistent are the local police in applying the laws in the same way to everyone?

- Very consistent
- Somewhat consistent
- Neither consistent nor inconsistent
- Somewhat inconsistent
- Very inconsistent

10. How would you rate the local police on treating people fairly, regardless of who they are?

- Very fair
- Somewhat fair
- Neither fair nor unfair
- Somewhat unfair
- Very unfair



11. How much of the time can the local police be trusted

- Always be trusted
- Usually can be trusted
- Sometimes can be trusted
- Rarely can be trusted
- Never can be trusted

12. How would you rate the local police on enforcing the

- Very good job
 - Somewhat good job
 - Neither good nor bad job
 - Somewhat bad job
- Very bad job

13. Taking everything into account, how would you rate the job the local police are doing?

- Very good job
- Somewhat good job
- Neither good nor bad job
- Somewhat bad job
- Very bad job

17. During any break-in or attempted break-in over the last 12 months, did the offender actually get inside the home, garage, storage unit or shed?

- Yes
- No

18. In the last 12 months, was your home broken into (including attempts) or entered without permission more than once? Include garages and storage units on your property.

- Yes
- No

19. Was anything stolen when someone broke in (including attempts) or entered your home without permission any time in the last 12 months?

- Yes ➔ GO TO 20
- No ➔ GO TO 21

20. What was stolen in the last 12 months?

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21. In the past 12 months, was any break-in (including attempts) or entry without permission reported to the police?

- Yes ➔ GO TO 22
- No ➔ GO TO 23

22. How satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

23. Please describe the most recent break-in or attempted break-in. Provide as many details as you can recall, such as: what happened and where it happened and what (if anything) was stolen.

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Thefts and Break-ins

in a yard.

Yes ➔ GO TO 16

No ➔ GO TO 15

15. In the last 12 months, did anyone try to break into your home, but not succeed?

Yes ➔ GO TO 16

No, no attempted break-ins ➔ GO TO 24

16. How long ago did the most recent break-in or attempted break-in occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?



24. In the last 12 months, was a car, truck, or other motor vehicle belonging to anyone in your household ...

Yes No

The vehicle was vandalized or broken into

Something was stolen from the vehicle

The vehicle itself was stolen

25. (If any 'Yes' to 24) How long ago did the most recent vehicle theft or vehicle related incident occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

26. Besides what you told us about earlier, was anything else stolen from your home, yard, or vehicle in the last 12 months?

- Yes → GO TO 27
- No → GO TO 29

27. How long ago did the most recent theft occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

28. Please describe the most recent theft.

Provide as many details as you can recall, such as: what happened and where it happened and what was stolen.

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29. Thinking about everything that may have been stolen from your home or from members of your household in the past 12 months, what would you say was the total value of everything that was taken?

- Nothing was taken
- Less than \$10
- \$10 - \$49
- \$50 - \$249
- \$250 - \$999
- \$1,000 or more

30. In the past 12 months, were any of these thefts reported to the police?

- Yes → GO TO 31
- No → GO TO 32
- Does not apply, nothing stolen → GO TO 32

31. How satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

32. Do you own or rent the place where you're living?

- Own
- Rent
- Other, describe below

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33. How long have you lived at this address?

- 1 year or less
- Less than 5 years, more than 1 year
- 5 years or more

34. Including yourself, how many people age 18 or older live in this household? Include yourself, all family members, roommates, and boarders age 18 or older.

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Number of people age 18 and older

35. How many children ages 0-17 live in this household? Please include small children and infants.

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Number of children ages 0-17

36. Which category best fits the approximate total income of all persons in your household over the past 12 months?

Include money from jobs or other earnings, pensions, interest, rent, Social Security payments, and so on.

- \$0 to \$20,000
- \$20,001 to \$50,000
- \$50,001 to \$100,000
- \$100,001 or more

33241



Questions about You (Adult 1)

You are Adult 1. Please answer Questions 37 to 93 for yourself (Adult 1).

Physical Attacks

37. In the last 12 months, has anyone physically attacked you?
- Yes → GO TO 38
 No → GO TO 48
38. How long ago did the most recent attack occur?
Was it...
- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?
39. In the last 12 months, were you physically attacked more than once?
- Yes
 No
40. Did the person(s) who attacked you have a weapon?
- Yes → GO TO 41
 No → GO TO 42
 Don't Know → GO TO 42
41. What type of weapon(s) did they have?
-
42. In the last 12 months, were you injured during an attack?
- Yes
 No
43. In the last 12 months, was anything stolen from you during an attack?
- Yes
 No
44. At the time, what was your relationship with the person or persons who attacked you?
Please mark all that apply.
- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

45. In the past 12 months, were any of these attacks reported to the police?

- Yes → GO TO 46
 No → GO TO 47

46. How satisfied were you with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

47. Please describe the most recent attack.

Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Threats

48. In the last 12 months, has anyone threatened you with physical violence?

- Yes → GO TO 49
 No → GO TO 58

49. How long ago did the most recent threat occur?
Was it...

- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?

50. In the last 12 months, were you threatened on more than one occasion?

- Yes
 No

51. Did the person(s) who threatened you have a weapon?

- Yes → GO TO 52
 No → GO TO 53
 Don't Know → GO TO 53

52. What type of weapon(s) did they have?

53. In the last 12 months, was anything stolen when you were threatened?

- Yes
- No

54. At the time, what was your relationship with the person or persons who threatened you with physical violence?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

55. In the past 12 months, were any of these threats reported to the police?

- Yes → GO TO 56
- No → GO TO 57

56. How satisfied were you with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

57. Please describe the most recent threat.

Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Unwanted Sexual Contact

58. In the last 12 months, did you experience any type of unwanted sexual contact?

- Yes → GO TO 59
- No → GO TO 69

59. How long ago did the most recent unwanted sexual contact occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

60. Did you experience unwanted sexual contact more than once?

- Yes
- No

61. In the last 12 months, did any of this contact involve forced or coerced sexual intercourse?

- Yes
- No

62. Did the person(s) who committed any unwanted sexual contact have a weapon?

- Yes → GO TO 63
- No → GO TO 64
- Don't know → GO TO 64

63. What type of weapon(s) did they have?

64. In the last 12 months, were you injured during the unwanted sexual contact?

- Yes
- No

65. At the time, what was your relationship with the person or persons who committed unwanted sexual contact against you?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

66. In the past 12 months, was any of the unwanted sexual contact reported to the police?

Yes → GO TO 67
 No → GO TO 68

67. How satisfied were you with the police response?

Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

68. Please describe the most recent unwanted sexual contact. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

73. Did the person(s) who attempted unwanted sexual contact have a weapon?

Yes → GO TO 74
 No → GO TO 75
 Don't know → GO TO 75

74. What type of weapon(s) did they have?

75. Were you injured during the attempted unwanted sexual contact?

Yes
 No

76. At the time, what was your relationship with the person or persons who attempted unwanted sexual contact against you?
Please mark all that apply.

Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

77. In the past 12 months, were any of the attempts of unwanted sexual contact reported to the police?

Yes → GO TO 78
 No → GO TO 79

78. How satisfied were you with the police response?

Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

79. Please describe the most recent attempted unwanted sexual contact. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.



Other Thefts Not Described Earlier

80. Besides what you may have told us about earlier, did you have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

Yes → GO TO 81
 No → GO TO 85

81. How long ago did your most recent theft occur?

Was it...

within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?

82. Please describe the most recent theft.

Provide as many details as you can recall, such as: what happened, where it happened, and what was stolen.

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83. In the past 12 months, were any of the other things stolen reported to the police?

Yes → GO TO 84
 No → GO TO 85

84. How satisfied were you with the police response?

Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

85. In the last 12 months, did you have a credit or debit card stolen or used without your permission?

Yes
 No

86. In the last 12 months, did you have a bank account used without your permission?

Yes
 No

87. In the last 12 months, did anyone steal your private information or use it to get a credit card or a loan?

Yes
 No

88. In the last 12 months, did you or anyone else tell the police about any unauthorized use of your financial accounts or personal information?

Yes
 No

About You - Adult 1

89. What is your gender?

Male
 Female

90. What is your age?

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91. Are you of Hispanic or Latino origin?

Yes, Hispanic or Latino
 No, not Hispanic or Latino

92. What is your race?

Please mark all that apply.

White
 Black or African American
 Asian
 American Indian or Alaska Native
 Native Hawaiian or Other Pacific Islander

93. What is the highest grade of school completed, or the highest degree you have received?

Less than High School
 High School diploma or GED
 Some College or Technical School
 Bachelor's degree
 Master's degree or higher



Adult 2

94. Is there another adult (someone 18 or older) besides yourself, who lives in this household? This includes family members, roommates, and boarders.
- Yes ➔ Complete questions 95 through 151 for Adult 2
 No ➔ Return the completed survey in the postage-paid envelope

Physical Attacks

95. In the last 12 months, has anyone physically attacked Adult 2?
- Yes ➔ GO TO 96
 No ➔ GO TO 106
96. How long ago did the most recent attack on Adult 2 occur? Was it...
- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?
97. In the last 12 months, was Adult 2 physically attacked more than once?
- Yes
 No
98. Did the person(s) who attacked Adult 2 have a weapon?
- Yes ➔ GO TO 99
 No ➔ GO TO 100
 Don't Know ➔ GO TO 100

99. What type of weapon(s) did they have?

100. In the last 12 months, was Adult 2 injured during an attack?
- Yes
 No
101. In the last 12 months, was anything stolen from Adult 2 during an attack?
- Yes
 No

102. At the time, what was Adult 2's relationship with the person or persons who attacked him/her? Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

103. In the past 12 months, were any of these attacks on Adult 2 reported to the police?

- Yes ➔ GO TO 104
 No ➔ GO TO 105

104. How satisfied was Adult 2 with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

105. Please describe the most recent attack on Adult 2.

Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Threats

106. In the last 12 months, has anyone threatened Adult 2 with physical violence?

- Yes ➔ GO TO 107
 No ➔ GO TO 116

107. How long ago did the most recent threat on Adult 2 occur? Was it...

- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?



108. In the last 12 months, was Adult 2 threatened on more than one occasion?

- Yes
 No

109. Did the person(s) who threatened Adult 2 have a weapon?

- Yes ➔ GO TO 110
 No ➔ GO TO 111
 Don't Know ➔ GO TO 111

110. What type of weapon(s) did they have?

111. In the last 12 months, was anything stolen when Adult 2 was threatened?

- Yes
 No

112. At the time, what was Adult 2's relationship with the person or persons who threatened Adult 2 with physical violence?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

113. In the past 12 months, were any of these threats on Adult 2 reported to the police?

- Yes ➔ GO TO 114
 No ➔ GO TO 115

114. How satisfied was Adult 2 with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

115. Please describe the most recent threat on Adult 2.

Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Unwanted Sexual Activity

116. In the last 12 months, did Adult 2 experience any type of unwanted sexual contact?

- Yes ➔ GO TO 117
 No ➔ GO TO 127

117. How long ago did the most recent unwanted sexual contact on Adult 2 occur? Was it...

- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?

118. Did Adult 2 experience unwanted sexual contact more than once?

- Yes
 No

119. In the last 12 months, did any of this contact that occurred to Adult 2 involve forced or coerced sexual intercourse?

- Yes
 No

120. Did the person(s) who committed any unwanted sexual contact against Adult 2 have a weapon?

- Yes ➔ GO TO 121
 No ➔ GO TO 122
 Don't Know ➔ GO TO 122

121. What type of weapon(s) did they have?



122. In the last 12 months, was Adult 2 injured during the unwanted sexual contact?

- Yes
 No

123. At the time, what was Adult 2's relationship with the person or persons who committed unwanted sexual contact against Adult 2?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

124. In the past 12 months, was any of the unwanted sexual contact on Adult 2 reported to the police?

- Yes ➔ GO TO 125
 No ➔ GO TO 126

125. How satisfied was Adult 2 with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

126. Please describe the most recent unwanted sexual contact on Adult 2. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

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Attempts of Unwanted Sexual Activity

127. In the last 12 months, did anyone attempt any type of forced unwanted sexual contact on Adult 2? Include times when someone threatened or tried to force Adult 2 but did not succeed.

- Yes ➔ GO TO 128
 No ➔ GO TO 138

128. How long ago did the most recent attempt of unwanted sexual contact on Adult 2 occur? Was it...

- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?

129. In the last 12 months, did any attempts of unwanted sexual contact on Adult 2 occur more than once?

- Yes
 No

130. In the last 12 months, did any of these attempted contacts that occurred to Adult 2 involve attempts of forced or coerced sexual intercourse?

- Yes
 No

131. Did the person(s) who attempted unwanted sexual contact against Adult 2 have a weapon?

- Yes ➔ GO TO 132
 No ➔ GO TO 133
 Don't Know ➔ GO TO 133

132. What type of weapon(s) did they have?

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133. Was Adult 2 injured during the attempted unwanted sexual contact?

- Yes
 No

134. At the time, what was Adult 2's relationship with the person or persons who attempted to commit unwanted sexual contact against Adult 2?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

135. In the past 12 months, were any of the attempts of unwanted sexual contact on Adult 2 reported to the police?

- Yes ➔ GO TO 136
 No ➔ GO TO 137



136. How satisfied was Adult 2 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

137. Please describe the most recent attempt of unwanted sexual contact on Adult 2. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

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Other Thefts Not Described Above

138. Besides what you may have told us about earlier, did Adult 2 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes → GO TO 139
- No → GO TO 143

139. How long ago did Adult 2's most recent theft occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

140. Please describe Adult 2's most recent theft.

Provide as many details as you can recall, such as: what happened, where it happened, and what was stolen.

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141. In the past 12 months, were any of the other things stolen from Adult 2 reported to the police?

- Yes → GO TO 142
- No → GO TO 143

142. How satisfied was Adult 2 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

143. In the last 12 months, did Adult 2 have a credit or debit card stolen or used without his/her permission?

- Yes
- No

144. In the last 12 months, did Adult 2 have a bank account used without his/her permission?

- Yes
- No

145. In the last 12 months, did anyone steal Adult 2's private information or use it to get a credit card or a loan?

- Yes
- No

146. In the past 12 months, did Adult 2 or anyone else tell the police about any unauthorized use of Adult 2's financial accounts or personal information?

- Yes
- No

About Adult 2

147. What gender is Adult 2?

- Male
- Female

148. How old is Adult 2?

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149. Is Adult 2 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino



150. What race is Adult 2?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

151. What is the highest grade of school completed, or the highest degree Adult 2 has received?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

152. Is there a third adult (someone 18 or older) besides yourself and Adult 2, who lives in this household?

This includes family members, roommates, and boarders.

- Yes ➔ Complete questions 153 through 209 for Adult 3
- No ➔ Return the completed survey in the postage-paid envelope

Physical Attacks

153. In the last 12 months, has anyone physically attacked Adult 3?

- Yes ➔ GO TO 154
- No ➔ GO TO 164

154. How long ago did the most recent attack on Adult 3 occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

155. In the last 12 months, was Adult 3 physically attacked more than once?

- Yes
- No

156. Did the person(s) who attacked Adult 3 have a weapon?

- Yes ➔ GO TO 157
- No ➔ GO TO 158
- Don't Know ➔ GO TO 158

157. What type of weapon(s) did they have?

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158. In the last 12 months, was Adult 3 injured during an attack?

- Yes
- No

159 In the last 12 months, was anything stolen from Adult 3 during an attack?

- Yes
- No

160. At the time, what was Adult 3's relationship with the person or persons who attacked him/her?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

161. In the past 12 months, were any of these attacks on Adult 3 reported to the police?

- Yes ➔ GO TO 162
- No ➔ GO TO 163

162. How satisfied was Adult 3 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

163. Please describe the most recent attack on Adult 3.

Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

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Threats

164. In the last 12 months, has anyone threatened Adult 3 with physical violence?

- Yes → GO TO 165
 No → GO TO 174

165. How long ago did the most recent threat on Adult 3 occur? Was it...

- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?

166. In the last 12 months, was Adult 3 threatened on more than one occasion?

- Yes
 No

167. Did the person(s) who threatened Adult 3 have a weapon?

- Yes → GO TO 168
 No → GO TO 169
 Don't Know → GO TO 169

168. What type of weapon(s) did they have?

169. In the last 12 months, was anything stolen when Adult 3 was threatened?

- Yes
 No

170. At the time, what was Adult 3's relationship with the person or persons who threatened Adult 3 with physical violence?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
 Former spouse, partner, boyfriend or girlfriend
 Other family member or relative
 Other friend or acquaintance
 Did not know the person

171. In the past 12 months, were any of these threats on Adult 3 reported to the police?

- Yes → GO TO 172
 No → GO TO 173

172. How satisfied was Adult 3 with the police response?

- Very satisfied
 Mostly satisfied
 Somewhat satisfied
 Not at all satisfied

173. Please describe the most recent threat on Adult 3.

Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Unwanted Sexual Activity

174. In the last 12 months, did Adult 3 experience any type of unwanted sexual contact?

- Yes → GO TO 175
 No → GO TO 185

175. How long ago did the most recent unwanted sexual contact on Adult 3 occur? Was it...

- within the past 3 months,
 about 3 to 6 months ago,
 about 6 to 12 months ago, or
 more than 12 months ago?

176. Did Adult 3 experience unwanted sexual contact more than once?

- Yes
 No

177. In the last 12 months, did any of this contact that occurred to Adult 3 involve forced or coerced sexual intercourse?

- Yes
 No

178. Did the person(s) who committed any unwanted sexual contact against Adult 3 have a weapon?

- Yes → GO TO 179
 No → GO TO 180
 Don't Know → GO TO 180



179. What type of weapon(s) did they have?

180. In the last 12 months, was Adult 3 injured during the unwanted sexual contact?

- Yes
- No

181. At the time, what was Adult 3's relationship with the person or persons who committed unwanted sexual contact against Adult 3?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

182. In the past 12 months, was any of the unwanted sexual contact on Adult 3 reported to the police?

- Yes ➔ GO TO 183
- No ➔ GO TO 184

183. How satisfied was Adult 3 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

184. Please describe the most recent unwanted sexual contact on Adult 3. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Attempts of Unwanted Sexual Activity

185. In the last 12 months, did anyone attempt any type of forced unwanted sexual contact on Adult 3? Include times when someone threatened or tried to force Adult 3 but did not succeed.

- Yes ➔ GO TO 186
- No ➔ GO TO 196

186. How long ago did the most recent attempt of unwanted sexual contact on Adult 3 occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

187. In the last 12 months, did any attempts of unwanted sexual contact on Adult 3 occur more than once?

- Yes
- No

188. In the last 12 months, did any of these attempted contacts that occurred to Adult 3 involve attempts of forced or coerced sexual intercourse?

- Yes
- No

189. Did the person(s) who attempted unwanted sexual contact against Adult 3 have a weapon?

- Yes ➔ GO TO 190
- No ➔ GO TO 191
- Don't Know ➔ GO TO 191

190. What type of weapon(s) did they have?

191. Was Adult 3 injured during the attempted unwanted sexual contact?

- Yes
- No

192. At the time, what was Adult 3's relationship with the person or persons who attempted to commit unwanted sexual contact against Adult 3?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person



193. In the past 12 months, were any of the attempts of unwanted sexual contact on Adult 3 reported to the police?

- Yes ➔ GO TO 194
- No ➔ GO TO 195

194. How satisfied was Adult 3 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

195. Please describe the most recent attempt of unwanted sexual contact on Adult 3. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

198. Please describe Adult 3's most recent theft.

Provide as many details as you can recall, such as: what happened, where it happened, and what was stolen.

199. In the past 12 months, were any of the other things stolen from Adult 3 reported to the police?

- Yes ➔ GO TO 200
- No ➔ GO TO 201

200. How satisfied was Adult 3 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

201. In the last 12 months, did Adult 3 have a credit or debit card stolen or used without his/her permission?

- Yes
- No

202. In the last 12 months, did Adult 3 have a bank account used without his/her permission?

- Yes
- No

203. In the last 12 months, did anyone steal Adult 3's private information or use it to get a credit card or a loan?

- Yes
- No

204. In the past 12 months, did Adult 3 or anyone else tell the police about any unauthorized use of Adult 3's financial accounts or personal information?

- Yes
- No

Other Thefts Not Described Above

196. Besides what you may have told us about earlier, did Adult 3 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes ➔ GO TO 197
- No ➔ GO TO 201

197. How long ago did Adult 3's most recent theft occur?

Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?



About Adult 3

205. What gender is Adult 3?

- Male
- Female

206. How old is Adult 3?

207. Is Adult 3 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

208. What race is Adult 3?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

209. What is the highest grade of school completed, or the highest degree Adult 3 has received?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

210. Is there a fourth adult (someone 18 or older) besides yourself and Adults 2 and 3, who lives in this household? This includes family members, roommates, and boarders.

-  Yes ➔ Complete questions 211 through 267 for Adult 4
 No ➔ Return the completed survey in the postage-paid envelope

Physical Attacks

211. In the last 12 months, has anyone physically attacked Adult 4?

- Yes ➔ GO TO 212
- No ➔ GO TO 222

212. How long ago did the most recent attack on Adult 4 occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

213. In the last 12 months, was Adult 4 physically attacked more than once?

- Yes
- No

214. Did the person(s) who attacked Adult 4 have a weapon?

- Yes ➔ GO TO 215
- No ➔ GO TO 216
- Don't Know ➔ GO TO 216

215. What type of weapon(s) did they have?

216. In the last 12 months, was Adult 4 injured during an attack?

- Yes
- No

217. In the last 12 months, was anything stolen from Adult 4 during an attack?

- Yes
- No

218. At the time, what was Adult 4's relationship with the person or persons who attacked him/her?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

219. In the past 12 months, were any of these attacks on Adult 4 reported to the police?

- Yes ➔ GO TO 220
- No ➔ GO TO 221

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220. How satisfied was Adult 4 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

221. Please describe the most recent attack on Adult 4.

*Provide as many details as you can recall, such as:
where it happened, what injuries occurred, and
what (if anything) was stolen.*

Threats

**222. In the last 12 months, has anyone threatened
Adult 4 with physical violence?**

- Yes ➔ GO TO 223
- No ➔ GO TO 232

**223. How long ago did the most recent threat on Adult 4
occur? Was it...**

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

**224. In the last 12 months, was Adult 4 threatened on
more than one occasion?**

- Yes
- No

**225. Did the person(s) who threatened Adult 4 have a
weapon?**

- Yes ➔ GO TO 226
- No ➔ GO TO 227
- Don't Know ➔ GO TO 227

226. What type of weapon(s) did they have?

**227. In the last 12 months, was anything stolen when
Adult 4 was threatened?**

- Yes
- No

**228. At the time, what was Adult 4's relationship with
the person or persons who threatened Adult 4
with physical violence?**

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or
girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

**229. In the past 12 months, were any of these threats
on Adult 4 reported to the police?**

- Yes ➔ GO TO 230
- No ➔ GO TO 231

230. How satisfied was Adult 4 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

231. Please describe the most recent threat on Adult 4.

*Provide as many details as you can recall, such as:
where it happened, what injuries occurred, and
what (if anything) was stolen.*

Unwanted Sexual Activity

**232. In the last 12 months, did Adult 4 experience any type
of unwanted sexual contact?**

- Yes ➔ GO TO 233
- No ➔ GO TO 243



233. How long ago did the most recent unwanted sexual contact on Adult 4 occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

234. Did Adult 4 experience unwanted sexual contact more than once?

- Yes
- No

235. In the last 12 months, did any of this contact that occurred to Adult 4 involve forced or coerced sexual intercourse?

- Yes
- No

236. Did the person(s) who committed any unwanted sexual contact against Adult 4 have a weapon?

- Yes ➔ GO TO 237
- No ➔ GO TO 238
- Don't Know ➔ GO TO 238

237. What type of weapon(s) did they have?

238. In the last 12 months, was Adult 4 injured during the unwanted sexual contact?

- Yes
- No

239. At the time, what was Adult 4's relationship with the person or persons who committed unwanted sexual contact against Adult 4?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

240. In the past 12 months, was any of the unwanted sexual contact on Adult 4 reported to the police?

- Yes ➔ GO TO 241
- No ➔ GO TO 242

241. How satisfied was Adult 4 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

242. Please describe the most recent unwanted sexual contact on Adult 4. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Attempts of Unwanted Sexual Activity

243. In the last 12 months, did anyone attempt any type of forced unwanted sexual contact on Adult 4? Include times when someone threatened or tried to force Adult 4 but did not succeed.

- Yes ➔ GO TO 244
- No ➔ GO TO 254

244. How long ago did the most recent attempt of unwanted sexual contact on Adult 4 occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

245. In the last 12 months, did any attempts of unwanted sexual contact on Adult 4 occur more than once?

- Yes
- No

246. In the last 12 months, did any of these attempted contacts that occurred to Adult 4 involve attempts of forced or coerced sexual intercourse?

- Yes
- No



247. Did the person(s) who attempted unwanted sexual contact against Adult 4 have a weapon?

- Yes ➔ GO TO 248
- No ➔ GO TO 249
- Don't Know ➔ GO TO 249

248. What type of weapon(s) did they have?

249. Was Adult 4 injured during the attempted unwanted sexual contact?

- Yes
- No

250. At the time, what was Adult 4's relationship with the person or persons who attempted to commit unwanted sexual contact against Adult 4?

Please mark all that apply.

- Spouse, partner, boyfriend or girlfriend
- Former spouse, partner, boyfriend or girlfriend
- Other family member or relative
- Other friend or acquaintance
- Did not know the person

251. In the past 12 months, were any of the attempts of unwanted sexual contact on Adult 4 reported to the police?

- Yes ➔ GO TO 252
- No ➔ GO TO 253

252. How satisfied was Adult 4 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

253. Please describe the most recent attempt of unwanted sexual contact on Adult 4. Provide as many details as you can recall, such as: where it happened, what injuries occurred, and what (if anything) was stolen.

Other Thefts Not Described Above

254. Besides what you may have told us about earlier, did Adult 4 have anything else stolen in the last 12 months? (For example: cash, a wallet, purse, watch, jewelry, cell phone, tablet, or anything else that might have been stolen.)

- Yes ➔ GO TO 255
- No ➔ GO TO 259

255. How long ago did Adult 4's most recent theft occur? Was it...

- within the past 3 months,
- about 3 to 6 months ago,
- about 6 to 12 months ago, or
- more than 12 months ago?

256. Please describe Adult 4's most recent theft.

Provide as many details as you can recall, such as: what happened, where it happened, and what was stolen.

257. In the past 12 months, were any of the other things stolen from Adult 4 reported to the police?

- Yes ➔ GO TO 258
- No ➔ GO TO 259

258. How satisfied was Adult 4 with the police response?

- Very satisfied
- Mostly satisfied
- Somewhat satisfied
- Not at all satisfied

259. In the last 12 months, did Adult 4 have a credit or debit card stolen or used without his/her permission?

- Yes
- No



260. In the last 12 months, did Adult 4 have a bank account used without his/her permission?

- Yes
- No

261. In the last 12 months, did anyone steal Adult 4's private information or use it to get a credit card or a loan?

- Yes
- No

262. In the past 12 months, did Adult 4 or anyone else tell the police about any unauthorized use of Adult 4's financial accounts or personal information?

- Yes
- No

About Adult 4

263. What gender is Adult 4?

- Male
- Female

264. How old is Adult 4?

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265. Is Adult 4 of Hispanic or Latino origin?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

266. What race is Adult 4?

Please mark all that apply.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

267. What is the highest grade of school completed, or the highest degree Adult 4 has received?

- Less than High School
- High School diploma or GED
- Some College or Technical School
- Bachelor's degree
- Master's degree or higher

Other Adults

268. Are there more than 4 adults living at your home?

- Yes ➔ GO TO 269
- No ➔ Survey is complete

269. Did any of the other adults in this home experience a crime in the last 12 months?

- Yes ➔ GO TO 270
- No ➔ Survey is complete

270. Please describe the crime(s):

Thank you.

Please return survey in the envelope provided.



Appendix B

Response Rate Tables

Table B-1. Year 1 response rates and case dispositions, by CBSA, stratum, and instrument

| CBSA | Stratum | ILS | | | Response rate | PLS | | | Response rate |
|-------|---------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | | Respondent | Nonrespondent | Ineligible | | Respondent | Nonrespondent | Ineligible | |
| 12060 | | 823 | 1,388 | 148 | 37.2% | 850 | 1,354 | 156 | 38.6% |
| 12420 | | 931 | 1,273 | 154 | 42.2% | 942 | 1,266 | 153 | 42.7% |
| 12580 | | 971 | 1,224 | 164 | 44.2% | 1,000 | 1,190 | 170 | 45.7% |
| 14460 | | 1,035 | 1,219 | 106 | 45.9% | 1,071 | 1,173 | 115 | 47.7% |
| 16740 | | 917 | 1,281 | 162 | 41.7% | 954 | 1,256 | 149 | 43.2% |
| 17140 | | 989 | 1,165 | 205 | 45.9% | 1,027 | 1,136 | 197 | 47.5% |
| 17460 | | 1,018 | 1,136 | 205 | 47.3% | 1,001 | 1,131 | 228 | 47.0% |
| 18140 | | 1,030 | 1,174 | 156 | 46.7% | 1,022 | 1,185 | 152 | 46.3% |
| 19100 | | 871 | 1,327 | 161 | 39.6% | 882 | 1,312 | 166 | 40.2% |
| 19740 | | 1,113 | 1,149 | 97 | 49.2% | 1,111 | 1,146 | 103 | 49.2% |
| 19820 | | 1,001 | 1,125 | 233 | 47.1% | 1,050 | 1,080 | 230 | 49.3% |
| 26420 | | 827 | 1,373 | 162 | 37.6% | 814 | 1,386 | 157 | 37.0% |
| 26900 | | 967 | 1,181 | 211 | 45.0% | 977 | 1,160 | 223 | 45.7% |
| 27260 | | 937 | 1,232 | 189 | 43.2% | 913 | 1,273 | 175 | 41.8% |
| 28140 | | 1,039 | 1,130 | 189 | 47.9% | 1,053 | 1,132 | 176 | 48.2% |
| 29820 | | 886 | 1,265 | 208 | 41.2% | 899 | 1,251 | 210 | 41.8% |
| 33100 | | 857 | 1,221 | 281 | 41.2% | 952 | 1,141 | 267 | 45.5% |
| 33340 | | 1,141 | 1,069 | 150 | 51.6% | 1,133 | 1,037 | 189 | 52.2% |
| 33460 | | 1,315 | 929 | 116 | 58.6% | 1,325 | 939 | 95 | 58.5% |
| 34980 | | 962 | 1,269 | 128 | 43.1% | 972 | 1,269 | 119 | 43.4% |
| 35620 | | 874 | 1,351 | 134 | 39.3% | 909 | 1,324 | 127 | 40.7% |
| 36740 | | 926 | 1,242 | 193 | 42.7% | 906 | 1,262 | 190 | 41.8% |
| 38060 | | 980 | 1,103 | 277 | 47.0% | 937 | 1,132 | 290 | 45.3% |
| 38300 | | 1,072 | 1,065 | 222 | 50.2% | 1,100 | 1,046 | 214 | 51.3% |

Table B-1. Year 1 response rates and case dispositions, by CBSA, stratum, and instrument (continued)

| CBSA | Stratum | ILS | | | PLS | | | Response rate | |
|-------|-----------|------------|---------------|------------|---------------|------------|---------------|---------------|-------|
| | | Respondent | Nonrespondent | Ineligible | Response rate | Respondent | Nonrespondent | | |
| 38900 | | 1,168 | 1,073 | 120 | 52.1% | 1,210 | 1,033 | 115 | 53.9% |
| 39300 | | 982 | 1,233 | 144 | 44.3% | 1,023 | 1,214 | 123 | 45.7% |
| 40140 | | 917 | 1,282 | 160 | 41.7% | 890 | 1,313 | 157 | 40.4% |
| 40900 | | 1,088 | 1,178 | 94 | 48.0% | 1,044 | 1,194 | 121 | 46.6% |
| 41180 | | 1,039 | 1,112 | 211 | 48.3% | 1,083 | 1,037 | 237 | 51.1% |
| 41700 | | 845 | 1,334 | 180 | 38.8% | 916 | 1,273 | 171 | 41.8% |
| 41740 | | 1,043 | 1,235 | 81 | 45.8% | 1,064 | 1,202 | 94 | 47.0% |
| 41860 | | 1,006 | 1,272 | 82 | 44.2% | 1,042 | 1,235 | 82 | 45.8% |
| 41940 | | 1,056 | 1,243 | 61 | 45.9% | 1,094 | 1,204 | 61 | 47.6% |
| 42660 | | 1,100 | 1,116 | 143 | 49.6% | 1,108 | 1,110 | 142 | 50.0% |
| 45300 | | 935 | 1,116 | 309 | 45.6% | 947 | 1,112 | 300 | 46.0% |
| 47260 | | 983 | 1,189 | 186 | 45.3% | 1,004 | 1,163 | 194 | 46.3% |
| 47900 | | 1,082 | 1,136 | 142 | 48.8% | 1,110 | 1,133 | 116 | 49.5% |
| 16980 | C | 727 | 1,331 | 186 | 35.3% | 721 | 1,346 | 183 | 34.9% |
| 16980 | N | 889 | 1,426 | 158 | 38.4% | 876 | 1,418 | 177 | 38.2% |
| 16980 | S | 605 | 1,135 | 284 | 34.8% | 611 | 1,117 | 293 | 35.4% |
| 16980 | Remainder | 813 | 777 | 97 | 51.1% | 823 | 776 | 85 | 51.5% |
| 31080 | CENTRAL | 582 | 1,014 | 101 | 36.5% | 562 | 1,027 | 110 | 35.4% |
| 31080 | SOUTH | 476 | 1,149 | 74 | 29.3% | 551 | 1,076 | 70 | 33.9% |
| 31080 | VALLEY | 677 | 965 | 56 | 41.2% | 660 | 987 | 51 | 40.1% |
| 31080 | WEST | 614 | 1,003 | 81 | 38.0% | 617 | 989 | 92 | 38.4% |
| 31080 | Remainder | 737 | 910 | 51 | 44.7% | 740 | 905 | 53 | 45.0% |
| 37980 | CPD | 461 | 803 | 199 | 36.5% | 429 | 814 | 215 | 34.5% |
| 37980 | EPD | 441 | 895 | 125 | 33.0% | 445 | 901 | 114 | 33.1% |
| 37980 | NEPD | 577 | 827 | 57 | 41.1% | 560 | 838 | 62 | 40.1% |
| 37980 | NWPD | 474 | 888 | 99 | 34.8% | 467 | 885 | 108 | 34.5% |
| 37980 | SPD | 558 | 796 | 102 | 41.2% | 566 | 790 | 109 | 41.7% |
| 37980 | SWPD | 366 | 927 | 167 | 28.3% | 371 | 903 | 187 | 29.1% |
| 37980 | Remainder | 785 | 876 | 97 | 47.3% | 763 | 871 | 120 | 46.7% |
| Total | | 46,508 | 60,132 | 8,098 | 43.6% | 47,097 | 59,447 | 8,193 | 44.2% |

Table B-2. Year 2 response rates and case dispositions, by CBSA, stratum, and instrument

| CBSA | Stratum | ILS | | | Response rate | PLS | | | Response rate |
|-------|---------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | | Respondent | Nonrespondent | Ineligible | | Respondent | Nonrespondent | Ineligible | |
| 12060 | | 706 | 1,480 | 172 | 32.3% | 700 | 1,500 | 162 | 31.8% |
| 12420 | | 722 | 1,466 | 173 | 33.0% | 694 | 1,496 | 169 | 31.7% |
| 12580 | | 833 | 1,331 | 197 | 38.5% | 847 | 1,295 | 217 | 39.5% |
| 14460 | | 896 | 1,335 | 130 | 40.2% | 837 | 1,410 | 112 | 37.2% |
| 16740 | | 738 | 1,458 | 163 | 33.6% | 738 | 1,462 | 161 | 33.5% |
| 17140 | | 809 | 1,344 | 208 | 37.6% | 817 | 1,313 | 229 | 38.4% |
| 17460 | | 838 | 1,306 | 214 | 39.1% | 833 | 1,285 | 244 | 39.3% |
| 18140 | | 811 | 1,367 | 183 | 37.2% | 789 | 1,397 | 173 | 36.1% |
| 19100 | | 697 | 1,482 | 182 | 32.0% | 711 | 1,471 | 177 | 32.6% |
| 19740 | | 842 | 1,377 | 141 | 37.9% | 827 | 1,389 | 144 | 37.3% |
| 19820 | | 808 | 1,361 | 191 | 37.3% | 795 | 1,318 | 247 | 37.6% |
| 26420 | | 637 | 1,560 | 164 | 29.0% | 619 | 1,535 | 205 | 28.7% |
| 26900 | | 798 | 1,354 | 208 | 37.1% | 815 | 1,317 | 228 | 38.2% |
| 27260 | | 686 | 1,435 | 239 | 32.3% | 713 | 1,432 | 215 | 33.2% |
| 28140 | | 869 | 1,276 | 214 | 40.5% | 822 | 1,360 | 179 | 37.7% |
| 29820 | | 695 | 1,429 | 233 | 32.7% | 699 | 1,438 | 226 | 32.7% |
| 33100 | | 700 | 1,353 | 306 | 34.1% | 678 | 1,397 | 286 | 32.7% |
| 33340 | | 900 | 1,290 | 171 | 41.1% | 880 | 1,289 | 190 | 40.6% |
| 33460 | | 1,079 | 1,168 | 111 | 48.0% | 1,085 | 1,152 | 125 | 48.5% |
| 34980 | | 795 | 1,442 | 122 | 35.5% | 766 | 1,463 | 132 | 34.4% |
| 35620 | | 696 | 1,522 | 143 | 31.4% | 755 | 1,465 | 139 | 34.0% |
| 36740 | | 699 | 1,431 | 228 | 32.8% | 730 | 1,439 | 193 | 33.7% |
| 38060 | | 721 | 1,349 | 291 | 34.8% | 707 | 1,375 | 277 | 34.0% |
| 38300 | | 873 | 1,235 | 252 | 41.4% | 873 | 1,247 | 240 | 41.2% |

Table B-1. Year 2 response rates and case dispositions, by CBSA, stratum, and instrument (continued)

| CBSA | Stratum | ILS | | | PLS | | | Response rate |
|-------|-----------|------------|---------------|------------|---------------|------------|---------------|---------------|
| | | Respondent | Nonrespondent | Ineligible | Response rate | Respondent | Nonrespondent | |
| 38900 | | 938 | 1,261 | 164 | 42.7% | 1,020 | 1,194 | 143 46.1% |
| 39300 | | 765 | 1,428 | 164 | 34.9% | 807 | 1,398 | 158 36.6% |
| 40140 | | 682 | 1,481 | 195 | 31.5% | 758 | 1,404 | 200 35.1% |
| 40900 | | 903 | 1,343 | 113 | 40.2% | 835 | 1,405 | 121 37.3% |
| 41180 | | 846 | 1,281 | 232 | 39.8% | 844 | 1,293 | 224 39.5% |
| 41700 | | 662 | 1,491 | 205 | 30.7% | 647 | 1,516 | 199 29.9% |
| 41740 | | 800 | 1,445 | 118 | 35.6% | 839 | 1,386 | 132 37.7% |
| 41860 | | 814 | 1,449 | 95 | 36.0% | 852 | 1,414 | 96 37.6% |
| 41940 | | 849 | 1,421 | 89 | 37.4% | 875 | 1,399 | 87 38.5% |
| 42660 | | 904 | 1,297 | 159 | 41.1% | 898 | 1,326 | 135 40.4% |
| 45300 | | 787 | 1,231 | 342 | 39.0% | 774 | 1,276 | 310 37.8% |
| 47260 | | 810 | 1,332 | 218 | 37.8% | 746 | 1,357 | 257 35.5% |
| 47900 | | 888 | 1,327 | 143 | 40.1% | 847 | 1,354 | 161 38.5% |
| 16980 | C | 569 | 1,474 | 205 | 27.9% | 598 | 1,412 | 236 29.8% |
| 16980 | N | 775 | 1,504 | 195 | 34.0% | 739 | 1,499 | 232 33.0% |
| 16980 | S | 505 | 1,204 | 312 | 29.5% | 484 | 1,201 | 339 28.7% |
| 16980 | Remainder | 615 | 952 | 118 | 39.2% | 615 | 971 | 100 38.8% |
| 31080 | CENTRAL | 31 | 106 | 11 | 22.6% | 34 | 107 | 7 24.1% |
| 31080 | SOUTH | 36 | 84 | 5 | 30.0% | 37 | 72 | 9 33.9% |
| 31080 | VALLEY | 62 | 165 | 6 | 27.3% | 67 | 145 | 11 31.6% |
| 31080 | WEST | 63 | 125 | 15 | 33.5% | 51 | 134 | 11 27.6% |
| 31080 | Remainder | 560 | 1,016 | 85 | 35.5% | 543 | 1,051 | 71 34.1% |
| 37980 | CPD | 370 | 824 | 260 | 31.0% | 370 | 887 | 210 29.4% |
| 37980 | EPD | 313 | 1,007 | 143 | 23.7% | 324 | 989 | 145 24.7% |
| 37980 | NEPD | 425 | 972 | 61 | 30.4% | 439 | 953 | 71 31.5% |
| 37980 | NWPD | 359 | 965 | 138 | 27.1% | 374 | 970 | 115 27.8% |
| 37980 | SPD | 465 | 892 | 106 | 34.3% | 427 | 923 | 108 31.6% |
| 37980 | SWPD | 262 | 1,004 | 196 | 20.7% | 315 | 955 | 189 24.8% |
| 37980 | Remainder | 641 | 1,005 | 113 | 38.9% | 660 | 957 | 135 40.8% |
| Total | | 35,547 | 64,237 | 8,842 | 34.8% | 35,549 | 64,193 | 8,882 34.9% |

Table B-3. Year 2 response rates and case dispositions, by CBSA, stratum, and overlap versus non-overlap sample

| CBSA | Stratum | Overlap | | | Response rate | Non-overlap | | | Response rate |
|-------|---------|------------|---------------|------------|---------------|-------------|---------------|------------|---------------|
| | | Respondent | Nonrespondent | Ineligible | | Respondent | Nonrespondent | Ineligible | |
| 12060 | | 285 | 734 | 82 | 28.0% | 1,045 | 2,053 | 225 | 33.7% |
| 12420 | | 286 | 640 | 78 | 30.9% | 953 | 1,861 | 197 | 33.9% |
| 12580 | | 388 | 660 | 101 | 37.0% | 1,252 | 1,899 | 303 | 39.7% |
| 14460 | | 364 | 664 | 61 | 35.4% | 1,262 | 1,873 | 159 | 40.3% |
| 16740 | | 326 | 710 | 82 | 31.5% | 1,084 | 2,050 | 223 | 34.6% |
| 17140 | | 363 | 683 | 117 | 34.7% | 1,231 | 1,934 | 315 | 38.9% |
| 17460 | | 396 | 654 | 105 | 37.7% | 1,237 | 1,877 | 340 | 39.7% |
| 18140 | | 370 | 699 | 90 | 34.6% | 1,212 | 2,003 | 261 | 37.7% |
| 19100 | | 258 | 602 | 90 | 30.0% | 931 | 1,786 | 181 | 34.3% |
| 19740 | | 333 | 671 | 65 | 33.2% | 1,213 | 1,832 | 188 | 39.8% |
| 19820 | | 381 | 665 | 100 | 36.4% | 1,180 | 1,949 | 325 | 37.7% |
| 26420 | | 222 | 611 | 70 | 26.7% | 763 | 1,759 | 203 | 30.3% |
| 26900 | | 354 | 673 | 99 | 34.5% | 1,205 | 1,882 | 314 | 39.0% |
| 27260 | | 316 | 722 | 99 | 30.4% | 1,043 | 2,065 | 345 | 33.6% |
| 28140 | | 383 | 636 | 102 | 37.6% | 1,245 | 1,874 | 268 | 39.9% |
| 29820 | | 280 | 602 | 100 | 31.7% | 926 | 1,777 | 260 | 34.3% |
| 33100 | | 184 | 451 | 124 | 29.0% | 726 | 1,268 | 335 | 36.4% |
| 33340 | | 378 | 634 | 91 | 37.4% | 1,331 | 1,740 | 243 | 43.3% |
| 33460 | | 502 | 590 | 51 | 46.0% | 1,612 | 1,659 | 180 | 49.3% |
| 34980 | | 350 | 740 | 55 | 32.1% | 1,170 | 2,081 | 195 | 36.0% |
| 35620 | | 273 | 639 | 54 | 29.9% | 960 | 1,763 | 174 | 35.3% |
| 36740 | | 284 | 636 | 95 | 30.9% | 926 | 1,818 | 282 | 33.7% |
| 38060 | | 297 | 588 | 127 | 33.6% | 983 | 1,714 | 384 | 36.4% |
| 38300 | | 377 | 666 | 120 | 36.1% | 1,346 | 1,781 | 358 | 43.0% |
| 38900 | | 429 | 626 | 86 | 40.7% | 1,456 | 1,743 | 209 | 45.5% |

Table B-3. Year 2 response rates and case dispositions, by CBSA, stratum, and overlap versus non-overlap sample (continued)

| CBSA | Stratum | Overlap | | | Non-overlap | | | Response rate | |
|-------|-----------|------------|---------------|------------|-------------|---------------|------------|---------------|-------|
| | | Respondent | Nonrespondent | Ineligible | Respondent | Nonrespondent | Ineligible | | |
| 39300 | | 331 | 628 | 77 | 34.5% | 1,076 | 1,866 | 201 | 36.6% |
| 40140 | | 259 | 576 | 81 | 31.0% | 875 | 1,628 | 252 | 35.0% |
| 40900 | | 363 | 656 | 52 | 35.6% | 1,253 | 1,852 | 161 | 40.4% |
| 41180 | | 372 | 652 | 127 | 36.3% | 1,289 | 1,874 | 324 | 40.8% |
| 41700 | | 211 | 599 | 81 | 26.0% | 781 | 1,697 | 242 | 31.5% |
| 41740 | | 313 | 607 | 57 | 34.0% | 1,092 | 1,695 | 151 | 39.2% |
| 41860 | | 346 | 651 | 36 | 34.7% | 1,159 | 1,842 | 133 | 38.6% |
| 41940 | | 343 | 636 | 46 | 35.0% | 1,199 | 1,768 | 115 | 40.4% |
| 42660 | | 409 | 670 | 70 | 37.9% | 1,344 | 1,887 | 222 | 41.6% |
| 45300 | | 336 | 588 | 153 | 36.4% | 1,092 | 1,675 | 460 | 39.5% |
| 47260 | | 344 | 673 | 139 | 33.8% | 1,177 | 1,947 | 326 | 37.7% |
| 47900 | | 370 | 660 | 66 | 35.9% | 1,260 | 1,832 | 220 | 40.8% |
| 16980 | C | 234 | 593 | 99 | 28.3% | 727 | 1,731 | 282 | 29.6% |
| 16980 | N | 283 | 638 | 97 | 30.7% | 1,005 | 1,773 | 259 | 36.2% |
| 16980 | S | 206 | 624 | 143 | 24.8% | 741 | 1,678 | 483 | 30.6% |
| 16980 | Remainder | 267 | 435 | 61 | 38.0% | 870 | 1,273 | 143 | 40.6% |
| 31080 | CENTRAL | 8 | 23 | 1 | 25.8% | 20 | 43 | 5 | 31.7% |
| 31080 | SOUTH | 11 | 14 | 4 | 44.0% | 24 | 49 | 3 | 32.9% |
| 31080 | VALLEY | 12 | 40 | 3 | 23.1% | 76 | 169 | 8 | 31.0% |
| 31080 | WEST | 16 | 38 | 5 | 29.6% | 73 | 159 | 16 | 31.5% |
| 31080 | Remainder | 204 | 399 | 39 | 33.8% | 665 | 1,140 | 90 | 36.8% |
| 37980 | CPD | 153 | 424 | 142 | 26.5% | 559 | 1,251 | 322 | 30.9% |
| 37980 | EPD | 45 | 264 | 35 | 14.6% | 254 | 631 | 95 | 28.7% |
| 37980 | NEPD | 195 | 474 | 35 | 29.1% | 625 | 1,336 | 90 | 31.9% |
| 37980 | NWPD | 168 | 481 | 62 | 25.9% | 535 | 1,375 | 179 | 28.0% |
| 37980 | SPD | 200 | 460 | 43 | 30.3% | 643 | 1,249 | 164 | 34.0% |
| 37980 | SWPD | 118 | 499 | 109 | 19.1% | 444 | 1,421 | 268 | 23.8% |
| 37980 | Remainder | 293 | 504 | 57 | 36.8% | 962 | 1,368 | 182 | 41.3% |
| Total | | 14,789 | 29,702 | 4,164 | 33.2% | 50,112 | 84,250 | 11,863 | 37.3% |

Appendix C

Statistical Methodology

Many surveys have the goal of estimating one or more characteristics of a finite population. For example, the 2015 NCVS produces an estimate of the violent victimization rate for the U.S. civilian noninstitutionalized population for the year 2015 (Year 1). Each record in the sample is weighted so that the weights sum to the target population.

The goal of the LACS Field Test was to evaluate instruments that may be used within jurisdictions to estimate levels and changes in victimization rates over time. To this end, the 40 largest CBSAs were selected for study, and addresses within each CBSA were randomly assigned an instrument (ILS or PLS) and a form (Form A positioned community questions at the beginning of the survey; Form B at the end) in Year 1. A subset of the same addresss were retained in the sample in Year 2 to better understand the ability to estimate change. The final household and person weights for the study sum to the household and adult populations for the 40 CBSAs. However, these 40 CBSAs were chosen for studying the performance of the instruments, not because the 40 CBSAs are the specific finite population of interest. Because the CBSAs have disparate sizes, the sampling weights are much higher for large CBSAs such as New York than for smaller CBSAs such as Jacksonville. If the sampling weights, or the final nonresponse-adjusted weights, were used for analyses, then all comparisons could be highly influenced by the largest CBSAs.

For evaluating the performance of the instruments, it is of interest to see how they perform for a “typical” CBSA. Therefore, the population characteristics of interest in Year 1 were the (1) means of the “touched by crime,” or TBC) rates over the 40 CBSAs, (2) correlations and regression coefficients relating measures from one survey to another, and (3) paired differences of measures between the ILS and PLS and between Forms A and B.

The 40 CBSAs were viewed as representative of future uses for this survey. The purpose for the Field Test was to look at mail questionnaires that municipalities could use to study levels and changes in their victimization rates. The finite populations of these particular 40 CBSAs were not of interest per se. Rather, the goal was to see how well the survey tracks changes over time and how well the estimates correlate with the NCVS and UCR.

C.1 Estimating the Average TBC Rate Across the 40 CBSAs

Let θ_i denote a parameter of interest for CBSA i , such as the TBC rate for CBSA i . The parameter θ_i is estimated, using the survey weights (for the particular survey of interest), by \bar{y}_i for each CBSA i for $i = 1, \dots, n$.¹ Then the parameter is estimated by—

$$\theta = \frac{1}{n} \sum_{i=1}^n \theta_i$$

$$\hat{\theta} = \bar{y} = \frac{1}{n} \sum_{i=1}^n \bar{y}_i$$

Assume that the CBSA-level measurements \bar{y}_i follow a Fay-Herriot-type model—

$$\bar{y}_i = \theta + v_i + e_i,$$

where $v_i \sim N(0, \sigma_v^2)$ and $e_i \sim N(0, \psi_i)$ are independent. In this model, v_i represents the CBSA-specific deviation from the overall mean θ that would be seen if there were no sampling error, and e_i represents the sampling error for CBSA i . Thus, σ_v^2 represents the variability among the true (the value from a census) TBC rates. Under this model—

$$V(\bar{y}) = \frac{1}{n^2} \sum_{i=1}^n V(\bar{y}_i) = \frac{\sigma_v^2}{n} + \frac{1}{n^2} \sum_{i=1}^n \psi_i,$$

thus including the design-based variance ψ_i plus the between-CBSA variance.

Let $s^2 = \frac{1}{n-1} [\sum_{i=1}^n (\bar{y}_i - \bar{y})^2]$ denote the sample variance of the n values of \bar{y}_i .

¹ For the Field Test, $n = 40$, the number of CBSAs. Note that for some data sources (such as the UCR) data from all 40 CBSAs may not have been available. In such cases, the average was over the CBSAs for which there was data.

Under this model, the expected value of the sample variance is—

$$\begin{aligned} E[s^2] &= \frac{1}{n-1} E \left[\sum_{i=1}^n (\bar{y}_i - \bar{\bar{y}})^2 \right] = \frac{1}{n-1} \left(\sum_{i=1}^n E[\bar{y}_i^2] - nE[\bar{\bar{y}}^2] \right) \\ &= \frac{1}{n-1} \left(\sum_{i=1}^n [\sigma_v^2 + \psi_i] - n \left[\frac{\sigma_v^2}{n} + \frac{1}{n^2} \sum_{i=1}^n \psi_i \right] \right) = \sigma_v^2 + \frac{1}{n} \sum_{i=1}^n \psi_i \end{aligned}$$

Consequently, s^2/n estimates $V(\bar{\bar{y}})$ and includes both the sampling error from the individual CBSA samples as well as the between-CBSA variability. This means that confidence intervals for θ can be constructed using usual t-type confidence intervals.

C.2 Differences Between the ILS and PLS

The Field Test used a blocked comparison design, and the increased efficiency from the blocking should be used for any comparison of the ILS with the PLS, ILS Form A with ILS Form B, or PLS Form A with PLS Form B. The blocks were the units in which randomization was performed: seven blocks in the Philadelphia CBSA, four blocks in the Chicago CBSA, five blocks in the Los Angeles CBSA, and one block for each of the remaining 37 CBSAs, for a total of 53 blocking units. The difference for block i may be calculated as—

$$d_i = \bar{y}_{ILS,i} - \bar{y}_{PLS,i}. \quad i = 1, \dots, 53.$$

One way to conceptualize this is to think of d_i as being the sum of the true population difference for block i , $D_i = \bar{Y}_{ILS,i} - \bar{Y}_{PLS,i}$, plus the two sampling errors:

$$d_i = D_i + e_{ILS,i} + e_{PLS,i}$$

The difference of sample means is—

$$\bar{d} = \frac{1}{n} \sum_{i=1}^n d_i = \bar{y}_{ILS} - \bar{y}_{PLS}$$

Under a model-based formulation—

$$V(\bar{d}) = \frac{\sigma_D^2}{n} + \frac{1}{n^2} \sum_{i=1}^n (\psi_{ILS,i} + \psi_{PLS,i})$$

Let s_d^2 represent the sample variance of the d_i . Then, if all error terms are independent, and assuming that the census quantities D_i are iid (\bar{D}, σ_D^2) , then—

$$\hat{V}(\bar{d}) = \frac{s_d^2}{n}$$

has expected value $\frac{\sigma_D^2}{n} + \frac{1}{n^2} \sum_{i=1}^n (\psi_{ILS,i} + \psi_{PLS,i})$.

Thus, to compare the ILS with the PLS, (1) find the rates for each block using the sampling weights, (2) form the differences, and (3) use the 53 values of d_i with a standard t-test program to find the average difference and its standard error. The sample variance of the 53 values of d_i includes the sampling error from the surveys as well as the variability of the differences across CBSAs and substrata.

An alternative, and approximately equivalent, analysis uses a logistic regression analysis to model the response—

$$u_{ij} = \begin{cases} 1 & \text{if unit } j \text{ in block } i \text{ reports at least one victimization} \\ 0 & \text{if unit } j \text{ in block } i \text{ reports no victimizations} \end{cases}$$

as a function of the instrument (ILS or PLS), form (A or B), and interaction of instrument and form. For this analysis, it is important to make use of the blocked design, in which the instrument and form assignments were randomized within CBSAs (and within substrata for the three oversampled CBSAs). This can be done by using the model—

$$\text{logit}(u_{ij}) = \beta_1 q_{ij} + \beta_2 a_{ij} + \beta_3 (q \times a)_{ij} + \sum_{k=1}^c \gamma_k \delta_{ij}(k) \quad (1)$$

where $q_{ij} = 1$ if unit (i, j) was administered the ILS and 0 if administered the PLS; $a_{ij} = 1$ if unit (i, j) was administered Form A and 0 if administered Form B; and $(q \times a)_{ij} = q_{ij} a_{ij}$. The

coefficients γ_k account for the blocking by the $C = 53$ CBSA strata: $\delta_{ij}(k) = 1$ if unit (i, j) is in stratum k and 0 otherwise. Including the last term in equation (1) removes the stratum-to-stratum differences from the error term used for the treatment comparison.

The blocking effects γ_k in equation (1) can be viewed as either fixed or random. With an approximately balanced design, the inferences for the treatment effects (β_1 , β_2 , and β_3) will be almost the same for either choice. This occurs because the treatment assignments are approximately orthogonal to the blocking variables. In general, the decision of whether to treat the blocks as fixed or random depends on whether inference is to be limited to these particular blocks or whether these CBSAs and substrata are representative of those to which the treatments would be applied in the future.

In the proposed approach, the CBSA strata are viewed as representative of those that may adopt these instruments in the future, and therefore the blocks should be treated as random effects in the analyses. The view of blocks as random effects also works better for logistic models studying the relationship between victimization and covariates such as race/ethnicity (as well as the interaction between demographic covariates and the instrument/form). For these types of analyses, the covariates are not orthogonal to the indicator variables specifying the CBSA strata. Treating the blocks as random gives a more accurate view of the standard error for the race/ethnicity coefficients, as the standard error adapts to the amount of within-stratum homogeneity of race/ethnicity. To see this, consider the extreme case in which covariate x takes the value 1 in CBSAs 2, 7, and 9 and takes the value 0 in all other CBSAs. For this case, x is actually a CBSA-level covariate, and inference about it should depend on the CBSA-to-CBSA variability. At the other extreme, assume exactly half of the units in each CBSA have $x = 0$, with the other half having $x = 1$; in that case, the standard error for the coefficient of x depends on the within-CBSA variability.

The nonresponse-adjusted weights provide a challenge for estimating relationships between TBC rates and covariates. To avoid the problem of having the regressions highly influenced by the large-population CBSAs, a set of scaled weights that sum to the sample size for each CBSA were created. These scaled weights were used for logistic regression analyses that combined data from all CBSAs.

Appendix D

Definitions of TBC Indicators

The tables in Section 6.1 gave a brief description of the types of crime included in each TBC measure. This appendix gives the algorithmic definitions of these TBC measures, showing the construction of each TBC indicator from the individual questions.

ILS

All incidents with missing or out-of-scope dates were excluded from the numerator.

Year 1 ILS Instrument

All Crime

SERIOUSVIOLENT = 0

SERIOUSVIOLENT = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q12 or Q35 = 1 /*WEAPON PRESENT*/
- Q17 or Q40 = 1 /*FORCED SEXUAL INTERCOURSE*/
- Q20 or Q43 = 1 /*INJURY*/
- Q25 = /*THEFT*/ AND [Q13 = 1 /*ATTACKED*/ OR Q14 = 1 /*ATTEMPT*/ OR Q15 = 1 /*THREATENED ASSAULT*/]
- Q48 = 1 /*THEFT*/ AND [Q36 = 1 /*ATTACKED*/ OR Q37 = 1 /*ATTEMPT*/ OR Q38 = 1 /*THREATENED ASSAULT*/]

ANYVIOLENT1 = 0

ANYVIOLENT1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT = 1
- Q13 or Q36 = 1 /*ATTACKED*/
- Q18 or Q41 = 1 /*ATTEMPTED FORCED INTERCOURSE*/
- Q19 or Q42 = 1 /*SEXL ASSAULT SOME OTHER WAY*/

ANYVIOLENT2 = 0

ANYVIOLENT2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1 = 1
- Q14 or Q37 = 1 /*ATTEMPTED ASSAULT*/
- Q15 or Q38 = 1 /*THREATENED ASSAULT*/
- Q16 or Q39 = 1 /*LEAD-IN ITEM ABOUT ANY SEXL ASSAULT OR ATTEMPT*/

PROPERTYCRIME1 = 0

PROPERTYCRIME1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q25 or Q48 = 1 /*THEFT AS PART OF A VIOLENT CRIME*/
- Q72 or Q85 or Q98 or Q111 = 1 /*OFFENDER GOT INSIDE*/

- Q75 or Q88 or Q101 or Q114 = 1 /*THEFT AS PART OF A PROPERTY CRIME*/
- Q77 or Q90 or Q103 or Q116 = 1 /*CAR STOLEN*/

PROPERTYCRIME2 = 0

PROPERTYCRIME2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- PROPERTYCRIME1 = 1
- Q76 or Q89 or Q102 or Q115 = 1 /*ATTEMPTED THEFT */
- Q78 or Q91 or Q104 or Q117 = 1 /* ATTEMPTED CAR THEFT */

Crime Reported to the Police

SERIOUSVIOLENT_P = 0

SERIOUSVIOLENT_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- (Q12 = 1 AND Q22 = 1) or (Q35 = 1 AND Q45 = 1) /*WEAPON PRESENT*/
- (Q17 = 1 AND Q22 = 1) or (Q40 = 1 AND Q45 = 1) /*FORCED SEXUAL INTERCOURSE*/
- (Q20 = 1 AND Q22 = 1) or (Q43 = 1 AND Q45 = 1) /*INJURY*/
- Q22 = 1 AND
 - ((Q25 = 1 AND /*THEFT*/
(Q13 = 1 /*ATTACKED*/ OR Q14 = 1 /*ATTEMPT*/ OR Q15 = 1)) /*THREATENED ASSAULT*/)
- Q45 = 1 AND
 - ((Q48 = 1 AND /*THEFT*/
(Q36 = 1 /*ATTACKED*/ OR Q37 = 1 /*ATTEMPT*/ OR Q38 = 1)) /*THREATENED ASSAULT*/)

ANYVIOLENT1_P = 0

ANYVIOLENT1_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT_P = 1
- (Q13 = 1 AND Q22 = 1) or (Q36 = 1 AND Q45 = 1) /*ATTACKED*/
- (Q18 = 1 AND Q22 = 1) or (Q41 = 1 AND Q45 = 1) /*ATTEMPTED FORCED INTERCOURSE*/
- (Q19 = 1 AND Q22 = 1) or (Q37 = 1 AND Q45 = 1) /*SEXL ASSAULT SOME OTHER WAY*/

ANYVIOLENT2_P = 0

ANYVIOLENT2_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1_P = 1
- (Q14 = 1 AND Q22 = 1) or (Q37 = 1 AND Q45 = 1) /*ATTEMPTED ASSAULT*/
- (Q15 = 1 AND Q22 = 1) or (Q38 = 1 AND Q45 = 1) /*THREATENED ASSAULT*/
- (Q16 = 1 AND Q22 = 1) or (Q39 = 1 AND Q45 = 1) /*LEAD-IN ITEM ABOUT ANY SEXL ASSAULT OR ATTEMPT*/

PROPERTYCRIME1_P = 0

PROPERTYCRIME1_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- (Q25 = 1 AND Q22 = 1) or (Q48 = 1 AND Q45 = 1) /*THEFT AS PART OF A VIOLENT CRIME*/
- (Q72 = 1 AND Q80 = 1) or /*MOST RECENT*/ /*OFFENDER GOT INSIDE*/
 - (Q85 = 1 AND Q93 = 1) or /*2ND MOST RECENT*/
 - (Q98 = 1 AND Q106 = 1) or /*3RD MOST RECENT*/
 - (Q111 = 1 AND Q119 = 1) /*4TH MOST RECENT*/
- (Q75 = 1 AND Q80 = 1) or /*MOST RECENT*/ /*THEFT AS PART OF PROP CRIME*/
 - (Q88 = 1 AND Q93 = 1) or /*2ND MOST RECENT*/
 - (Q101 = 1 AND Q106 = 1) or /*3RD MOST RECENT*/
 - (Q114 = 1 AND Q119 = 1) /*4TH MOST RECENT*/

- (Q77 = 1 AND Q80 = 1) or /*MOST RECENT*/ /*CAR STOLEN*/
(Q90 = 1 AND Q93 = 1) or /*2ND MOST RECENT*/
(Q103 = 1 AND Q106 = 1) or /*3RD MOST RECENT*/
(Q116 = 1 AND Q119 = 1) /*4TH MOST RECENT*/

PROPERTYCRIME2_P = 0

PROPERTYCRIME2_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- PROPERTYCRIME1_P = 1
- (Q76 = 1 AND Q80 = 1) or /*MOST RECENT*/ /*ATTEMPTED THEFT*/
(Q89 = 1 AND Q93 = 1) or /*2ND MOST RECENT*/
(Q102 = 1 AND Q106 = 1) or /*3RD MOST RECENT*/
(Q115 = 1 AND Q119 = 1) /*4TH MOST RECENT*/
- (Q78 = 1 AND Q80 = 1) or /*MOST RECENT*/ /*ATTEMPTED CAR THEFT*/
(Q91 = 1 AND Q93 = 1) or /*2ND MOST RECENT*/
(Q104 = 1 AND Q106 = 1) or /*3RD MOST RECENT*/
(Q117 = 1 AND Q119 = 1) /*4TH MOST RECENT*/

Year 2 ILS Instrument

All Crime

SERIOUSVIOLENT = 0

SERIOUSVIOLENT = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q12 or Q37 or Q62 = 1 /*WEAPON PRESENT*/
- Q17 or Q42 or Q67 = 1 /*FORCED SEXUAL INTERCOURSE*/
- Q20 or Q45 or Q70 = 1 /*INJURY*/
- Q26 = /*THEFT*/ AND [Q13 = 1 /*ATTACKED*/ OR Q14 = 1 /*ATTEMPT*/ OR Q15 = 1 /*THREATENED ASSAULT*/]
- Q51 = 1 /*THEFT*/ AND [Q38 = 1 /*ATTACKED*/ OR Q39 = 1 /*ATTEMPT*/ OR Q40 = 1 /*THREATENED ASSAULT*/]
- Q76 = 1 /*THEFT*/ AND [Q63 = 1 /*ATTACKED*/ OR Q64 = 1 /*ATTEMPT*/ OR Q65 = 1 /*THREATENED ASSAULT*/]

ANYVIOLENT1 = 0

ANYVIOLENT1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT = 1
- Q13 or Q38 or Q63 = 1 /*ATTACKED*/
- Q18 or Q43 or Q68 = 1 /*ATTEMPTED FORCED INTERCOURSE*/
- Q19 or Q44 or Q69 = 1 /*SEXL ASSAULT SOME OTHER WAY*/

ANYVIOLENT2 = 0

ANYVIOLENT2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1 = 1
- Q14 or Q39 or Q64 = 1 /*ATTEMPTED ASSAULT*/
- Q15 or Q40 or Q65 = 1 /*THREATENED ASSAULT*/
- Q16 or Q41 or Q66 = 1 /*LEAD-IN ITEM ABOUT ANY SEXL ASSAULT OR ATTEMPT*/

PROPERTYCRIME1 = 0

PROPERTYCRIME1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q26 or Q51 or Q76 = 1 /*THEFT AS PART OF A VIOLENT CRIME*/
- Q90 or Q105 or Q120 or Q135 = 1 /*OFFENDER GOT INSIDE*/
- Q93 or Q108 or Q123 or Q138 = 1 /*THEFT AS PART OF A PROPERTY CRIME*/
- Q95 or Q110 or Q125 or Q140 = 1 /*CAR STOLEN*/

PROPERTYCRIME2 = 0

PROPERTYCRIME2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- PROPERTYCRIME1 = 1
- Q94 or Q109 or Q124 or Q139 = 1 /*ATTEMPTED THEFT */
- Q96 or Q111 or Q126 or Q141 = 1 /* ATTEMPTED CAR THEFT */

Crime Reported to the Police

SERIOUSVIOLENT_P = 0

SERIOUSVIOLENT_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- (Q12 = 1 AND Q22 = 1) or (Q37 = 1 AND Q47 = 1) /*WEAPON PRESENT*/
- (Q17 = 1 AND Q22 = 1) or (Q42 = 1 AND Q47 = 1) /*FORCED SEXUAL INTERCOURSE*/
- (Q20 = 1 AND Q22 = 1) or (Q45 = 1 AND Q47 = 1) /*INJURY*/

- Q22 = 1 AND
 $((Q26 = 1 \text{ AND } /*\text{THEFT}*/ \text{ AND } (Q13 = 1 \text{ /*ATTACKED*/ OR } Q14 = 1 \text{ /*ATTEMPT*/ OR } Q15 = 1)) \text{ /*THREAT ASSAULT*/})$
- Q47 = 1 AND
 $((Q51 = 1 \text{ AND } /*\text{THEFT}*/ \text{ AND } (Q38 = 1 \text{ /*ATTACKED*/ OR } Q39 = 1 \text{ /*ATTEMPT*/ OR } Q40 = 1)) \text{ /*THREAT ASSAULT*/})$

ANYVIOLENT1_P = 0

ANYVIOLENT1_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT_P = 1
- (Q13 = 1 AND Q22 = 1) or (Q38 = 1 AND Q47 = 1) /*ATTACKED*/
- (Q18 = 1 AND Q22 = 1) or (Q43 = 1 AND Q47 = 1) /*ATTEMPTED FORCED INTERCOURSE*/
- (Q19 = 1 AND Q22 = 1) or (Q39 = 1 AND Q47 = 1) /*SEXL ASSAULT SOME OTHER WAY*/

ANYVIOLENT2_P = 0

ANYVIOLENT2_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1_P = 1
- (Q14 = 1 AND Q22 = 1) or (Q39 = 1 AND Q47 = 1) /*ATTEMPTED ASSAULT*/
- (Q15 = 1 AND Q22 = 1) or (Q40 = 1 AND Q47 = 1) /*THREATENED ASSAULT*/
- (Q16 = 1 AND Q22 = 1) or (Q41 = 1 AND Q47 = 1) /*LEAD-IN ITEM ABOUT ANY SEXL ASSAULT OR ATTEMPT*/

PROPERTYCRIME1_P = 0

PROPERTYCRIME1_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- (Q26 = 1 AND Q22 = 1) or (Q51 = 1 AND Q47 = 1) /*THEFT AS PART OF A VIOLENT CRIME*/
- (Q90 = 1 AND Q98 = 1) or /*MOST RECENT*/ /*OFFENDER GOT INSIDE*/
 $(Q105 = 1 \text{ AND } Q113 = 1) \text{ or } /*2ND MOST RECENT*/$
 $(Q120 = 1 \text{ AND } Q128 = 1) \text{ or } /*3RD MOST RECENT*/$
 $(Q135 = 1 \text{ AND } Q143 = 1) \text{ or } /*4TH MOST RECENT*/$
- (Q93 = 1 AND Q98 = 1) or /*MOST RECENT*/ /*THEFT AS PART OF PROP CRIME*/
 $(Q108 = 1 \text{ AND } Q113 = 1) \text{ or } /*2ND MOST RECENT*/$
 $(Q123 = 1 \text{ AND } Q128 = 1) \text{ or } /*3RD MOST RECENT*/$
 $(Q138 = 1 \text{ AND } Q143 = 1) \text{ or } /*4TH MOST RECENT*/$
- (Q95 = 1 AND Q98 = 1) or /*MOST RECENT*/ /*CAR STOLEN*/
 $(Q110 = 1 \text{ AND } Q113 = 1) \text{ or } /*2ND MOST RECENT*/$
 $(Q125 = 1 \text{ AND } Q128 = 1) \text{ or } /*3RD MOST RECENT*/$
 $(Q140 = 1 \text{ AND } Q143 = 1) \text{ or } /*4TH MOST RECENT*/$

PROPERTYCRIME2_P = 0

PROPERTYCRIME2_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- PROPERTYCRIME1_P = 1
- (Q94 = 1 AND Q98 = 1) or /*MOST RECENT*/ /*ATTEMPTED THEFT*/
 $(Q109 = 1 \text{ AND } Q113 = 1) \text{ or } /*2ND MOST RECENT*/$
 $(Q124 = 1 \text{ AND } Q128 = 1) \text{ or } /*3RD MOST RECENT*/$
 $(Q139 = 1 \text{ AND } Q143 = 1) \text{ or } /*4TH MOST RECENT*/$
- (Q96 = 1 AND Q98 = 1) or /*MOST RECENT*/ /*ATTEMPTED CAR THEFT*/
 $(Q111 = 1 \text{ AND } Q113 = 1) \text{ or } /*2ND MOST RECENT*/$
 $(Q126 = 1 \text{ AND } Q128 = 1) \text{ or } /*3RD MOST RECENT*/$
 $(Q141 = 1 \text{ AND } Q143 = 1) \text{ or } /*4TH MOST RECENT*/$

PLS

Generally, crimes with missing or out-of-scope dates were excluded from the numerator. The exceptions are Year 1 items Q20B (something stolen from vehicle) and Q20C (vehicle stolen). In the Year 1 PLS, these items did not include a respective date.

Year 1 PLS Instrument

All Crime

SERIOUSVIOLENT = 0

SERIOUSVIOLENT = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q33 or Q43 or Q52 or Q61 =1 /*WEAPON PRESENT PERSON 1*/
Q83 or Q93 or Q102 or Q111 =1 /*WEAPON PRESENT PERSON 2*/
or Q133 or Q143 or Q152 or Q161 =1 /*WEAPON PRESENT PERSON 3*/
Q183 or Q193 or Q202 or Q211 = 1 /*WEAPON PRESENT PERSON 4*/
- Q35 or Q54 or Q63 =1 /*INJURY PERSON 1*/
Q85 or Q104 or Q113 =1 /*INJURY PERSON 2*/
Q135 or Q154 or Q163 =1 /*INJURY PERSON 3*/
Q185 or Q204 or Q213 = 1 /*INJURY PERSON 4*/
- Q31 = 1 /* ATTACKED */ AND Q36 = 1 /* THEFT PERSON 1*/
- Q81 = 1 /* ATTACKED */ AND Q86 = 1 /* THEFT PERSON 2*/
- Q131 = 1 /* ATTACKED */ AND Q136 = 1 /* THEFT PERSON 3*/
- Q181 = 1 /* ATTACKED */ AND Q186 = 1 /* THEFT PERSON 4*/
- Q41 = 1 /*THREAT*/ AND Q45 = 1 /* THEFT PERSON 1*/
- Q91 = 1 /*THREAT*/ AND Q95 = 1 /* THEFT PERSON 2*/
- Q141 = 1 /*THREAT*/ AND Q145 = 1 /* THEFT PERSON 3*/
- Q191 = 1 /*THREAT*/ AND Q195 = 1 /* THEFT PERSON 4*/

(Note: FORCED SEXUAL INTERCOURSE was not captured in the Year 1 PLS. The questionnaire was revised for Year 2 to capture this.)

ANYVIOLENT1 = 0

ANYVIOLENT1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT = 1
- Q31 or Q81 or Q131 or Q181 = 1 /*ATTACKED*/
- Q50 or Q100 or Q150 or Q200 = 1 /*UNWANTED SEXUAL CONTACT*/

ANYVIOLENT2 = 0

ANYVIOLENT2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1 = 1
- Q41 or Q91 or Q141 or Q191 = 1 /*THREAT*/

(Note: THREAT OF UNWANTED SEXUAL CONTACT was not used for the PLS because the construct was too broad.)

PROPERTYCRIME1 = 0

PROPERTYCRIME1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q14 /* BNE THEFT */ or Q20B /*ITEMS IN CAR*/ or Q20C /*A CAR*/ = 1
(Note: A date to use for cleaning was unavailable for Q20A and Q20B.)
- Q21 = 1 /*HH THEFT*/
- Q10 = 1 /*OFFENDER BROKE IN - GOT INSIDE*/
- Q36 = 1 or Q45 = 1 or Q68 = 1 /*THEFT FROM ADULT 1*/
- Q86 = 1 or Q95 = 1 or Q118 = 1 /*THEFT FROM ADULT 2*/
- Q136 = 1 or Q145 = 1 or Q168 = 1 /*THEFT FROM ADULT 3*/
- Q186 = 1 or Q195 = 1 or Q218 = 1 /*THEFT FROM ADULT 4*/

(Note: Attempted theft was not captured in the PLS, which therefore has no PROPERTYCRIME2 variable.)

Crime Reported to the Police

SERIOUSVIOLENT_P = 0

SERIOUSVIOLENT_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- (Q38 = 1 AND (Q33 = 1 OR Q35 = 1)) /* WEAPON/INJURY ATTACK PERSON 1*/
- (Q88 = 1 AND (Q83 = 1 OR Q85 = 1)) /*WEAPON/INJURY ATTACK PERSON 2*/
- (Q138 = 1 AND (Q133 = 1 OR Q135 = 1)) /*WEAPON/INJURY ATTACK PERSON 3*/
- (Q188 = 1 AND (Q183 = 1 OR Q185 = 1)) /*WEAPON/INJURY ATTACK PERSON 4*/

- (Q43 = 1 AND Q47 = 1) /*WEAPON THREAT PERSON 1*/
- (Q93 = 1 AND Q97 = 1) /*WEAPON THREAT PERSON 2*/
- (Q143 = 1 AND Q147 = 1) /*WEAPON THREAT PERSON 3*/
- (Q193 = 1 AND Q197 = 1) /*WEAPON THREAT PERSON 4*/

- (Q56 = 1 AND (Q52 = 1 OR Q54 = 1)) /*WEAPON/INJURY UNW SEX CONTACT PER 1*/
- (Q106 = 1 AND (Q102 = 1 OR Q104 = 1)) /*WEAPON/INJURY UNW SEX CONTACT PER 2*/
- (Q156 = 1 AND (Q152 = 1 OR Q154 = 1)) /*WEAPON/INJURY UNW SEX CONTACT PER 3*/
- (Q206 = 1 AND (Q202 = 1 OR Q204 = 1)) /*WEAPON/INJURY UNW SEX CONTACT PER 4*/

- (Q65 = 1 AND (Q61 = 1 OR Q63 = 1)) /*WEAP/INJUR THRT UNW SEX CONTACT PER 1*/
- (Q115 = 1 AND (Q111 = 1 OR Q113 = 1)) /*WEAP/INJUR THRT UNW SEX CONTACT PER 2*/
- (Q165 = 1 AND (Q161 = 1 OR Q163 = 1)) /*WEAP/INJUR THRT UNW SEX CONTACT PER 3*/
- (Q215 = 1 AND (Q211 = 1 OR Q213 = 1)) /*WEAP/INJUR THRT UNW SEX CONTACT PER 4*/

- (Q38 = 1 AND Q31 = 1 /*ATTACKED*/ AND Q36 = 1) /*THEFT PERSON 1*/
- (Q88 = 1 AND Q81 = 1 /*ATTACKED*/ AND Q86 = 1) /*THEFT PERSON 2*/
- (Q138 = 1 AND Q131 = 1 /*ATTACKED*/ AND Q136 = 1) /*THEFT PERSON 3*/
- (Q188 = 1 AND Q181 = 1 /*ATTACKED*/ AND Q186 = 1) /*THEFT PERSON 4*/

- (Q47 = 1 AND Q41 = 1 /*THREAT*/ AND Q45 = 1) /*THEFT PERSON 1*/
- (Q97 = 1 AND Q91 = 1 /*THREAT*/ AND Q95 = 1) /*THEFT PERSON 2*/
- (Q147 = 1 AND Q141 = 1 /*THREAT*/ AND Q145 = 1) /*THEFT PERSON 3*/
- (Q197 = 1 AND Q191 = 1 /*THREAT*/ AND Q195 = 1) /*THEFT PERSON 4*/

(Note: FORCED SEXUAL INTERCOURSE was not captured in the Year 1 PLS.)

ANYVIOLEN1_P = 0

ANYVIOLENT1_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

ANYVIOLENT2_P = 0

ANYVIOLENT2_P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

(Note: THREAT OF UNWANTED SEXUAL CONTACT was not used for the PLS because the construct was too broad.)

PROPERTYCRIME1 P = 0

PROPERTYCRIME1 P = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- (Q16 = 1 AND (Q10 OR Q14 = 1)) /*OFFENDER BROKE IN - GOT INSIDE OR BNE THEFT*/
 - (Q25 = 1 AND (Q20B OR Q20C OR Q21 = 1)) /*ITEMS IN CAR OR CAR OR HH THEFT*/
 - (Q36 = 1 AND Q38 = 1) or
(Q45 = 1 AND Q47 = 1) or
(Q68 = 1 AND Q71 = 1) /*THEFT FROM ADULT 1*/
 - (Q86 = 1 AND Q88 = 1) or
(Q95 = 1 AND Q97 = 1) or
(Q118 = 1 AND Q121 = 1) /*THEFT FROM ADULT 2*/
 - (Q136 = 1 AND Q138 = 1) or
(Q145 = 1 AND Q147 = 1) or
(Q168 = 1 AND Q171 = 1) /*THEFT FROM ADULT 3*/
 - (Q186 = 1 AND Q188 = 1) or
(Q195 = 1 AND Q197 = 1) or
(Q218 = 1 AND Q221 = 1) /*THEFT FROM ADULT 4*/

Year 2 PLS Instrument

All Crime

SERIOUSVIOLENT = 0

SERIOUSVIOLENT = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q40 or Q51 or Q62 or Q73 =1 /*WEAPON PRESENT PERSON 1*/
Q98 or Q109 or Q120 or Q131 =1 /*WEAPON PRESENT PERSON 2*/
or Q156 or Q167 or Q178 or Q189 =1 /*WEAPON PRESENT PERSON 3*/
Q214 or Q225 or Q236 or Q247 = 1 /*WEAPON PRESENT PERSON 4*/
- Q42 or Q64 or Q75 =1 /*INJURY PERSON 1*/
Q100 or Q122 or Q133 =1 /*INJURY PERSON 2*/
Q158 or Q180 or Q191 =1 /*INJURY PERSON 3*/
Q216 or Q238 or Q249 = 1 /*INJURY PERSON 4*/
- Q37 = 1 /* ATTACKED */ AND Q43 = 1 /* THEFT PERSON 1*/
- Q95 = 1 /* ATTACKED */ AND Q101 = 1 /* THEFT PERSON 2*/
- Q153 = 1 /* ATTACKED */ AND Q159 = 1 /* THEFT PERSON 3*/
- Q211 = 1 /* ATTACKED */ AND Q217 = 1 /* THEFT PERSON 4*/
- Q48 = 1 /*THREAT*/ AND Q53 = 1 /* THEFT PERSON 1*/
- Q106 = 1 /*THREAT*/ AND Q111 = 1 /* THEFT PERSON 2*/
- Q164 = 1 /*THREAT*/ AND Q169 = 1 /* THEFT PERSON 3*/
- Q222 = 1 /*THREAT*/ AND Q227 = 1 /* THEFT PERSON 4*/
- Q61=1 or Q119 =1 or Q177 =1 or Q235 =1 /* FORCED SEXUAL INTERCOURSE - NEW IN YEAR 2 PLS */

ANYVIOLENT1 = 0

ANYVIOLENT1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT = 1
- Q37 or Q95 or Q153 or Q211 = 1 /*ATTACKED*/
- Q58 or Q116 or Q174 or Q232 = 1 /*UNWANTED SEXUAL CONTACT*/
- Q72 or Q130 or Q188 or Q246=1 /* ATTEMPTED FORCED SEXUAL INTERCOURSE - NEW IN YEAR 2 PLS */

ANYVIOLENT2 = 0

ANYVIOLENT2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1 = 1
- Q48 or Q106 or Q164 or Q222 = 1 /*THREAT*/

PROPERTYCRIME1 = 0

PROPERTYCRIME1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- **Q19 /* BNE THEFT */ or Q24B /*ITEMS IN CAR*/ or Q24C /*A CAR*/ = 1**
(Note: In Year 2, a date question was added to this section of the PLS.)
 - **Q26 = 1 /*HH THEFT*/**
 - **Q14 = 1 /*OFFENDER BROKE IN - GOT INSIDE*/**
 - **Q43 = 1 or Q53 = 1 or Q80 = 1 /*THEFT FROM ADULT 1*/**
 - **Q101 = 1 or Q111 = 1 or Q138 = 1 /*THEFT FROM ADULT 2*/**
 - **Q159 = 1 or Q169 = 1 or Q196 = 1 /*THEFT FROM ADULT 3*/**
 - **Q217 = 1 or Q227 = 1 or Q254 = 1 /*THEFT FROM ADULT 4*/**

(Note: Attempted theft was not captured in the PLS, which therefore has no PROPERTYCRIME2 variable.)

Crime Reported to the Police

SERIOUSVIOLENT = 0

SERIOUSVIOLENT = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- Q40+Q45=1 or Q51+Q55=1 or Q62+Q66=1 or Q73+Q77=1 /*WEAPON PRESENT PERSON 1*/
Q98+Q103=1 or Q109+Q113=1 or Q120+Q124=1 or Q131+Q135 =1 /*WEAPON PRESENT
PERSON 2*/
or Q156+Q161=1 or Q167+Q171=1 or Q178+Q182=1 or Q189+Q193 =1 /*WEAPON PRESENT
PERSON 3*/
Q214+Q219=1 or Q225+Q229=1 or Q236+Q240=1 or Q247+Q251=1 /*WEAPON PRESENT
PERSON 4*/
 - Q42+Q45=1 or Q64+Q66=1 or Q75+Q77=1 =1 /*INJURY PERSON 1*/
Q100+Q103=1 or Q122+Q124=1 or Q133+Q135=1 /*INJURY PERSON 2*/
Q158+Q161=1 or Q180+Q182=1 or Q191+Q193=1 /*INJURY PERSON 3*/
Q216+Q219=1 or Q238+Q240=1 or Q249+Q251=1 /*INJURY PERSON 4*/
 - Q37 = 1 /* ATTACKED */ AND Q43 = 1 /* THEFT PERSON 1*/ AND Q45=1
 - Q95 = 1 /* ATTACKED */ AND Q101 = 1 /* THEFT PERSON 2*/ AND Q103=1
 - Q153 = 1 /* ATTACKED */ AND Q159 = 1 /* THEFT PERSON 3*/ AND Q161=1
 - Q211 = 1 /* ATTACKED */ AND Q217 = 1 /* THEFT PERSON 4*/ AND Q219=1
 - Q48 = 1 /*THREAT*/ AND Q53 = 1 /* THEFT PERSON 1*/ AND Q55=1
 - Q106 = 1 /*THREAT*/ AND Q111 = 1 /* THEFT PERSON 2*/ AND Q113=1
 - Q164 = 1 /*THREAT*/ AND Q169 = 1 /* THEFT PERSON 3*/ AND Q171=1
 - Q222 = 1 /*THREAT*/ AND Q227 = 1 /* THEFT PERSON 4*/ AND Q229=1
 - Q61+Q66=1 or Q119+Q124=1 or Q177+Q182=1 or Q235+Q240=1 /* FORCED SEXUAL
INTERCOURSE - NEW IN YEAR 2 PLS */

ANYVIOLEN1 = 0

ANYVIOLEN1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- SERIOUSVIOLENT = 1
 - Q37+Q45=1 or Q95+Q103=1 or Q153+Q161=1 or Q211+Q219= 1 /*ATTACKED*/
 - Q58+Q66=1 or Q116+Q124=1 or Q174+Q182=1 or Q232+Q240=1 /*UNWANTED SEXUAL CONTACT*/
 - Q72+Q77=1 or Q130+Q135=1 or Q188+Q193=1 or Q246+Q251=1 /* ATTEMPTED FORCED SEXUAL INTERCOURSE - NEW IN YEAR 2 PLS */

ANYVIOLENT2 = 0

ANYVIOLEN2 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

- ANYVIOLENT1 = 1
 - Q48+Q55=1 or Q106+Q113=1 or Q164+Q171=1 or Q222+Q229= 1 /*THREAT*/

PROPERTYCRIME1 = 0

PROPERTYCRIME1 = 1 IF ANY OF THE FOLLOWING ARE TRUE...

(Note: Attempted theft was not captured in the PLS,, which therefore has no PROPERTYCRIME2 variable.)

Appendix E

Households Touched by Crime: Year 2, Overlap Sample

Tables E1 and E2 provide estimates and standard errors for select TBC variables. The data are based on the Year 2 LACS Field Test and include only the overlap sample.

Table E1. Overlap sample households touched by crime, by CBSA – ILS

| | CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|-----|---|---|-----------|--|-----------|---|-----------|
| | | Estimate | Std error | Estimate | Std error | Estimate | Std error |
| E-1 | CBSA 12060 - Atlanta-Sandy Springs-Marietta, GA | 0.96 | 0.70 | 2.51 | 1.27 | 9.65 | 2.62 |
| | CBSA 12420 - Austin-Round Rock, TX | 1.64 | 1.18 | 2.54 | 0.73 | 10.80 | 2.74 |
| | CBSA 12580 - Baltimore-Towson, MD | 0.00 | N/A | 0.83 | 0.78 | 8.02 | 2.09 |
| | CBSA 14460 - Boston-Cambridge-Quincy, MA | 1.71 | 1.01 | 1.71 | 1.01 | 6.18 | 1.83 |
| | CBSA 16740 - Charlotte-Gastonia-Concord, NC-SC | 0.36 | 0.36 | 0.36 | 0.36 | 6.35 | 2.28 |
| | CBSA 16980 - Chicago-Naperville-Joliet, IL-IN-WI | 2.98 | 0.96 | 3.19 | 0.97 | 9.77 | 1.71 |
| | CBSA 17140 - Cincinnati-Middletown, OH-KY-IN | 1.92 | 1.21 | 1.92 | 1.21 | 9.07 | 2.51 |
| | CBSA 17460 - Cleveland-Elyria-Mentor, OH | 2.16 | 1.37 | 2.16 | 1.37 | 3.75 | 1.42 |
| | CBSA 18140 - Columbus, OH | 2.00 | 1.15 | 2.00 | 1.15 | 9.89 | 2.38 |
| | CBSA 19100 - Dallas-Fort Worth-Arlington, TX | 0.59 | 0.59 | 0.59 | 0.59 | 15.95 | 3.36 |
| | CBSA 19740 - Denver-Aurora, CO | 0.57 | 0.54 | 0.97 | 0.67 | 9.59 | 2.40 |
| | CBSA 19820 - Detroit-Warren-Livonia, MI | 1.93 | 1.10 | 2.46 | 1.20 | 6.85 | 1.85 |
| | CBSA 26420 - Houston-Sugar Land-Baytown, TX | 2.77 | 1.57 | 2.77 | 1.57 | 8.77 | 2.59 |
| | CBSA 26900 - Indianapolis-Carmel, IN | 1.16 | 0.80 | 1.16 | 0.80 | 4.35 | 1.47 |
| | CBSA 27260 - Jacksonville, FL | 0.43 | 0.43 | 0.43 | 0.43 | 3.37 | 1.44 |
| | CBSA 28140 - Kansas City, MO-KS | 1.13 | 0.86 | 1.13 | 0.86 | 7.51 | 1.98 |
| | CBSA 29820 - Las Vegas-Paradise, NV | 1.35 | 0.79 | 3.12 | 1.51 | 7.76 | 2.39 |
| | CBSA 31080 - Los Angeles-Long Beach-Santa Ana, CA | 0.94 | 0.96 | 1.53 | 1.09 | 12.08 | 2.72 |

Table E1. Overlap sample households touched by crime, by CBSA – ILS (continued)

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|-----------|--|-----------|---|-----------|
| | Estimate | Std error | Estimate | Std error | Estimate | Std error |
| CBSA 33100 - Miami-Fort Lauderdale-Pompano Beach, FL | 1.29 | 0.93 | 1.29 | 0.93 | 4.95 | 1.80 |
| CBSA 33340 - Milwaukee-Waukesha-West Allis, WI | 0.00 | N/A | 0.00 | N/A | 9.68 | 2.38 |
| CBSA 33460 - Minneapolis-St. Paul-Bloomington, MN-WI | 0.52 | 0.51 | 0.96 | 0.68 | 10.06 | 1.91 |
| CBSA 34980 - Nashville-Davidson-Murfreesboro-Franklin, TN | 1.42 | 1.37 | 2.58 | 1.78 | 3.41 | 1.68 |
| CBSA 35620 - NY-Northern NJ-LI, NY-NJ-PA | 1.91 | 1.34 | 1.91 | 1.34 | 10.09 | 2.64 |
| CBSA 36740 - Orlando-Kissimmee-Sanford, FL | 0.73 | 0.74 | 0.73 | 0.74 | 5.80 | 2.18 |
| CBSA 37980 - Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 0.82 | 0.19 | 1.66 | 0.78 | 6.26 | 1.40 |
| CBSA 38060 - Phoenix-Mesa-Scottsdale, AZ | 2.52 | 1.34 | 2.81 | 1.36 | 12.77 | 3.07 |
| CBSA 38300 - Pittsburgh, PA | 1.05 | 0.75 | 1.05 | 0.75 | 3.94 | 1.33 |
| CBSA 38900 - Portland-Vancouver-Hillsboro, OR-WA | 0.82 | 0.83 | 2.44 | 1.38 | 11.65 | 2.18 |
| CBSA 39300 - Providence-Warwick, RI-MA | 2.21 | 1.39 | 3.29 | 1.74 | 6.42 | 2.11 |
| CBSA 40140 - Riverside-San Bernardino-Ontario, CA | 1.84 | 1.25 | 2.75 | 1.53 | 13.44 | 2.76 |
| CBSA 40900 - Sacramento-Arden-Arcade-Roseville, CA | 1.38 | 0.78 | 2.72 | 1.26 | 10.71 | 2.67 |
| CBSA 41180 - St. Louis-MO-IL | 1.21 | 0.87 | 1.21 | 0.87 | 9.63 | 2.59 |
| CBSA 41700 - San Antonio, TX | 2.38 | 1.61 | 2.38 | 1.61 | 11.17 | 3.29 |
| CBSA 41740 - San Diego-Carlsbad-San Marcos, CA | 1.43 | 1.00 | 1.43 | 1.00 | 10.37 | 2.56 |
| CBSA 41860 - San Francisco-Oakland-Fremont, CA | 2.69 | 1.25 | 2.69 | 1.25 | 20.34 | 3.39 |
| CBSA 41940 - San Jose-Sunnyvale-Santa Clara, CA | 0.63 | 0.63 | 0.63 | 0.63 | 12.94 | 2.46 |
| CBSA 42660 - Seattle-Tacoma-Bellevue, WA | 0.82 | 0.77 | 1.21 | 0.86 | 12.18 | 2.17 |
| CBSA 45300 - Tampa-St. Petersburg-Clearwater, FL | 0.00 | N/A | 0.00 | N/A | 10.14 | 2.55 |
| CBSA 47260 - Virginia Beach-Norfolk-Newport News, VA-NC | 1.58 | 1.10 | 1.58 | 1.10 | 5.37 | 1.76 |
| CBSA 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV | 1.17 | 0.95 | 1.17 | 0.95 | 6.49 | 1.75 |

Table E2. Overlap sample households touched by crime, by CBSA – PLS

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|-----------|--|-----------|---|-----------|
| | Estimate | Std error | Estimate | Std error | Estimate | Std error |
| CBSA 12060 - Atlanta-Sandy Springs-Marietta, GA | 1.44 | 1.05 | 1.44 | 1.05 | 6.91 | 2.29 |
| CBSA 12420 - Austin-Round Rock, TX | 1.46 | 0.81 | 2.66 | 1.16 | 13.38 | 2.87 |
| CBSA 12580 - Baltimore-Towson, MD | 2.58 | 1.27 | 3.79 | 1.74 | 16.74 | 2.92 |
| CBSA 14460 - Boston-Cambridge-Quincy, MA | 0.78 | 0.79 | 0.78 | 0.79 | 7.23 | 2.10 |
| CBSA 16740 - Charlotte-Gastonia-Concord, NC-SC | 0.66 | 0.66 | 0.66 | 0.66 | 11.43 | 2.68 |
| CBSA 16980 - Chicago-Naperville-Joliet, IL-IN-WI | 2.16 | 1.19 | 6.45 | 1.98 | 9.23 | 1.38 |
| CBSA 17140 - Cincinnati-Middletown, OH-KY-IN | 1.91 | 1.14 | 4.55 | 1.99 | 11.89 | 2.73 |
| CBSA 17460 - Cleveland-Elyria-Mentor, OH | 0.00 | N/A | 2.13 | 1.23 | 13.97 | 2.63 |
| CBSA 18140 - Columbus, OH | 0.94 | 0.68 | 2.42 | 0.85 | 13.46 | 2.59 |
| CBSA 19100 - Dallas-Fort Worth-Arlington, TX | 0.95 | 0.67 | 1.61 | 0.94 | 4.72 | 1.94 |
| CBSA 19740 - Denver-Aurora, CO | 0.86 | 0.60 | 2.52 | 1.13 | 14.34 | 2.89 |
| CBSA 19820 - Detroit-Warren-Livonia, MI | 0.00 | N/A | 0.00 | N/A | 6.80 | 1.88 |
| CBSA 26420 - Houston-Sugar Land-Baytown, TX | 0.57 | 0.54 | 1.96 | 1.19 | 4.44 | 1.59 |
| CBSA 26900 - Indianapolis-Carmel, IN | 3.73 | 1.77 | 6.11 | 2.15 | 18.59 | 3.41 |
| CBSA 27260 - Jacksonville, FL | 1.64 | 1.17 | 2.18 | 1.28 | 10.61 | 2.37 |
| CBSA 28140 - Kansas City, MO-KS | 0.92 | 0.65 | 0.92 | 0.65 | 9.92 | 2.08 |
| CBSA 29820 - Las Vegas-Paradise, NV | 3.00 | 1.56 | 3.34 | 1.59 | 16.83 | 3.37 |
| CBSA 31080 - Los Angeles-Long Beach-Santa Ana, CA | 2.17 | 1.27 | 3.50 | 1.56 | 15.33 | 2.76 |
| CBSA 33100 - Miami-Fort Lauderdale-Pompano Beach, FL | 0.80 | 0.81 | 1.58 | 1.10 | 11.83 | 2.80 |
| CBSA 33340 - Milwaukee-Waukesha-West Allis, WI | 2.66 | 1.30 | 3.77 | 1.55 | 12.84 | 2.82 |
| CBSA 33460 - Minneapolis-St. Paul-Bloomington, MN-WI | 0.88 | 0.62 | 1.46 | 0.86 | 10.73 | 1.97 |
| CBSA 34980 - Nashville-Davidson-Murfreesboro-Franklin, TN | 2.28 | 1.19 | 4.58 | 1.66 | 9.87 | 2.17 |
| CBSA 35620 - NY-Northern NJ-LI, NY-NJ-PA | 3.03 | 1.76 | 4.80 | 2.08 | 11.18 | 2.61 |
| CBSA 36740 - Orlando-Kissimmee-Sanford, FL | 0.33 | 0.33 | 1.26 | 1.00 | 9.38 | 2.56 |
| CBSA 37980 - Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 1.62 | 0.52 | 2.13 | 0.57 | 13.68 | 2.25 |
| CBSA 38060 - Phoenix-Mesa-Scottsdale, AZ | 3.91 | 2.07 | 3.91 | 2.07 | 8.60 | 2.56 |

Table E2. Overlap sample households touched by crime, by CBSA – PLS (continued)

| CBSA | Households touched by serious violent crime | | Households touched by violent crime, excluding threats | | Households touched by property crime, excludes attempts | |
|---|---|-----------|--|-----------|---|-----------|
| | Estimate | Std error | Estimate | Std error | Estimate | Std error |
| CBSA 38300 - Pittsburgh, PA | 0.89 | 0.88 | 0.89 | 0.88 | 5.89 | 1.74 |
| CBSA 38900 - Portland-Vancouver-Hillsboro, OR-WA | 1.98 | 1.10 | 3.33 | 1.45 | 14.13 | 2.60 |
| CBSA 39300 - Providence-Warwick, RI-MA | 0.69 | 0.70 | 0.69 | 0.70 | 15.83 | 3.41 |
| CBSA 40140 - Riverside-San Bernardino-Ontario, CA | 1.11 | 1.08 | 2.18 | 1.25 | 11.96 | 2.32 |
| CBSA 40900 - Sacramento-Arden-Arcade-Roseville, CA | 2.45 | 1.45 | 3.53 | 1.82 | 15.13 | 2.74 |
| CBSA 41180 - St. Louis-MO-IL | 0.74 | 0.74 | 2.00 | 1.15 | 7.14 | 2.13 |
| CBSA 41700 - San Antonio, TX | 1.82 | 1.28 | 3.44 | 1.78 | 11.91 | 2.76 |
| CBSA 41740 - San Diego-Carlsbad-San Marcos, CA | 2.36 | 1.16 | 5.45 | 1.77 | 16.86 | 2.74 |
| CBSA 41860 - San Francisco-Oakland-Fremont, CA | 2.75 | 1.23 | 3.75 | 1.46 | 24.63 | 3.17 |
| CBSA 41940 - San Jose-Sunnyvale-Santa Clara, CA | 2.64 | 1.31 | 4.52 | 1.73 | 13.80 | 3.16 |
| CBSA 42660 - Seattle-Tacoma-Bellevue, WA | 1.56 | 0.90 | 1.56 | 0.90 | 20.73 | 2.97 |
| CBSA 45300 - Tampa-St. Petersburg-Clearwater, FL | 1.59 | 1.10 | 2.07 | 1.19 | 14.55 | 2.42 |
| CBSA 47260 - Virginia Beach-Norfolk-Newport News, VA-NC | 2.08 | 1.26 | 2.08 | 1.26 | 9.72 | 2.84 |
| CBSA 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV | 0.00 | N/A | 1.00 | 0.72 | 11.15 | 2.60 |

Appendix F

Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

This appendix displays the estimated Year 1 TBC rate comparisons for the 40 CBSAs in the LACS. The three-letter codes by each data point use the airport code for each CBSA, given in Table F-1.

Table F-1. Airport codes for the 40 CBSAs

| CBSA | CBSA name | Airport code |
|-------|--|--------------|
| 12060 | Atlanta-Sandy Springs-Marietta, GA | ATL |
| 12420 | Austin-Round Rock, TX | AUS |
| 12580 | Baltimore-Towson, MD | BWI |
| 14460 | Boston-Cambridge-Quincy, MA | BOS |
| 16740 | Charlotte-Gastonia-Concord, NC-SC | CLT |
| 16980 | Chicago-Naperville-Joliet, IL-IN-WI | ORD |
| 17140 | Cincinnati-Middletown, OH-KY-IN | CVG |
| 17460 | Cleveland-Elyria-Mentor, OH | CLE |
| 18140 | Columbus, OH | CMH |
| 19100 | Dallas-Fort Worth-Arlington, TX | DFW |
| 19740 | Denver-Aurora, CO | DEN |
| 19820 | Detroit-Warren-Livonia, MI | DTW |
| 26420 | Houston-Sugar Land-Baytown, TX | HOU |
| 26900 | Indianapolis-Carmel, IN | IND |
| 27260 | Jacksonville, FL | JAX |
| 28140 | Kansas City, MO-KS | MCI |
| 29820 | Las Vegas-Paradise, NV | LAS |
| 31080 | Los Angeles-Long Beach-Santa Ana, CA | LAX |
| 33100 | Miami-Fort Lauderdale-Pompano Beach, FL | MIA |
| 33340 | Milwaukee-Waukesha-West Allis, WI | MKE |
| 33460 | Minneapolis-St. Paul-Bloomington, MN-WI | MSP |
| 34980 | Nashville-Davidson-Murfreesboro-Franklin, TN | BNA |
| 35620 | NY-Northern NJ-LI, NY-NJ-PA | JFK |
| 36740 | Orlando-Kissimmee-Sanford, FL | ORL |
| 37980 | Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | PHL |
| 38060 | Phoenix-Mesa-Scottsdale, AZ | PHX |
| 38300 | Pittsburgh, PA | PIT |
| 38900 | Portland-Vancouver-Hillsboro, OR-WA | PDX |
| 39300 | Providence-Warwick, RI-MA | PVD |
| 40140 | Riverside-San Bernardino-Ontario, CA | SNA |

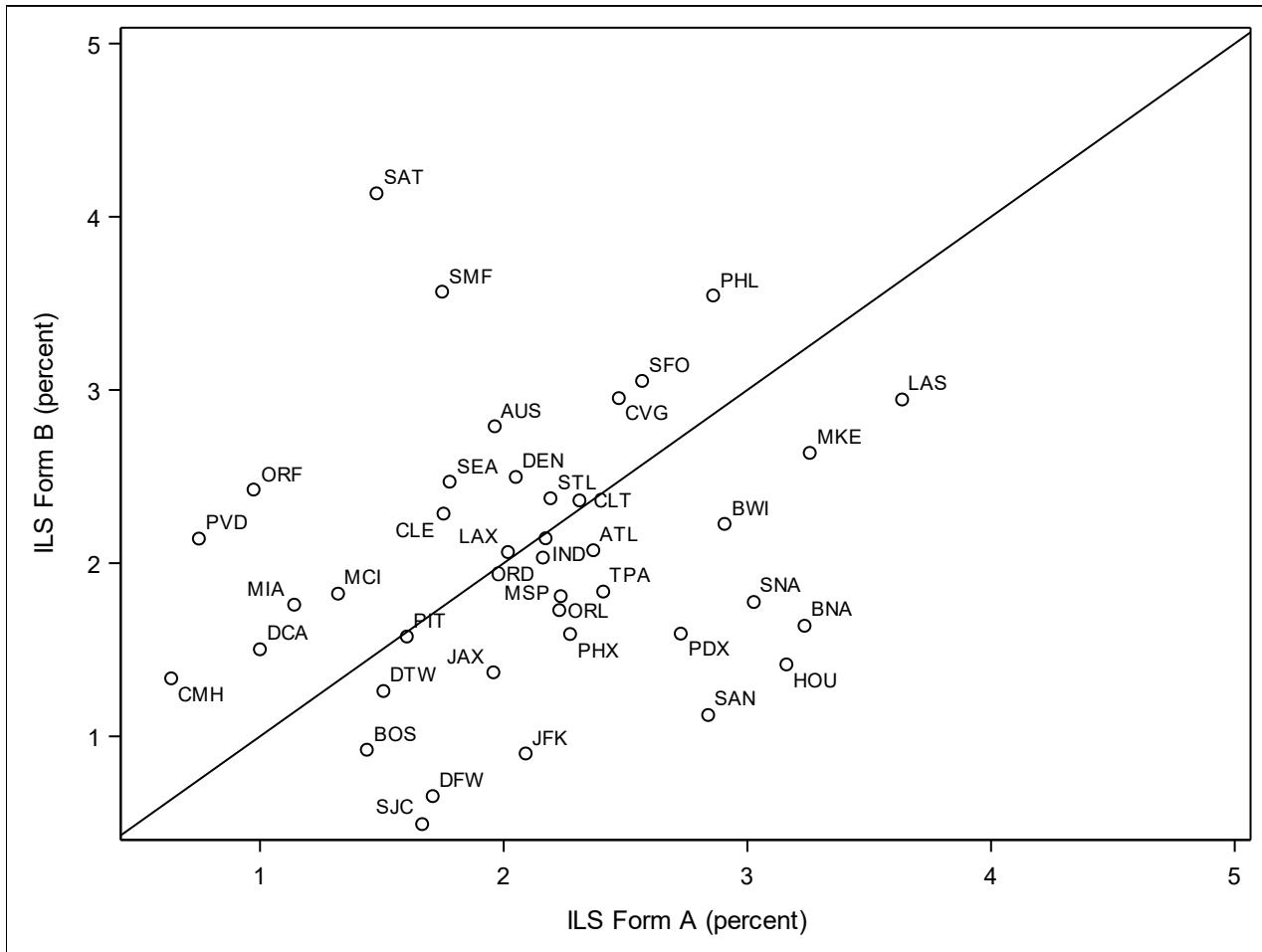
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Table F-1. Airport codes for the 40 CBSAs (continued)

| CBSA | CBSA name | Airport code |
|-------|--|--------------|
| 40900 | Sacramento-Arden-Arcade-Roseville, CA | SMF |
| 41180 | St. Louis-MO-IL | STL |
| 41700 | San Antonio, TX | SAT |
| 41740 | San Diego-Carlsbad-San Marcos, CA | SAN |
| 41860 | San Francisco-Oakland-Fremont, CA | SFO |
| 41940 | San Jose-Sunnyvale-Santa Clara, CA | SJC |
| 42660 | Seattle-Tacoma-Bellevue, WA | SEA |
| 45300 | Tampa-St. Petersburg-Clearwater, FL | TPA |
| 47260 | Virginia Beach-Norfolk-Newport News, VA-NC | ORF |
| 47900 | Washington-Arlington-Alexandria, DC-VA-MD-WV | DCA |

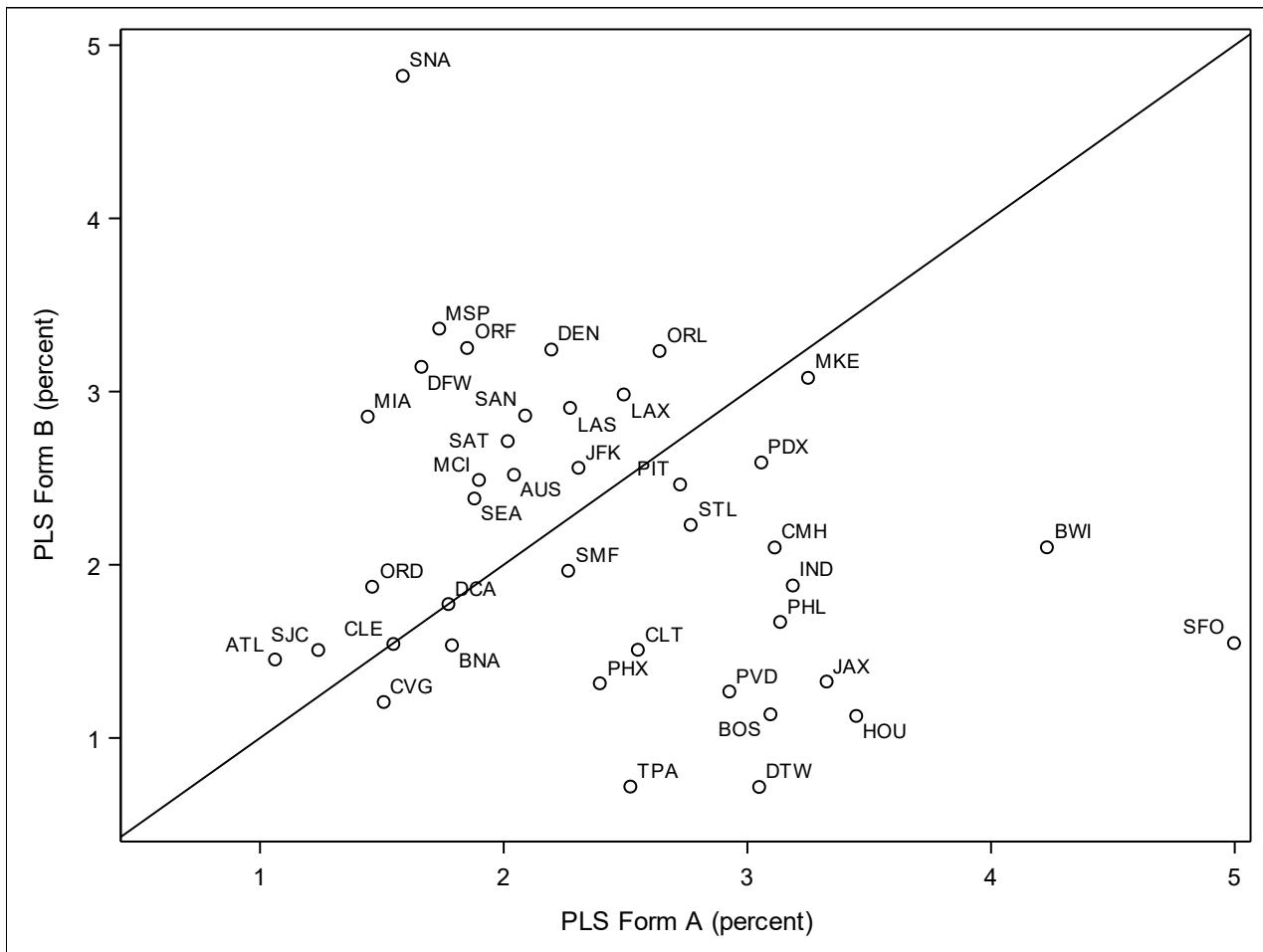
F.1 Scatterplots for ILS and PLS

Figure F-1. Households touched by violent crime, excluding threats: ILS Form B and ILS Form A



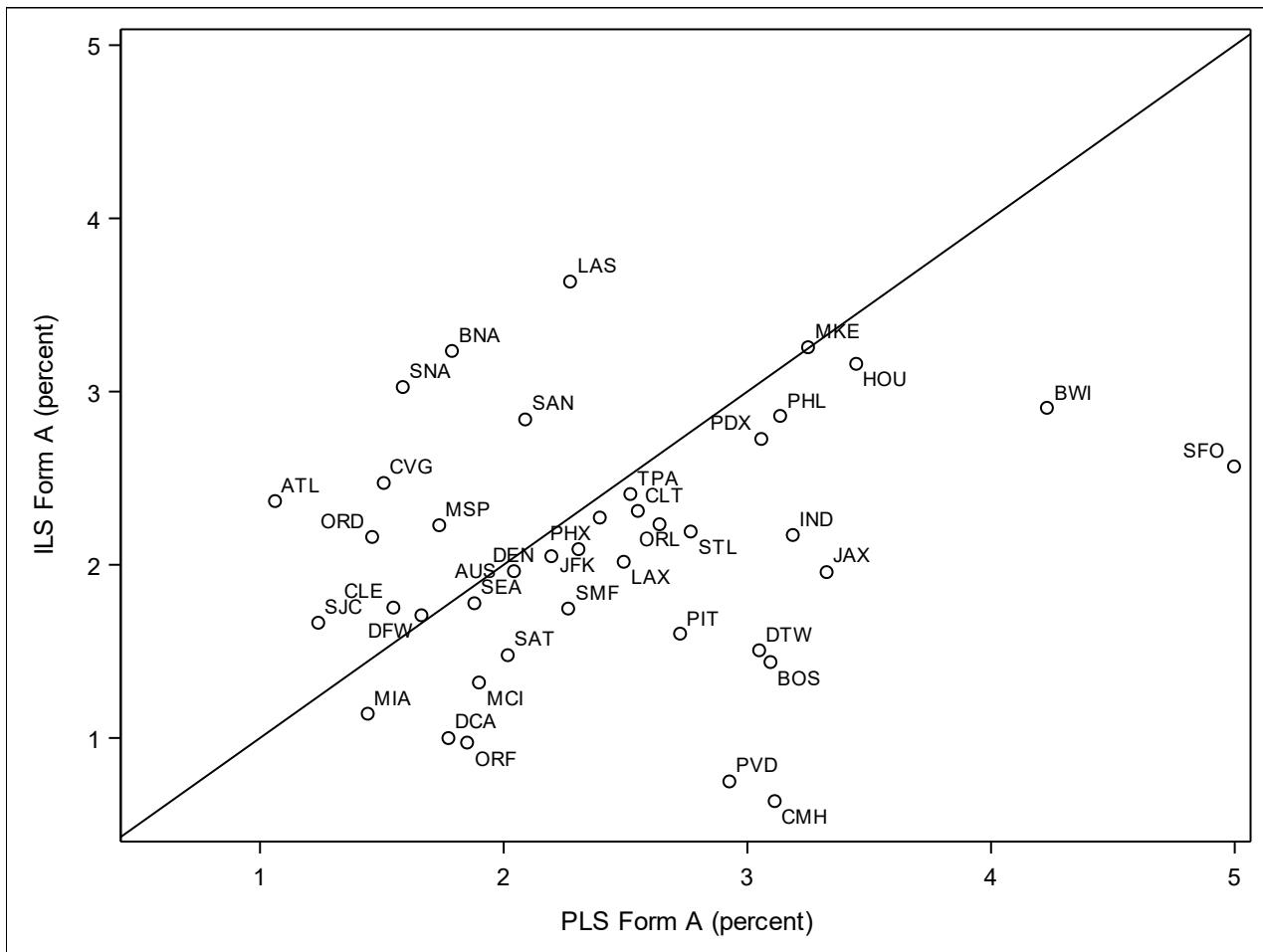
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-2. Households touched by violent crime, excluding threats: PLS Form B and PLS Form A



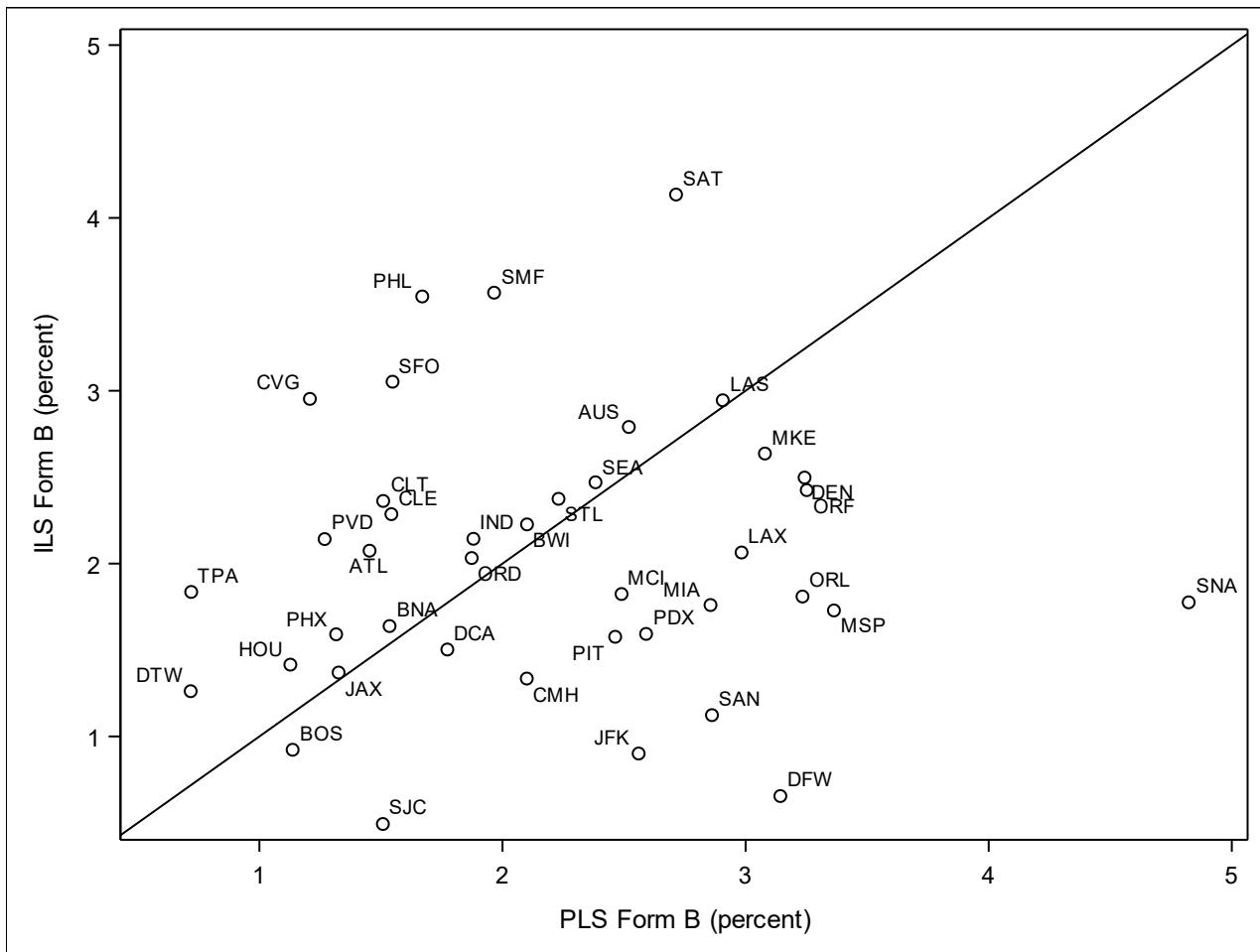
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-3. Households touched by violent crime, excluding threats: ILS Form A and PLS Form A



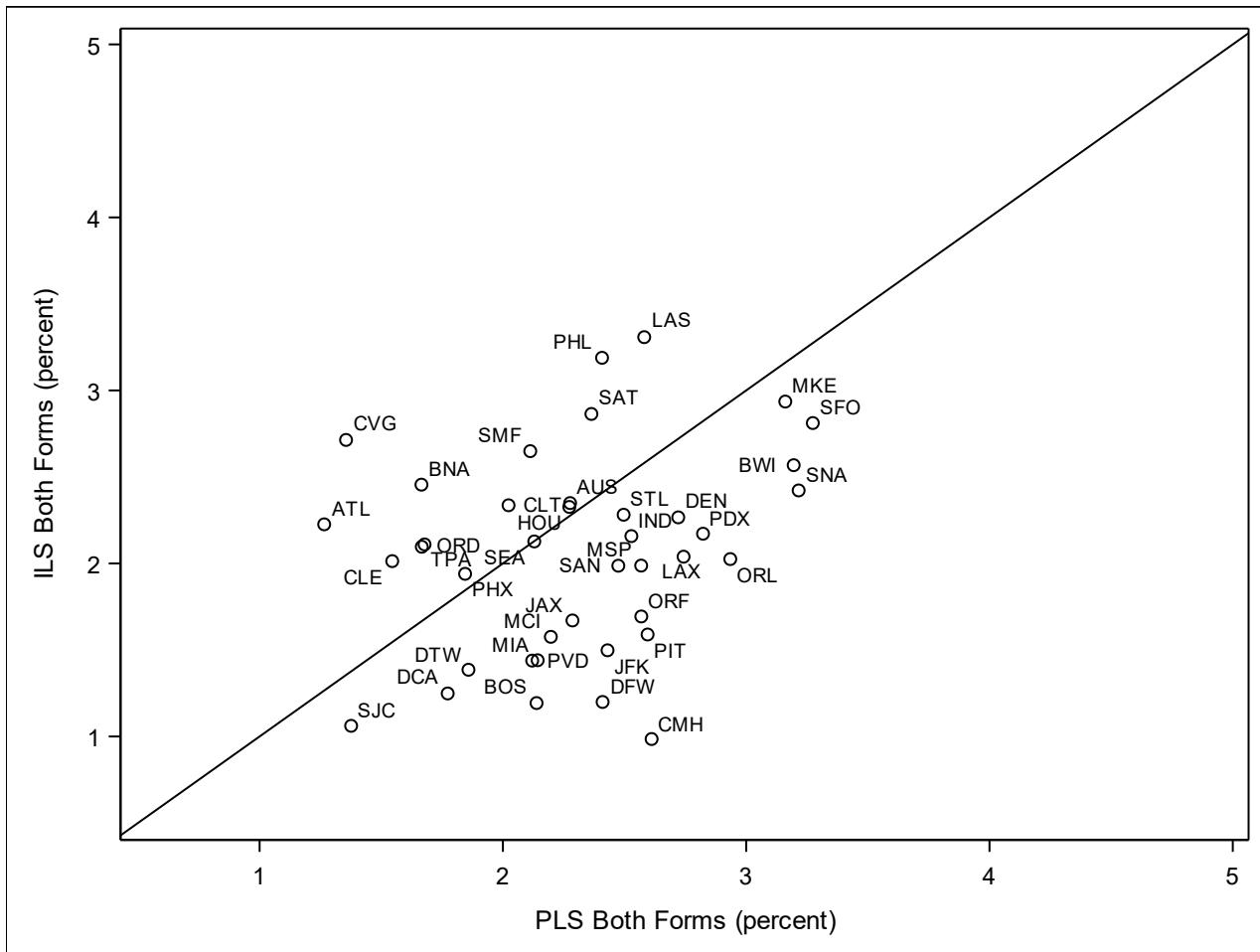
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-4. Households touched by violent crime, excluding threats: ILS Form B and PLS Form B



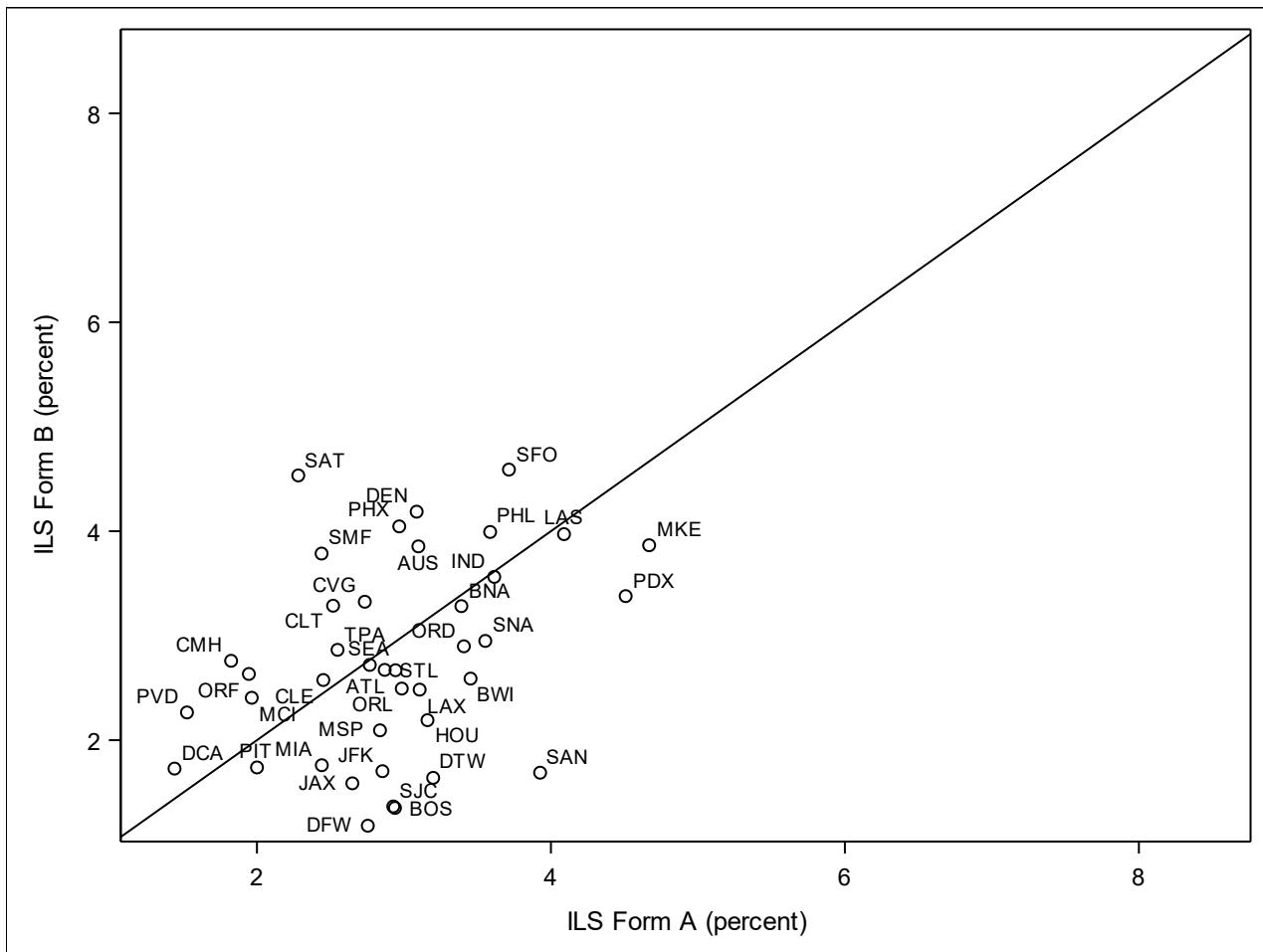
Appendix F

Figure F-5. Households touched by violent crime, excluding threats: ILS both forms and PLS both forms



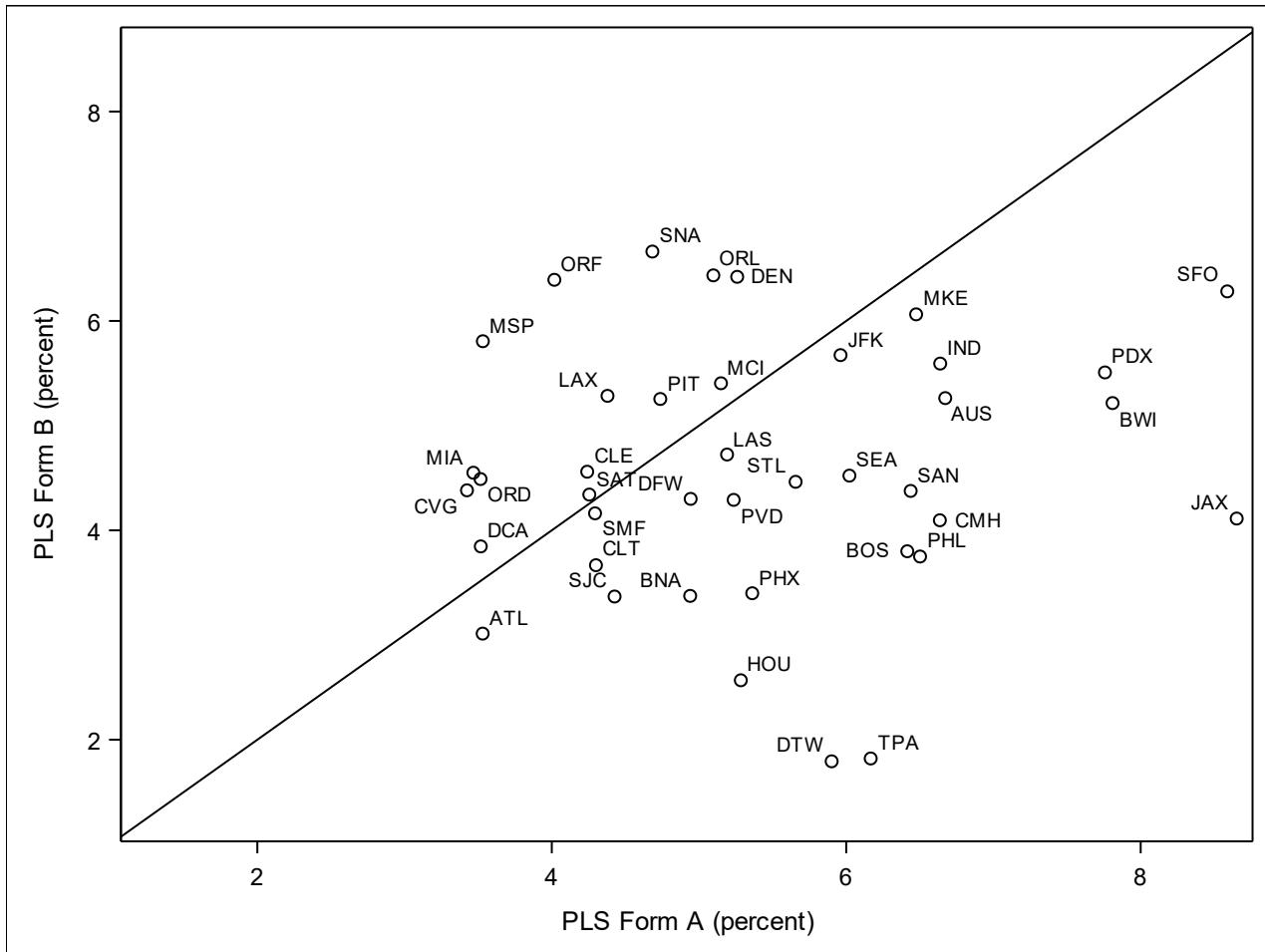
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-6. Households touched by violent crime, including threats: ILS Form B and ILS Form A



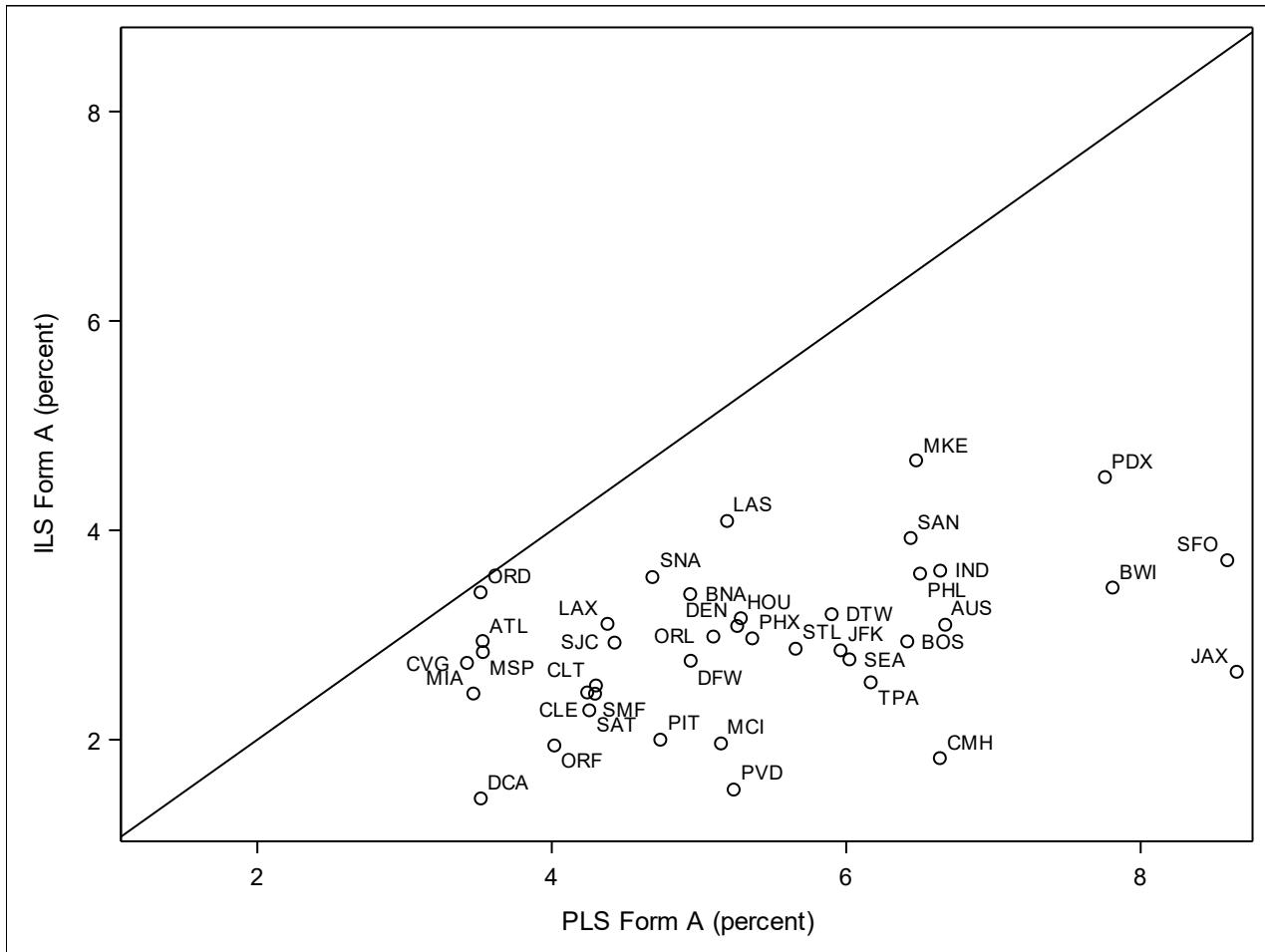
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-7. Households touched by violent crime, including threats: PLS Form B and PLS Form A



Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-8. Households touched by violent crime, including threats: ILS Form A and PLS Form A



Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-9. Households touched by violent crime, including threats: ILS Form B and PLS Form B

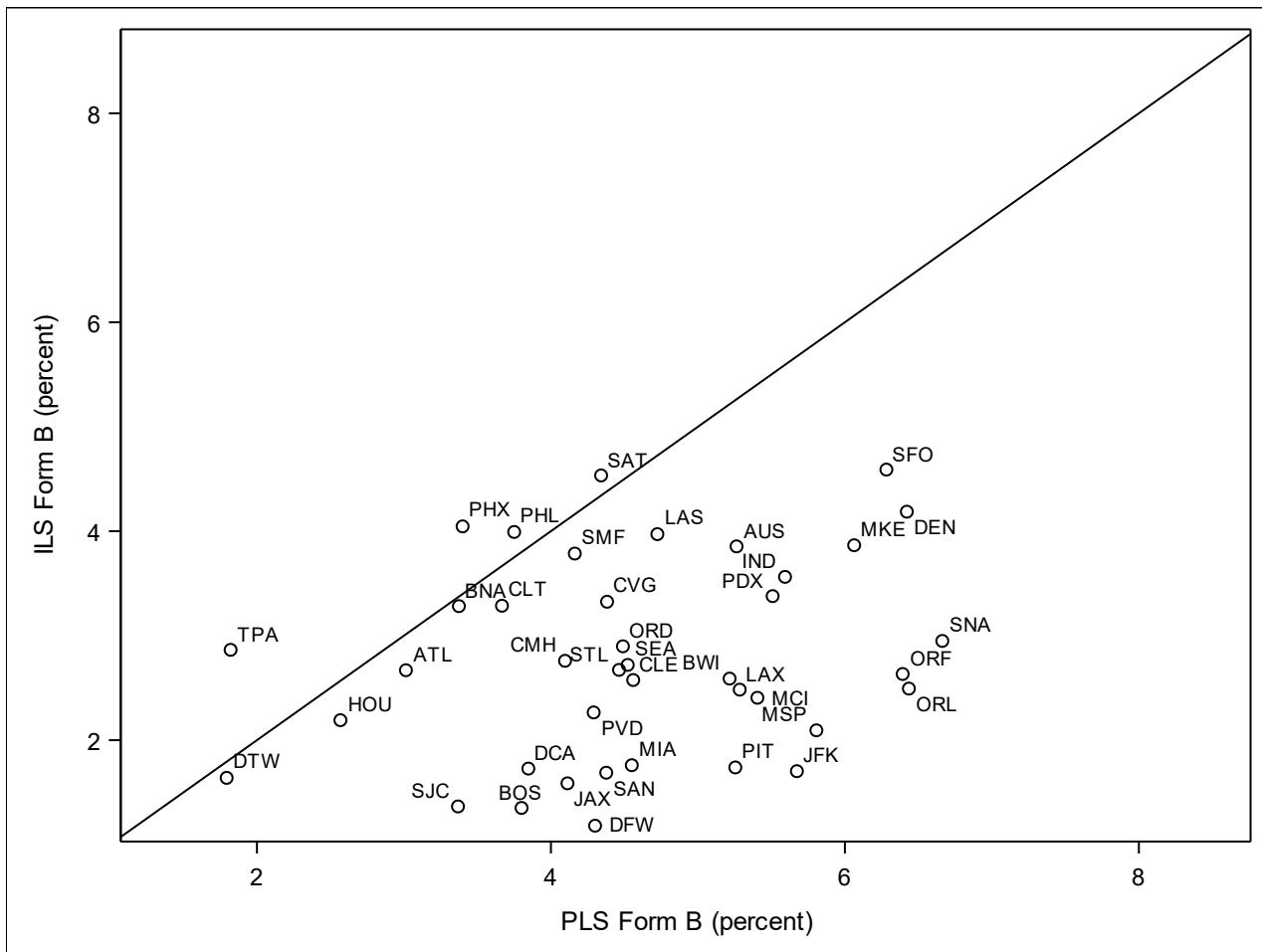
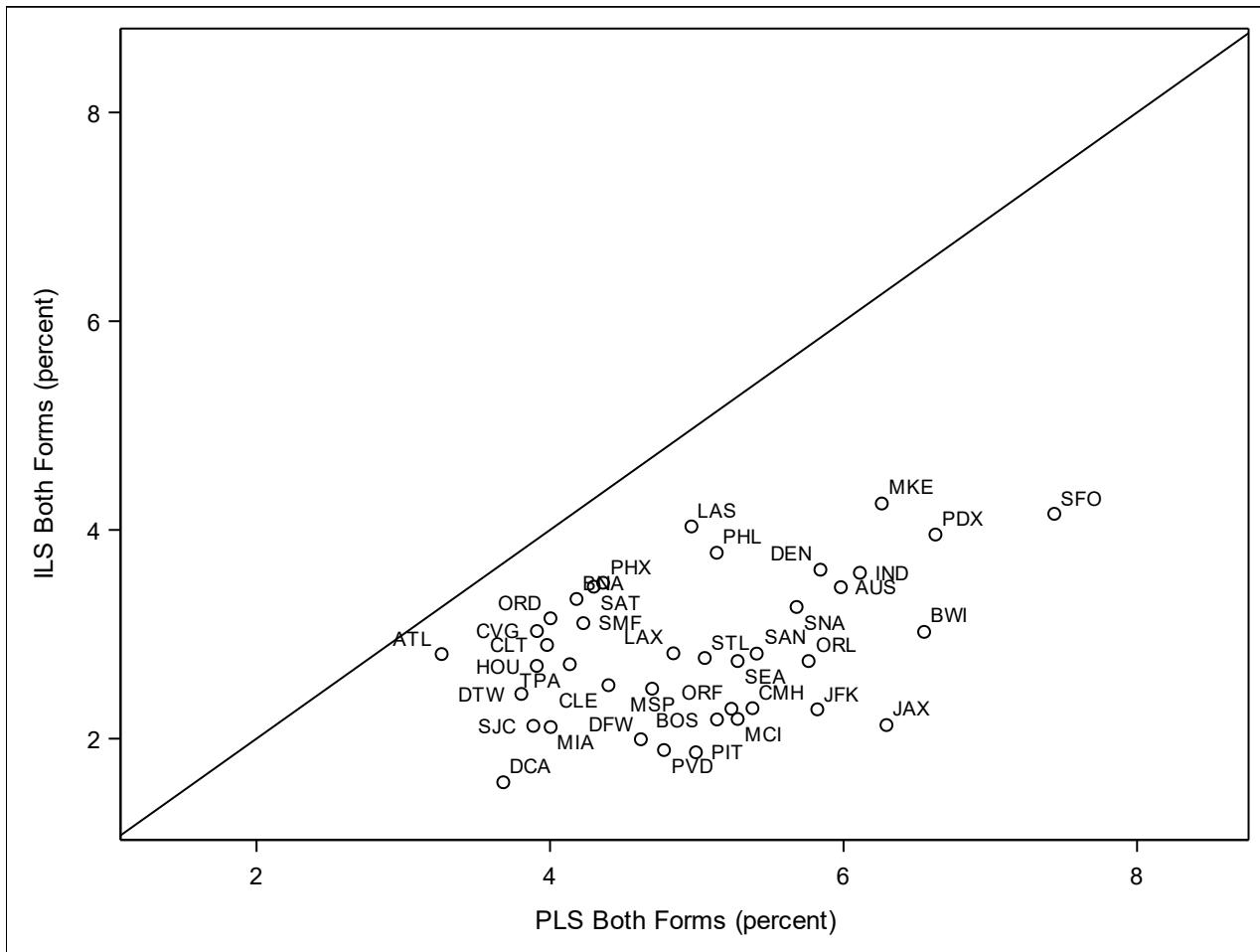
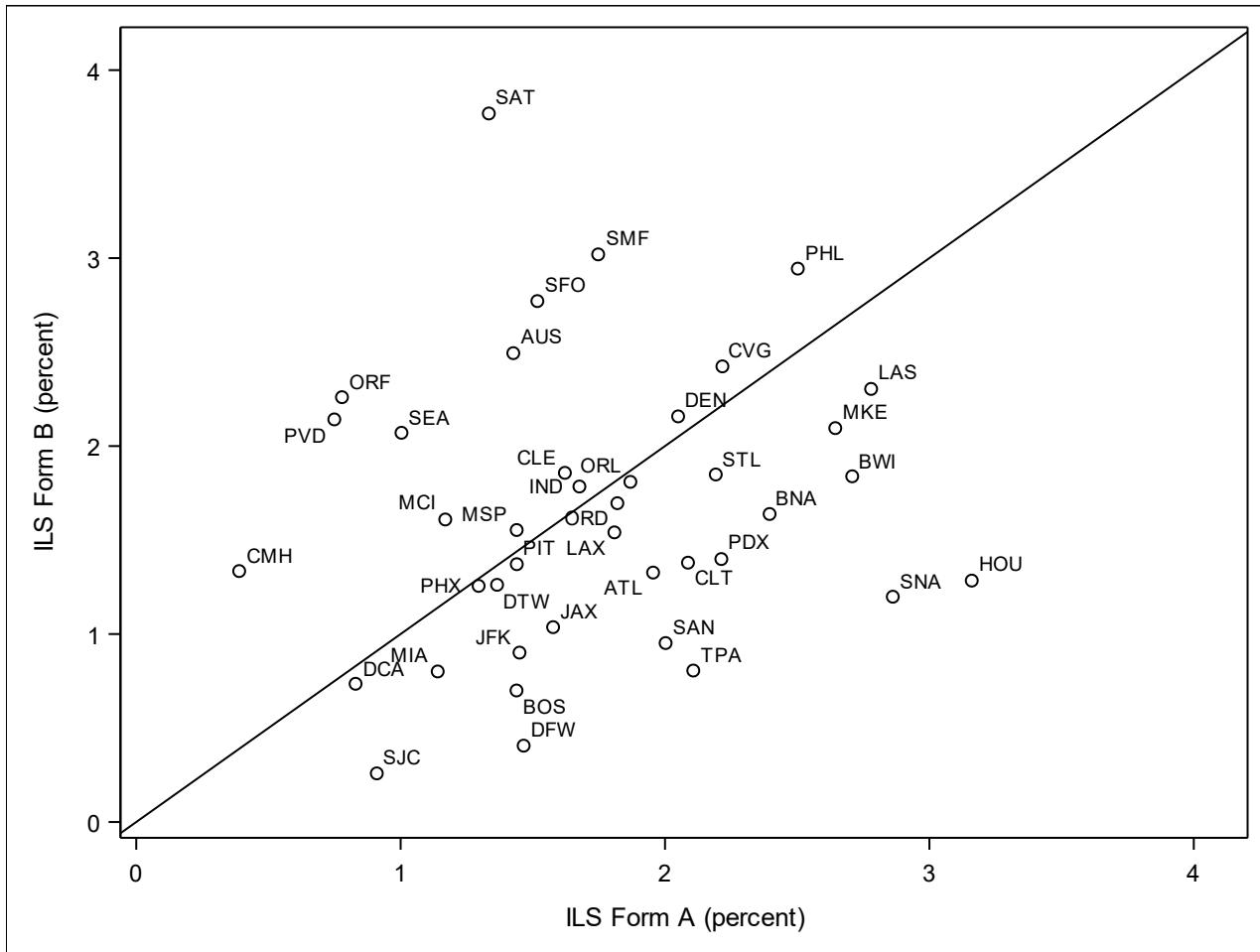


Figure F-10. Households touched by violent crime, including threats: ILS both forms and PLS both forms



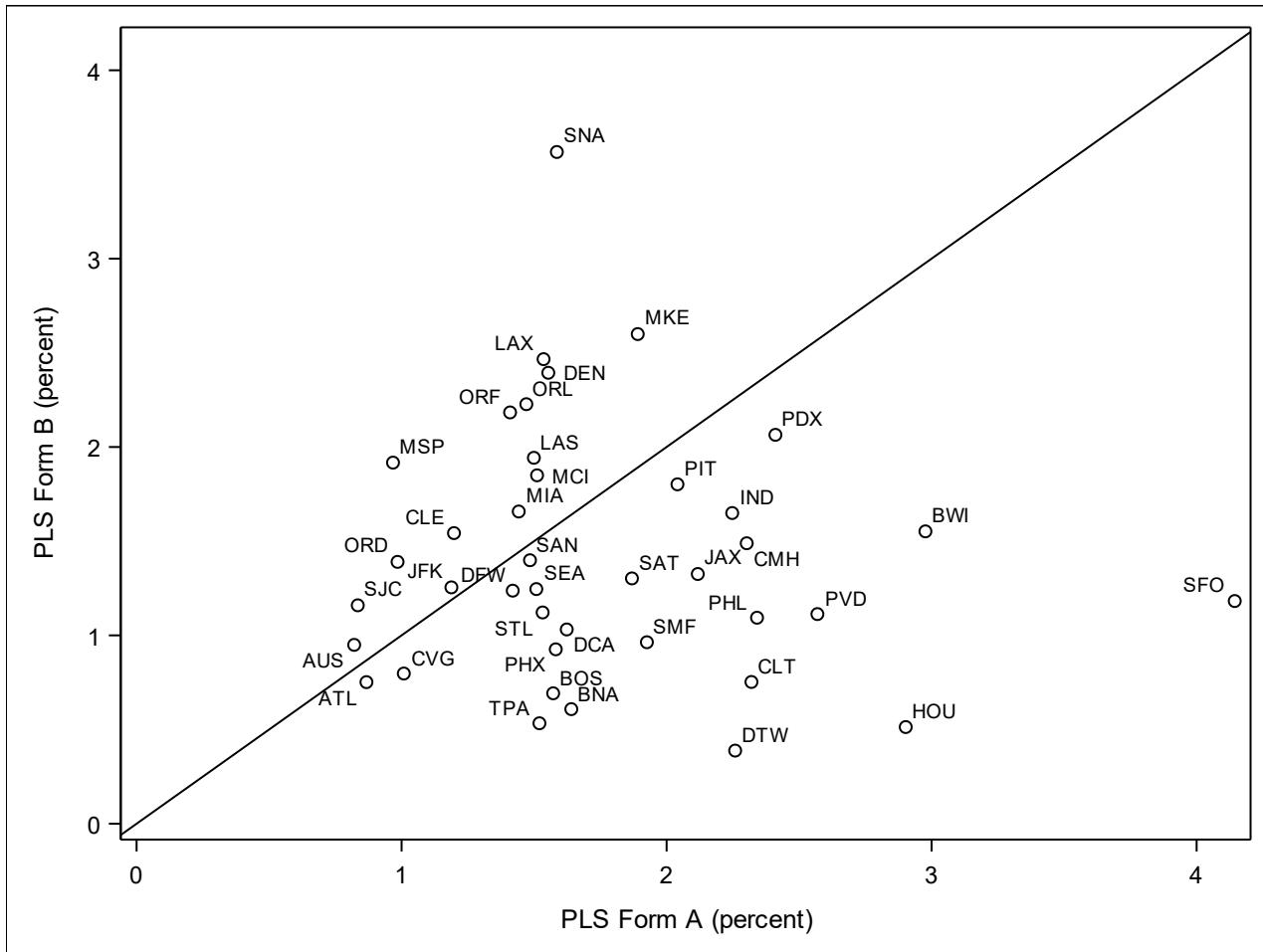
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-11. Households touched by serious violent crime: ILS Form B and ILS Form A



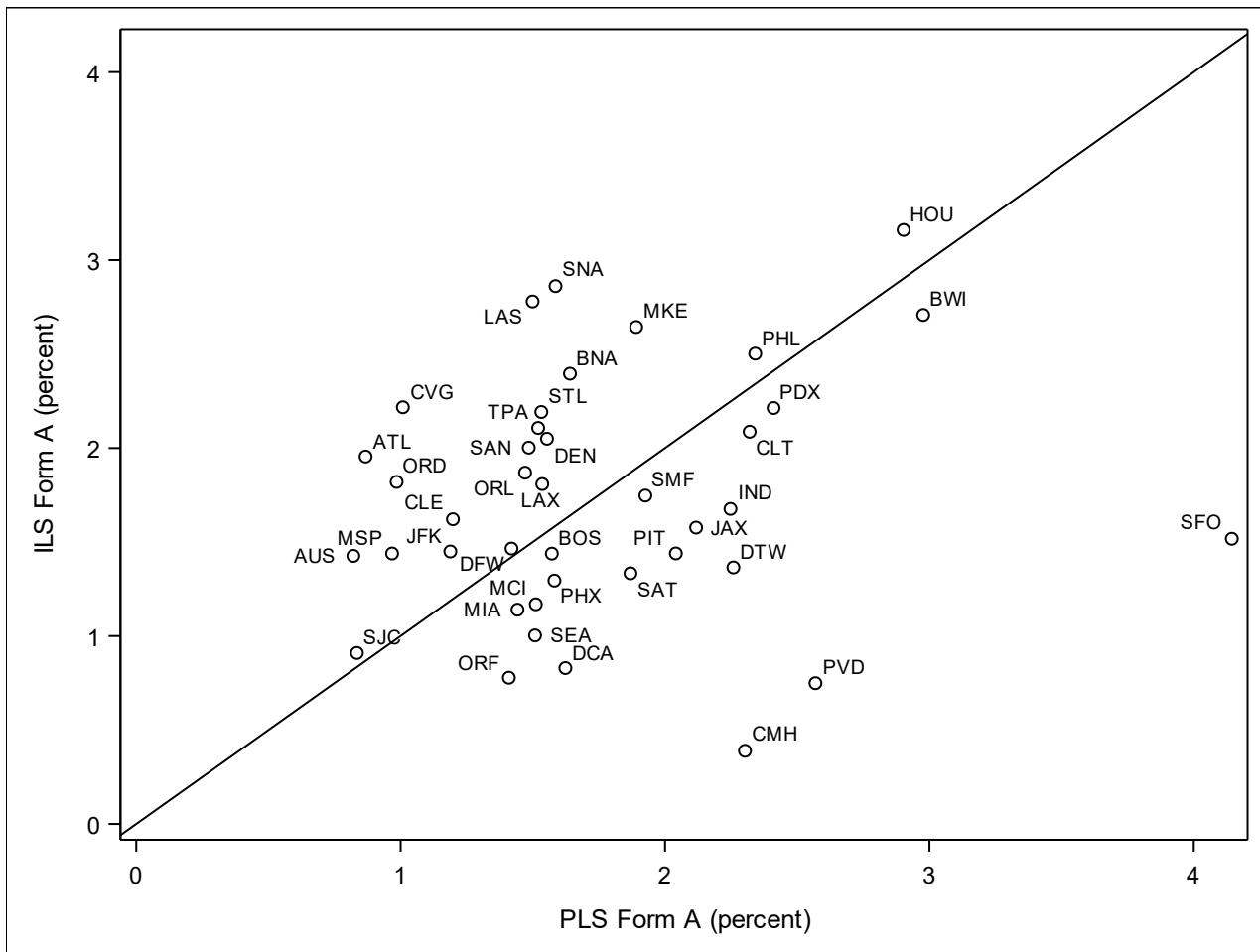
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-12. Households touched by serious violent crime: PLS Form B and PLS Form A



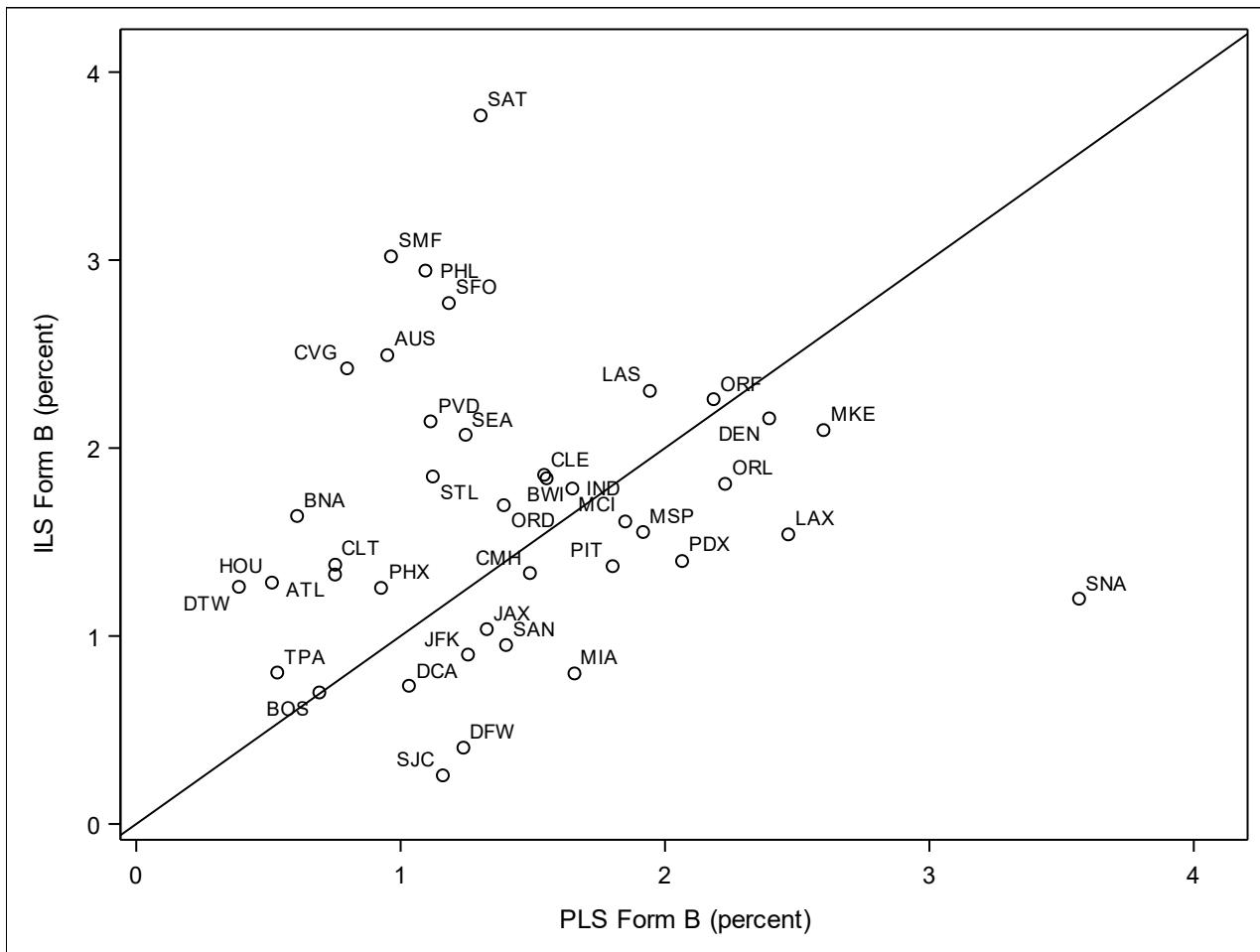
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-13. Households touched by serious violent crime: ILS Form A and PLS Form A



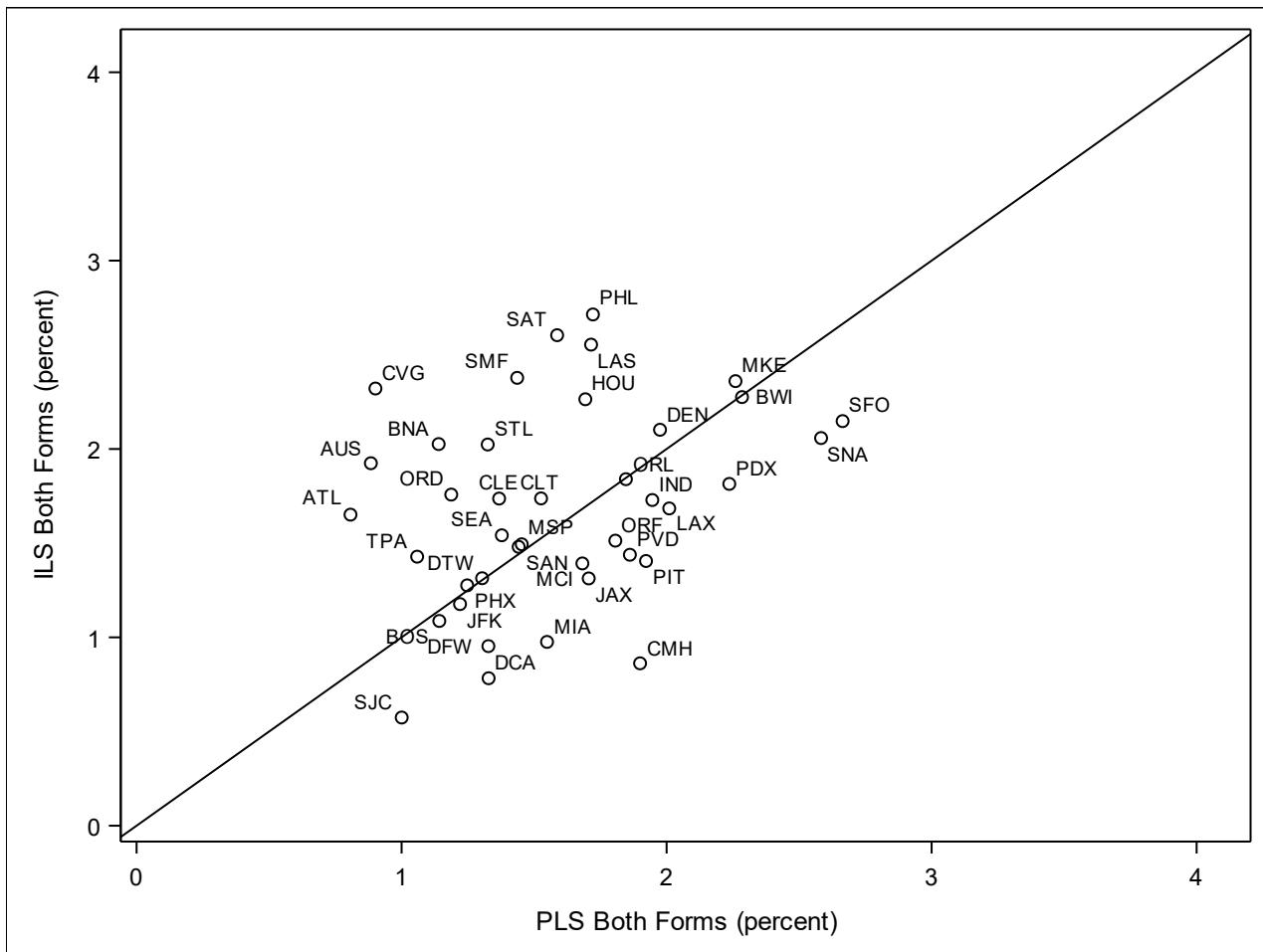
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-14. Households touched by serious violent crime: ILS Form B and PLS Form B



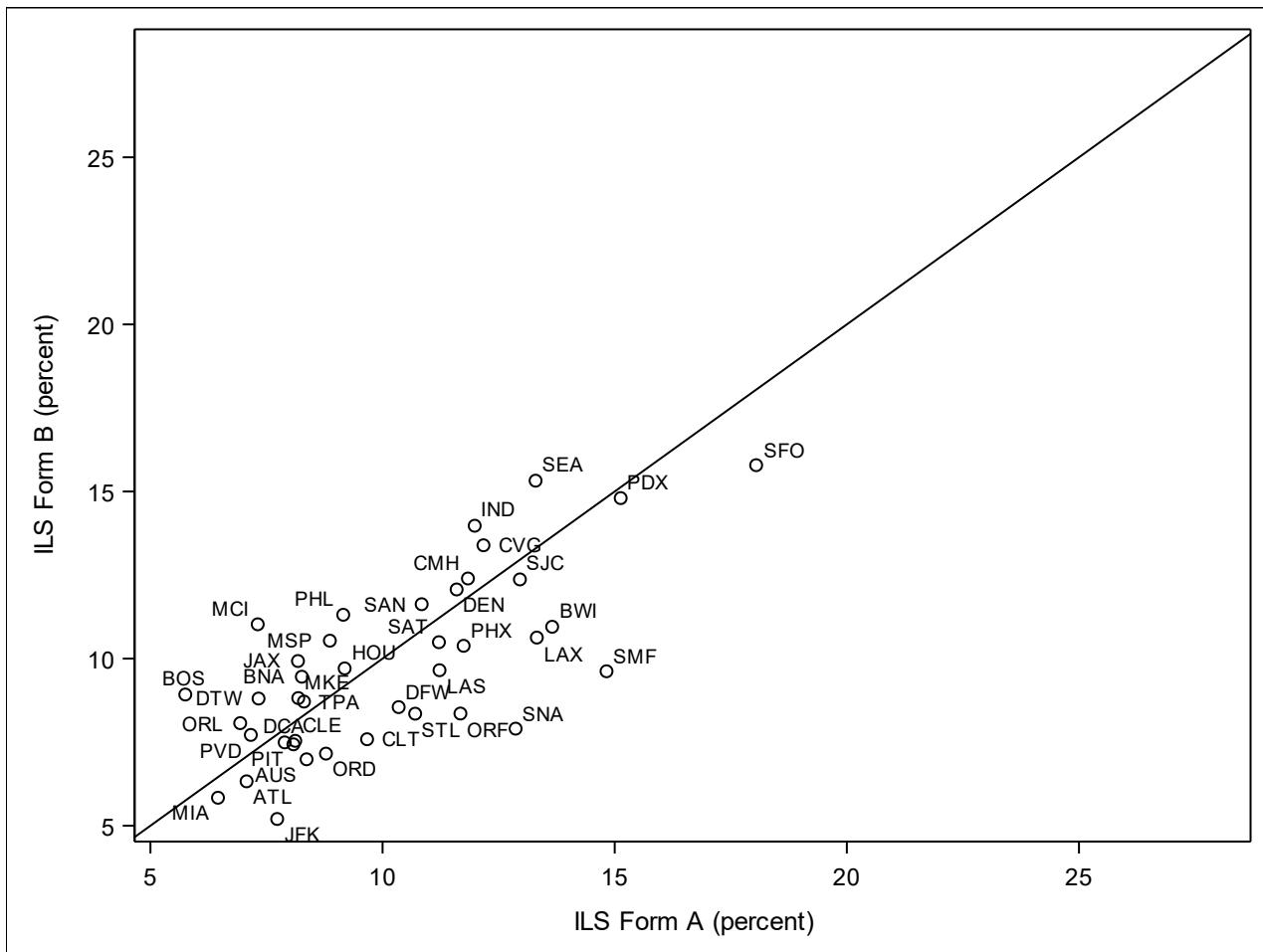
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-15. Households touched by serious violent crime: ILS both forms and PLS both forms



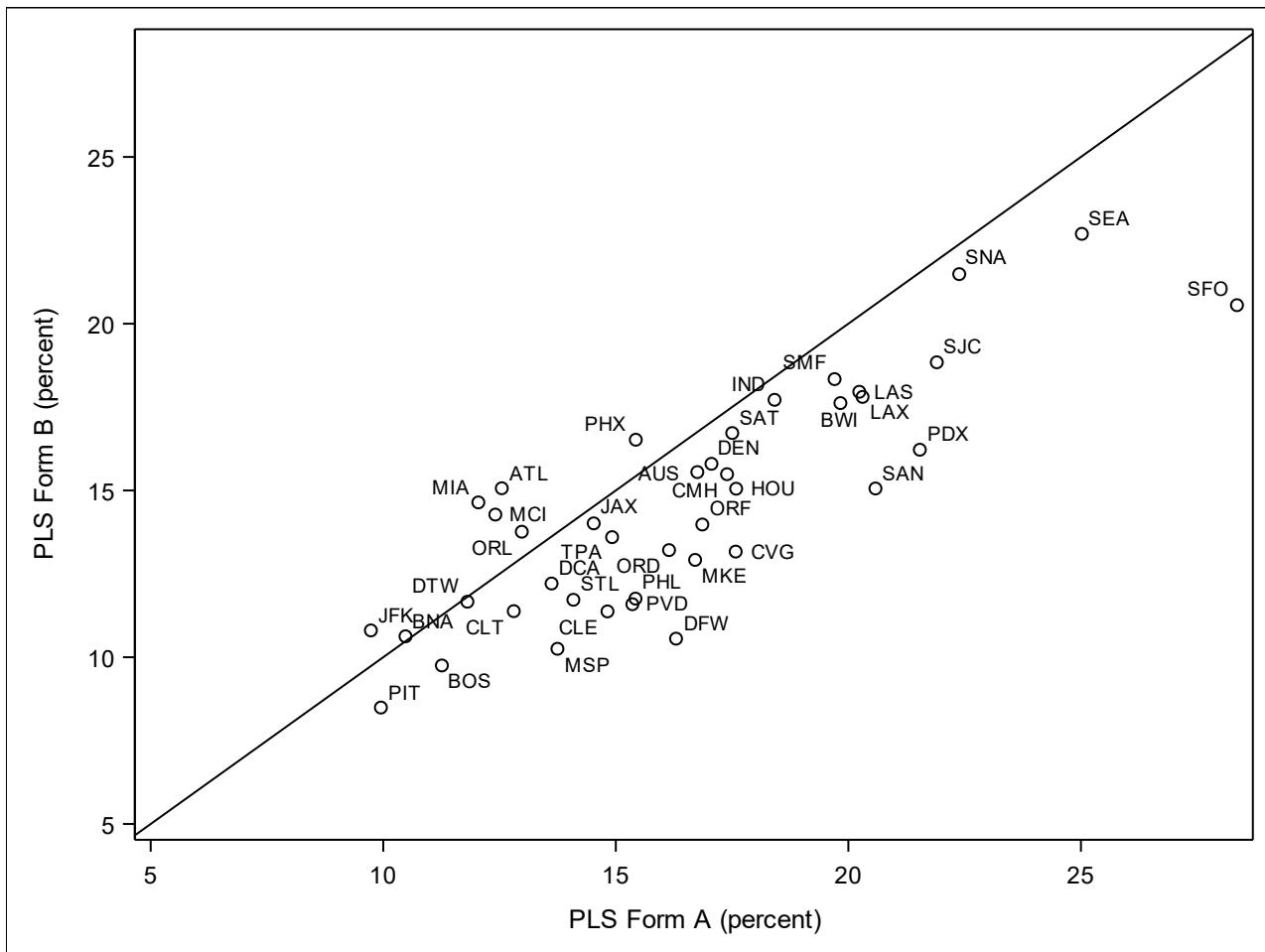
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-16. Households touched by property crime, excludes attempts: ILS Form B and ILS Form A



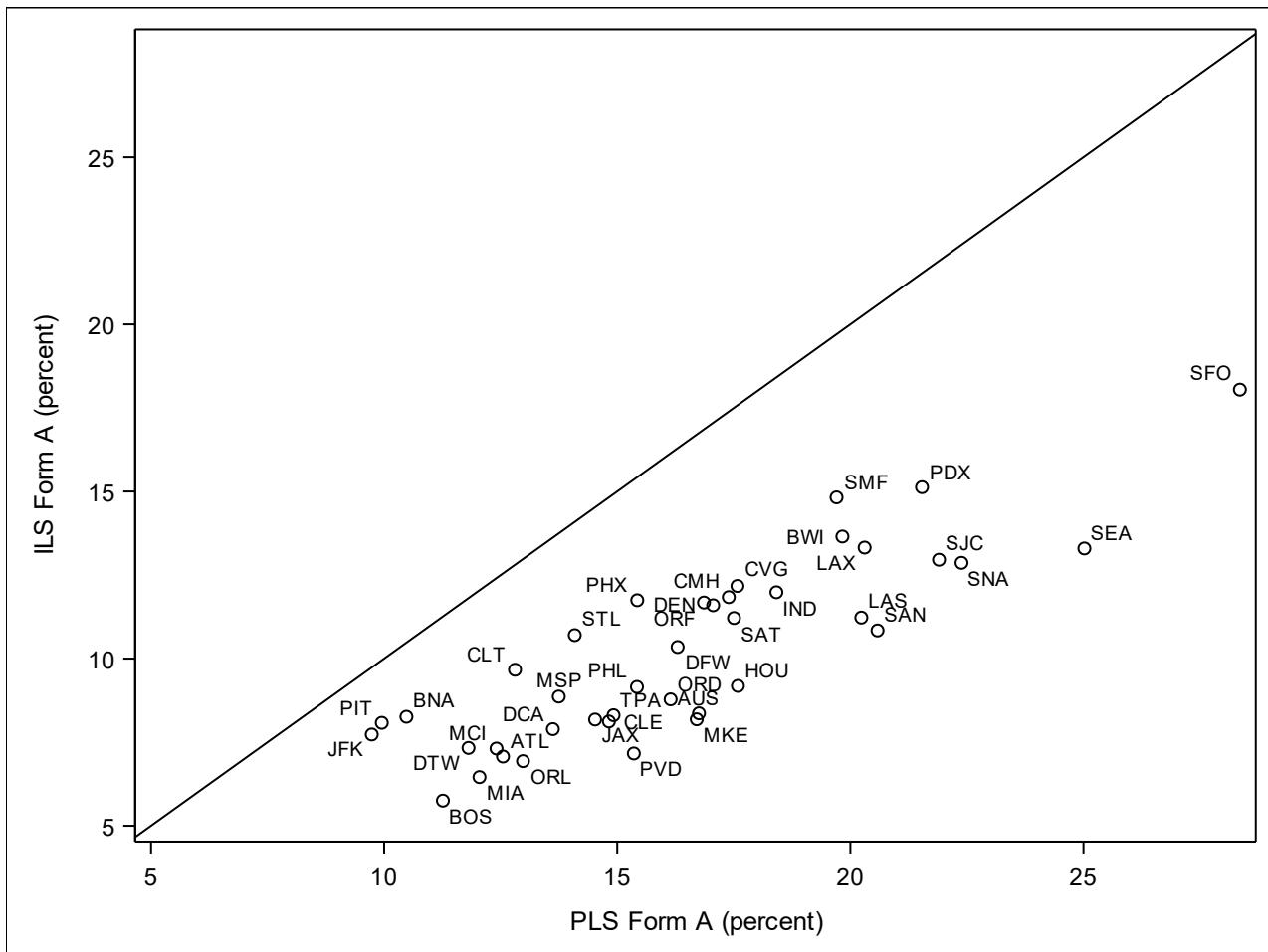
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-17. Households touched by property crime, excludes attempts: PLS Form B and PLS Form A



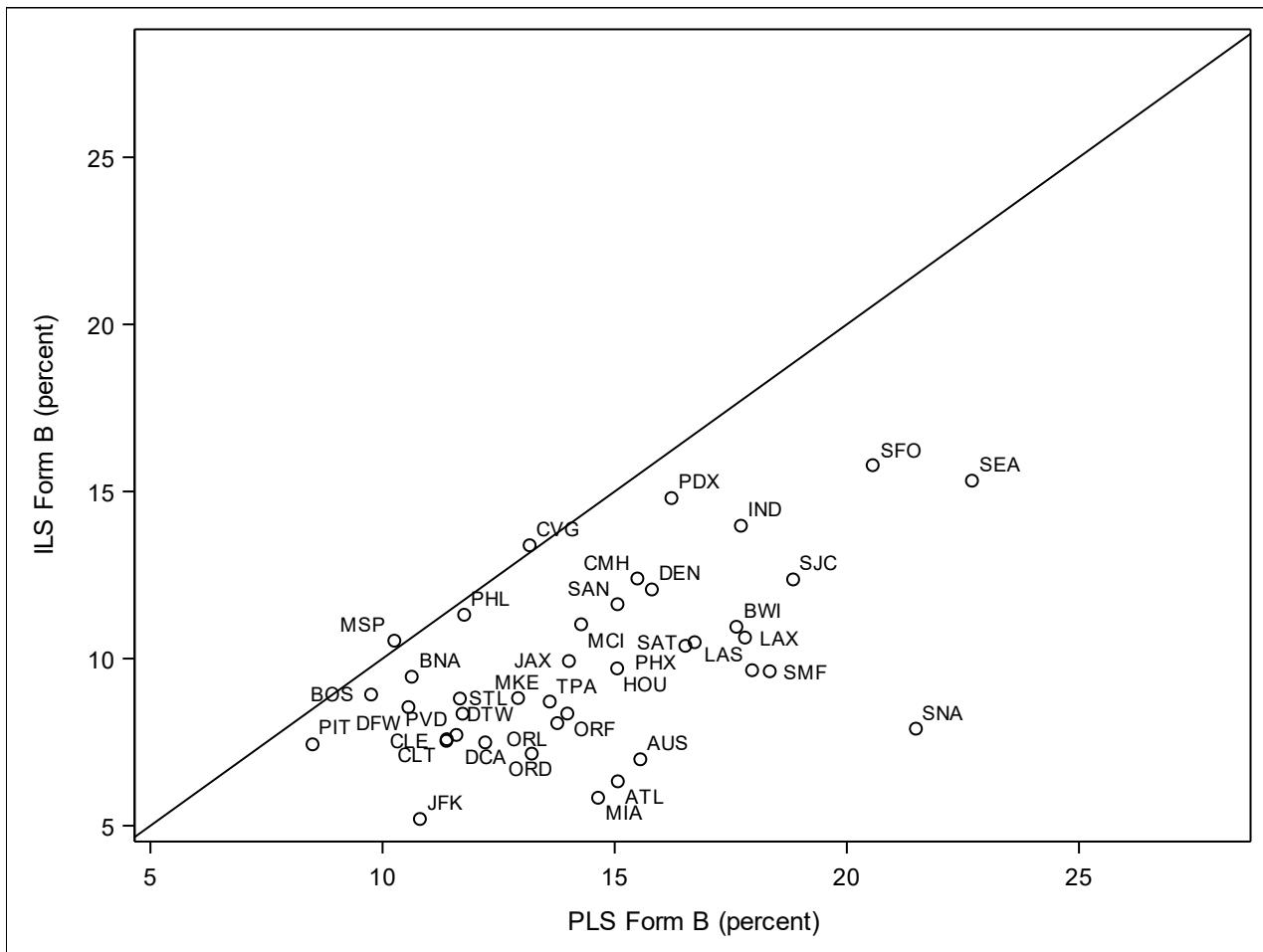
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-18. Households touched by property crime, excludes attempts: ILS Form A and PLS Form A



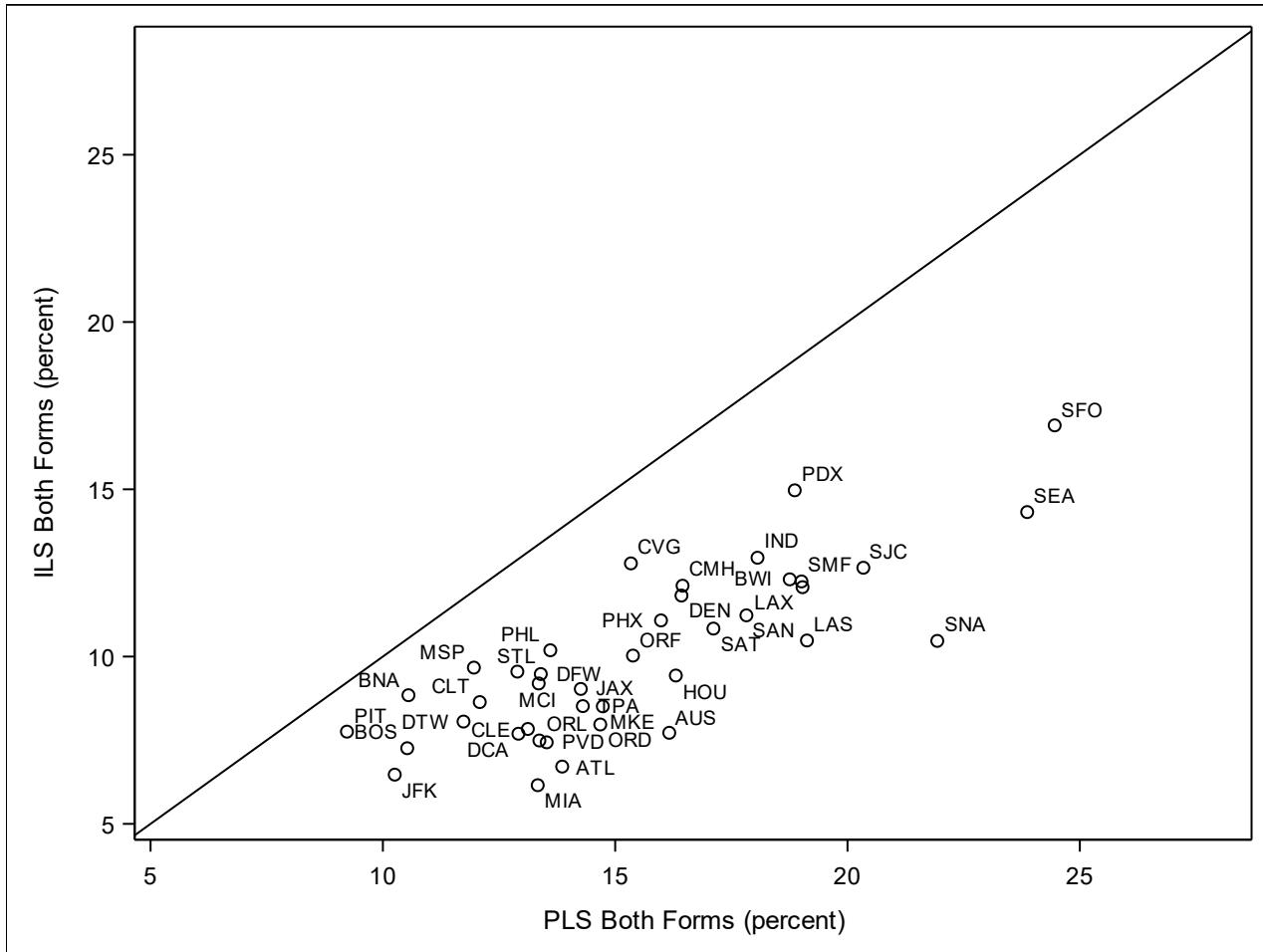
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-19. Households touched by property crime, excludes attempts: ILS Form B and PLS Form B



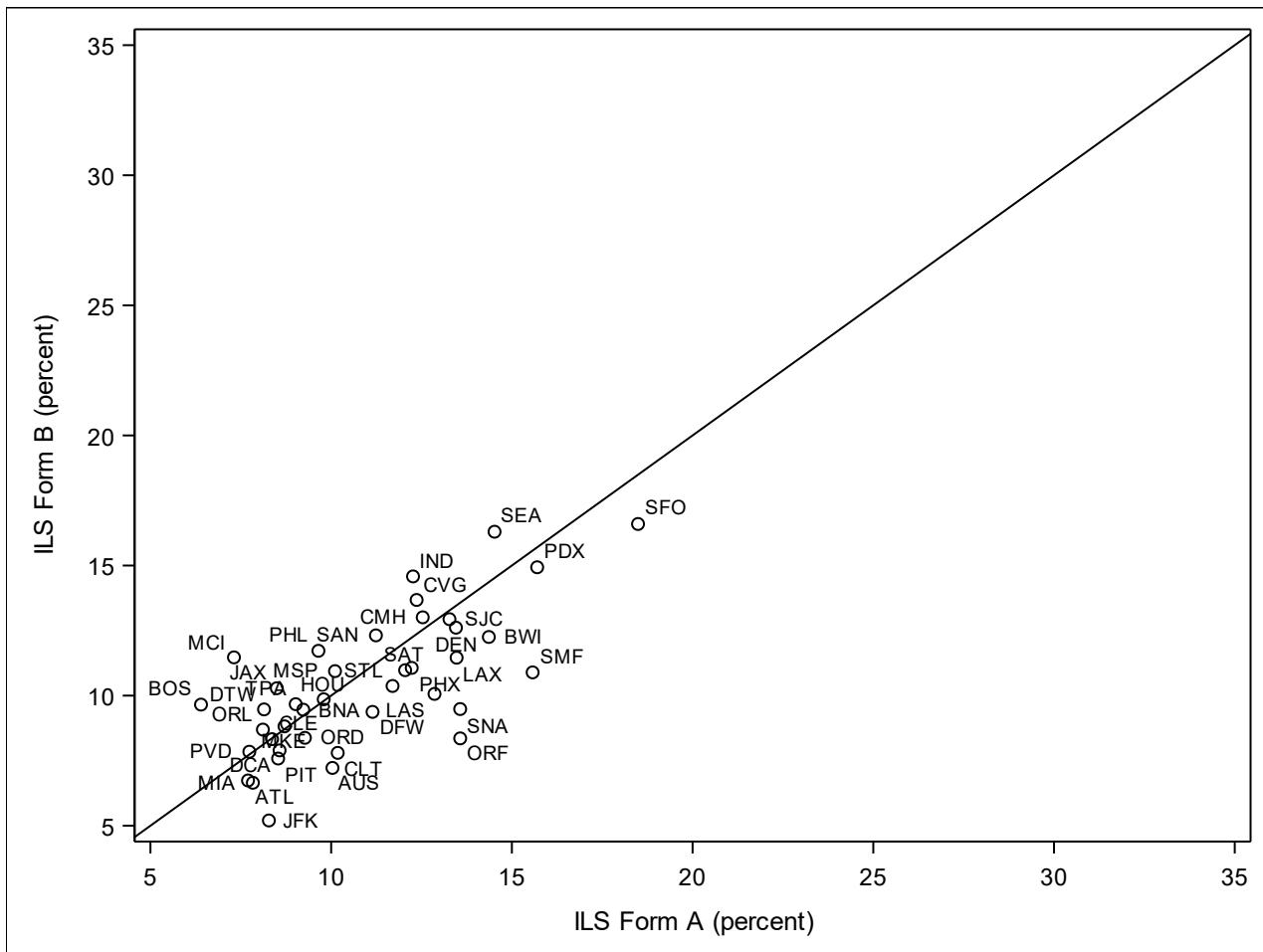
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-20. Households touched by property crime, excludes attempts: ILS both forms and PLS both forms



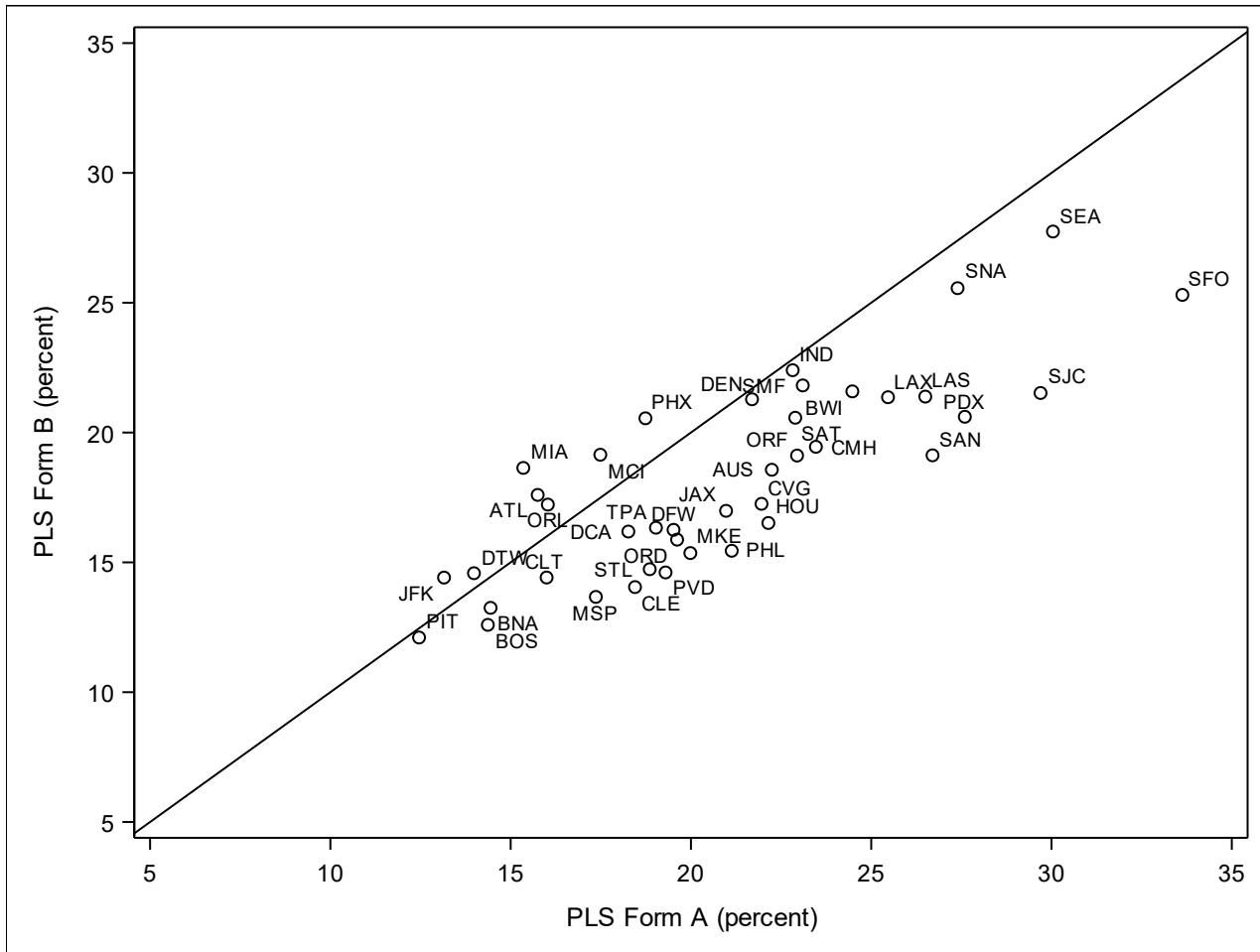
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-21. Households touched by property crime, includes attempts: ILS Form B and ILS Form A



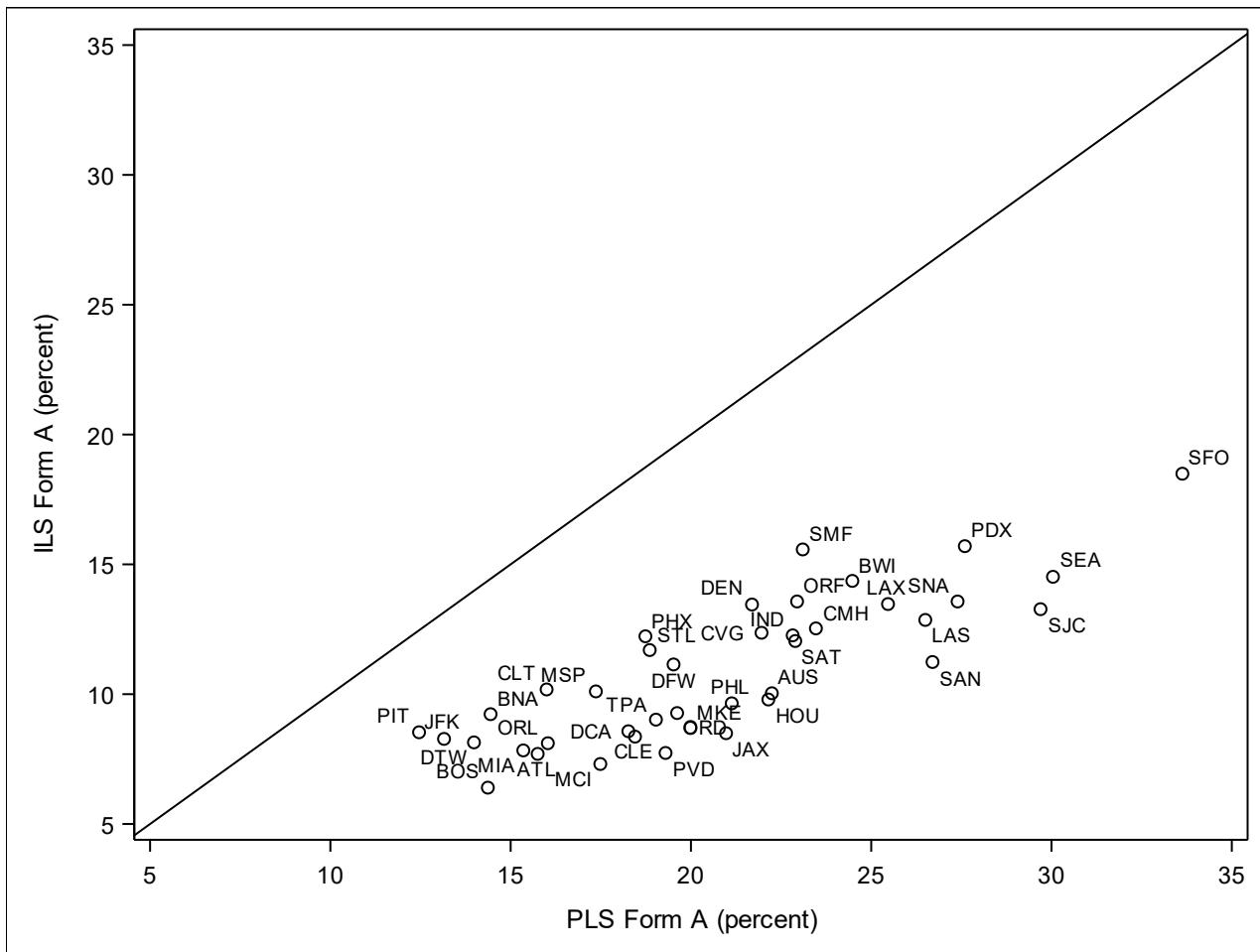
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-22. Households touched by property crime, includes attempts: PLS Form B and PLS Form A



Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-23. Households touched by property crime, includes attempts: ILS Form A and PLS Form A



Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-24. Households touched by property crime, includes attempts: ILS Form B and PLS Form B

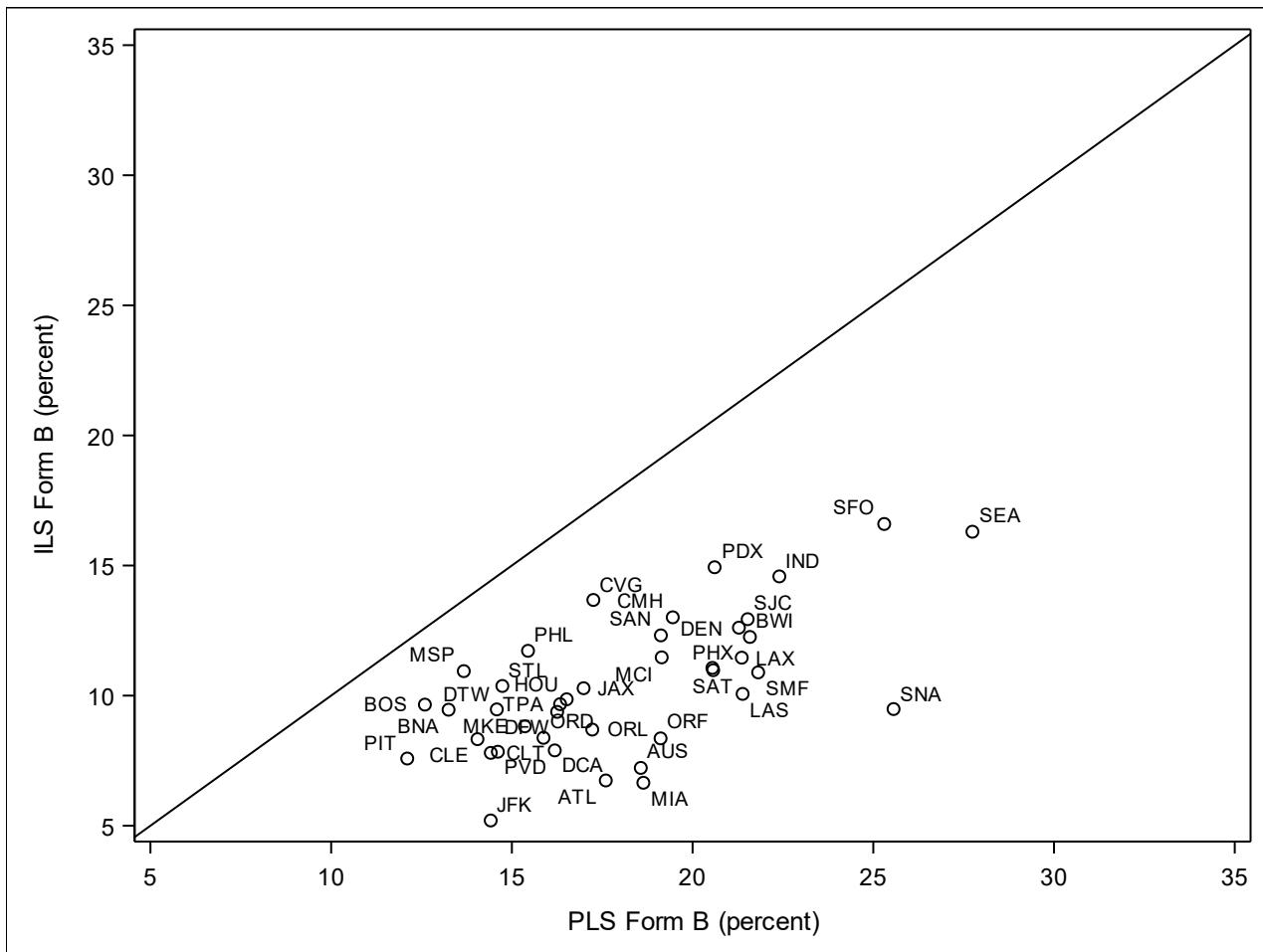
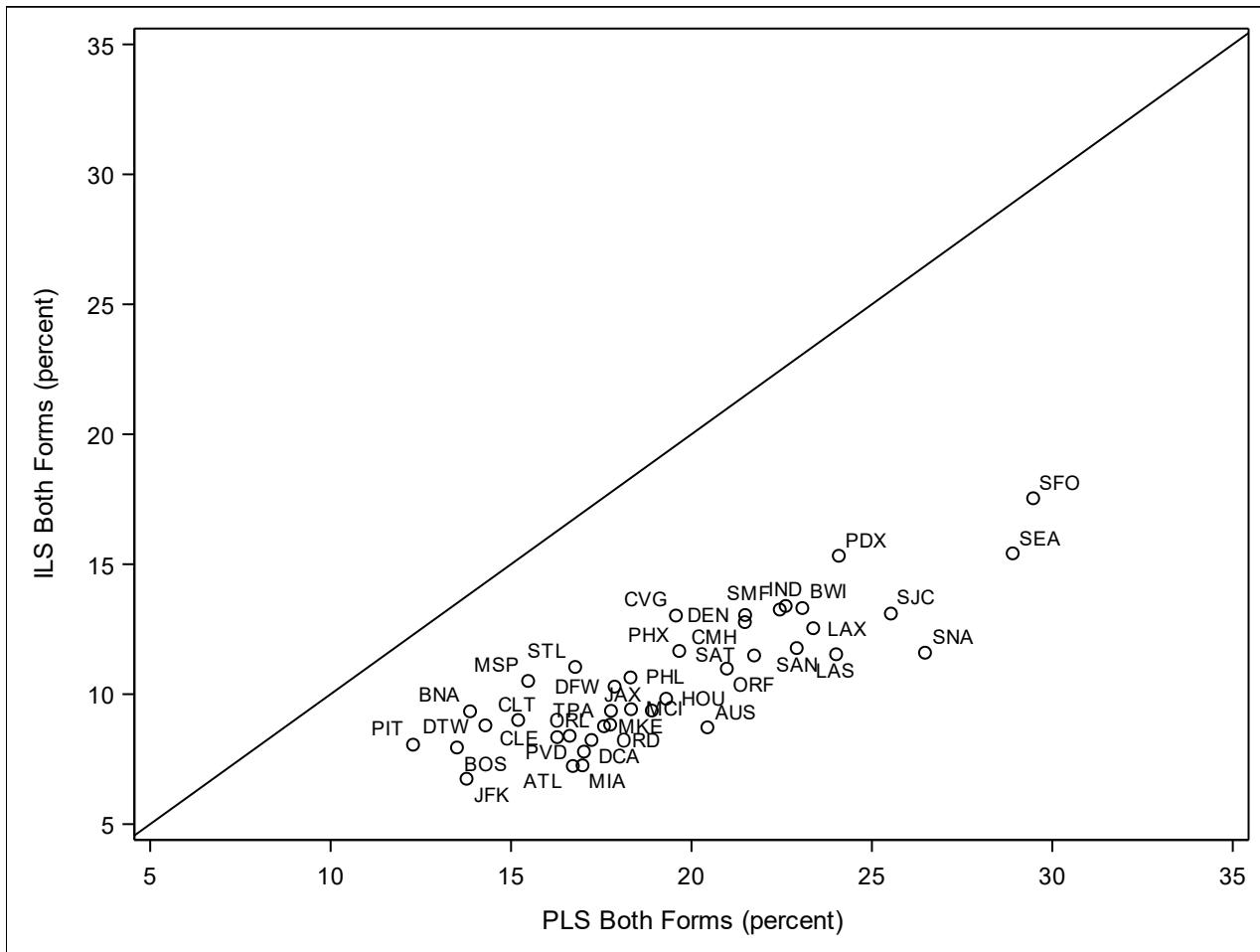
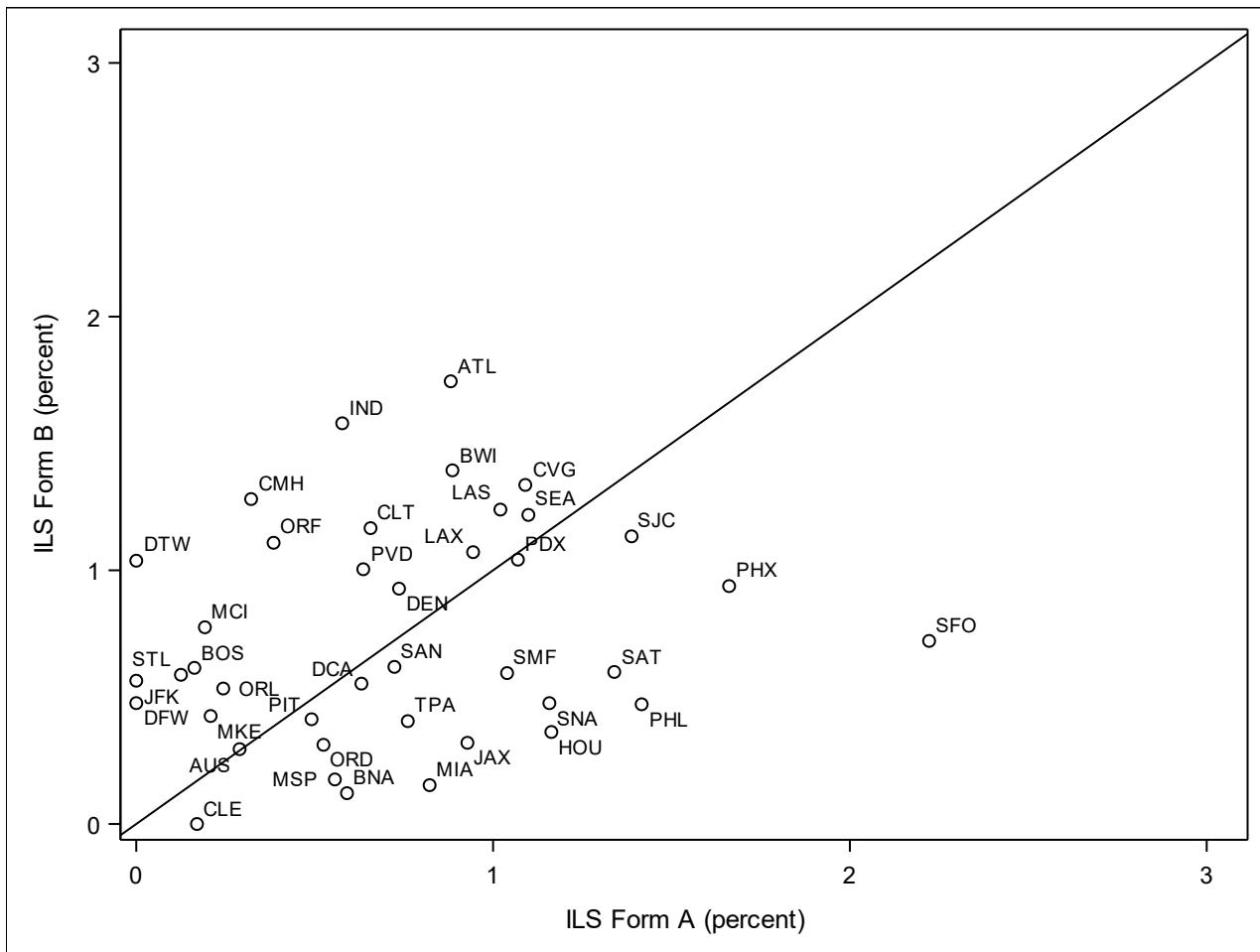


Figure F-25. Households touched by property crime, includes attempts: ILS both forms and PLS both forms



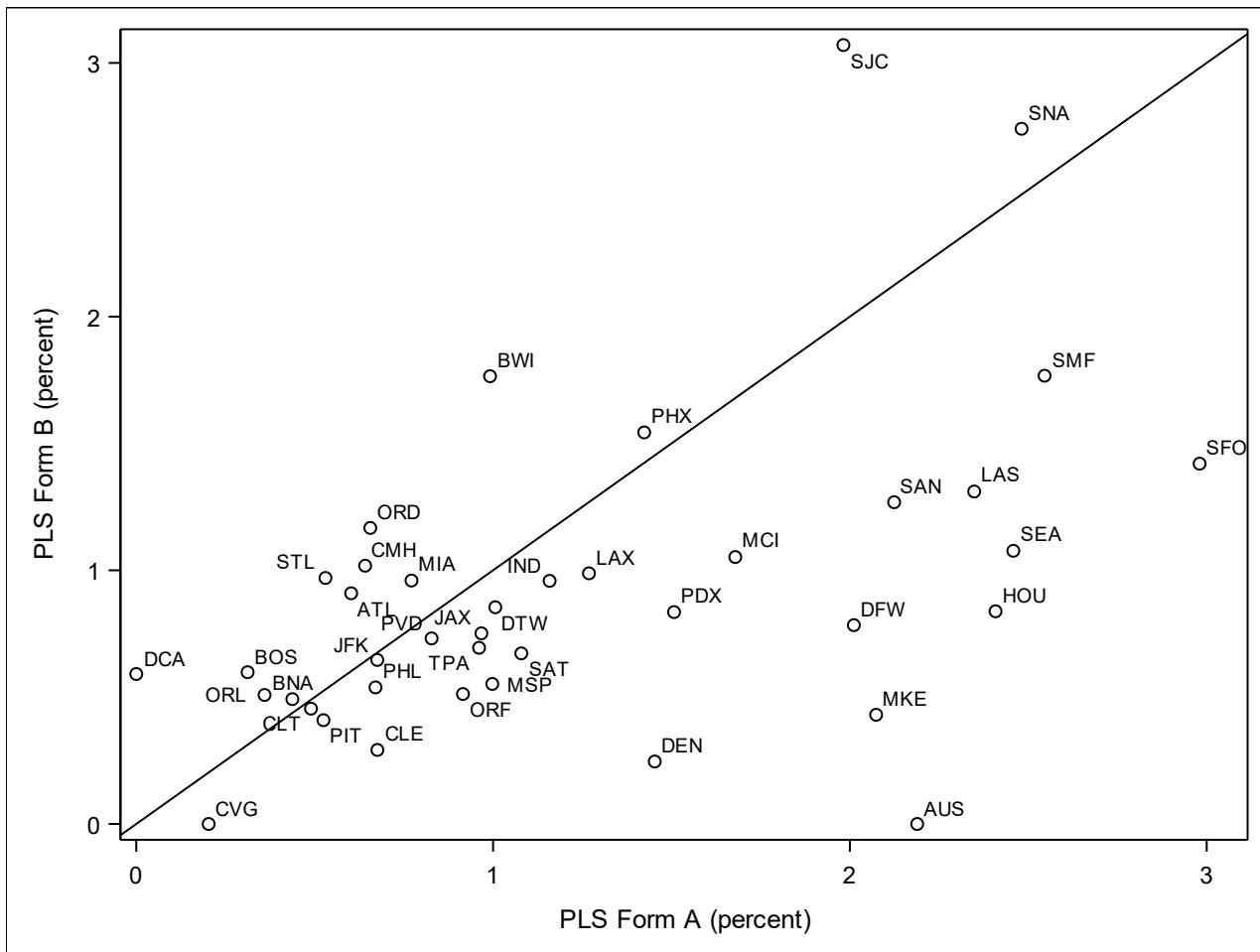
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-26. Households touched by motor vehicle theft: ILS Form B and ILS Form A



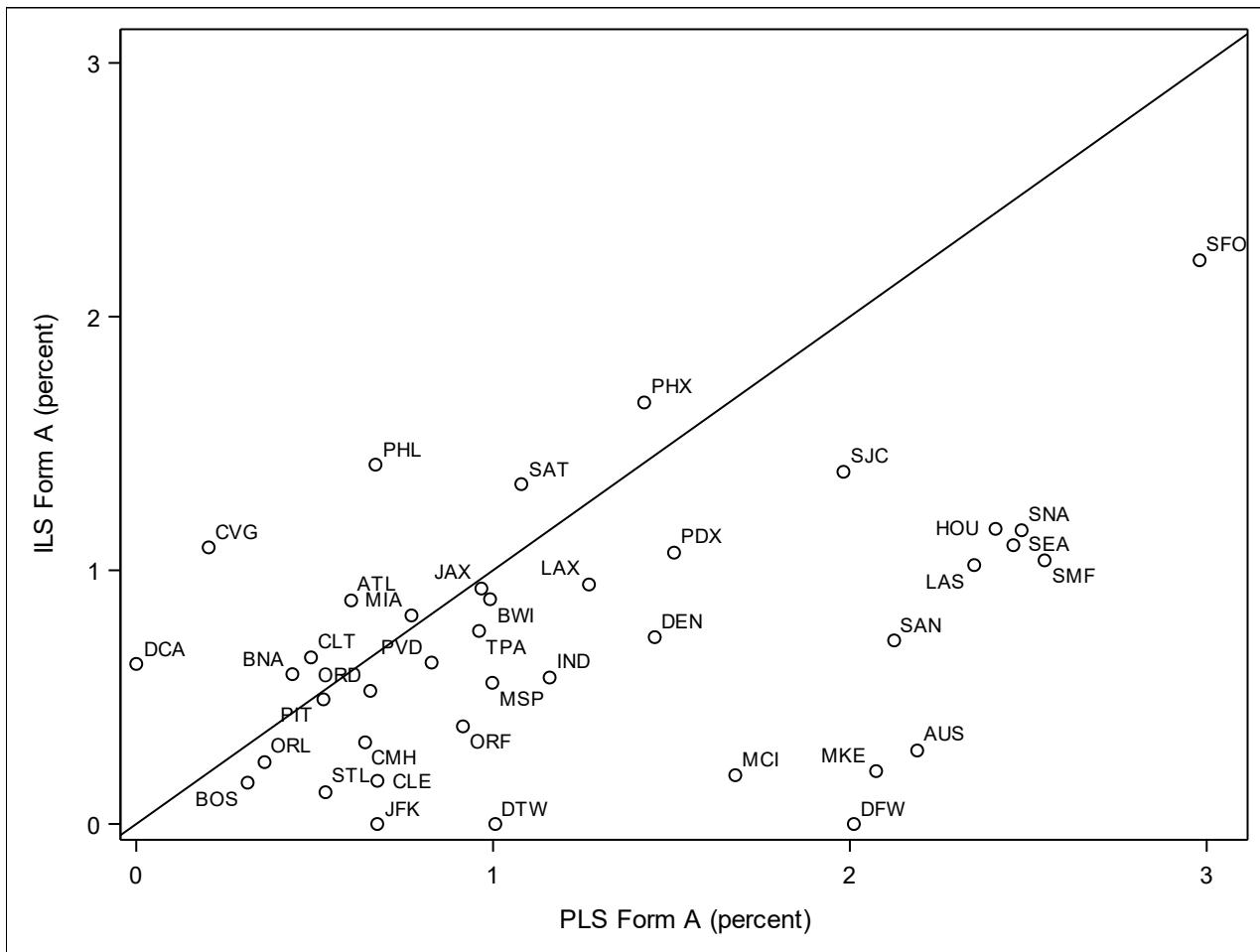
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-27. Households touched by motor vehicle theft: PLS Form B and PLS Form A



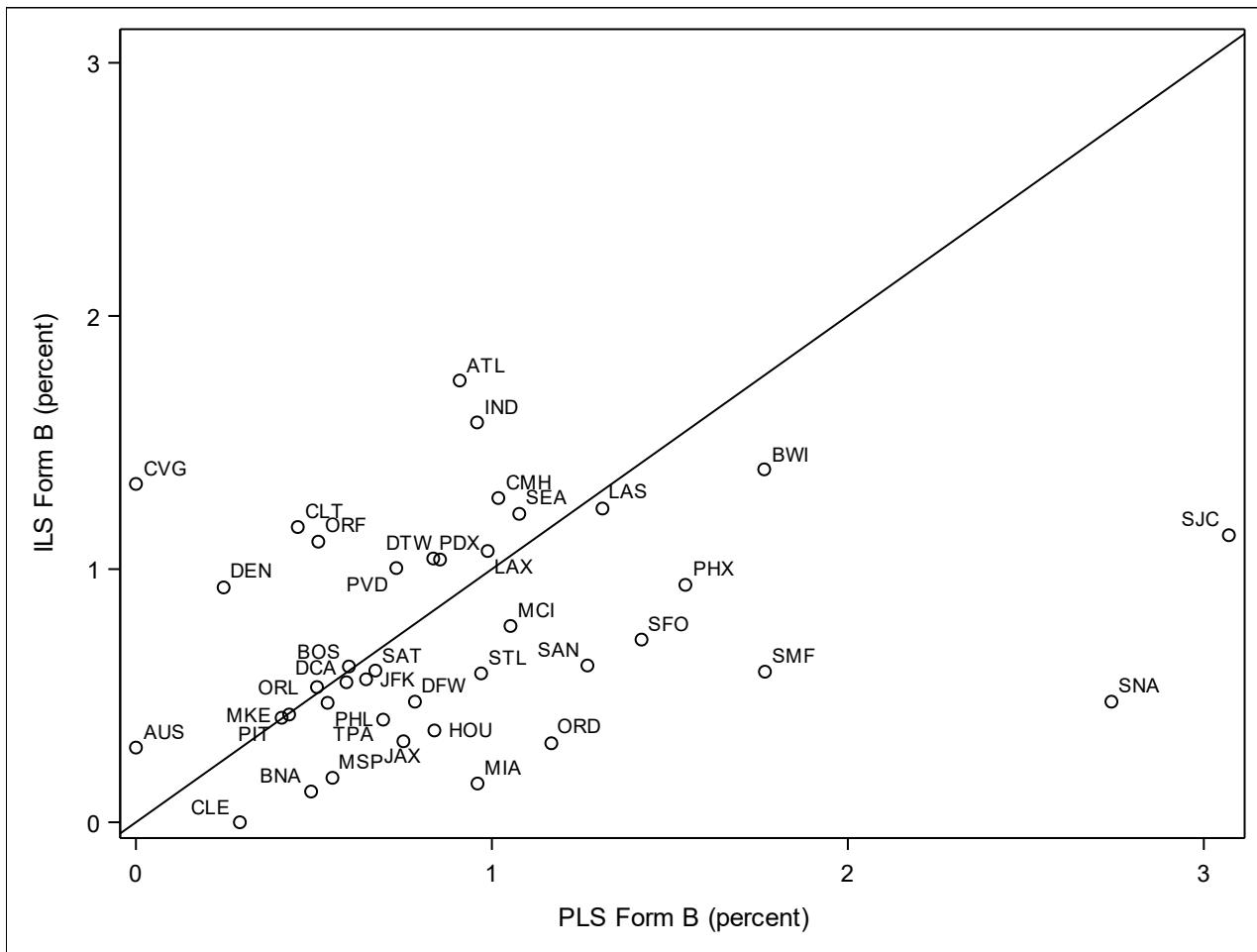
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-28. Households touched by motor vehicle theft: ILS Form A and PLS Form A



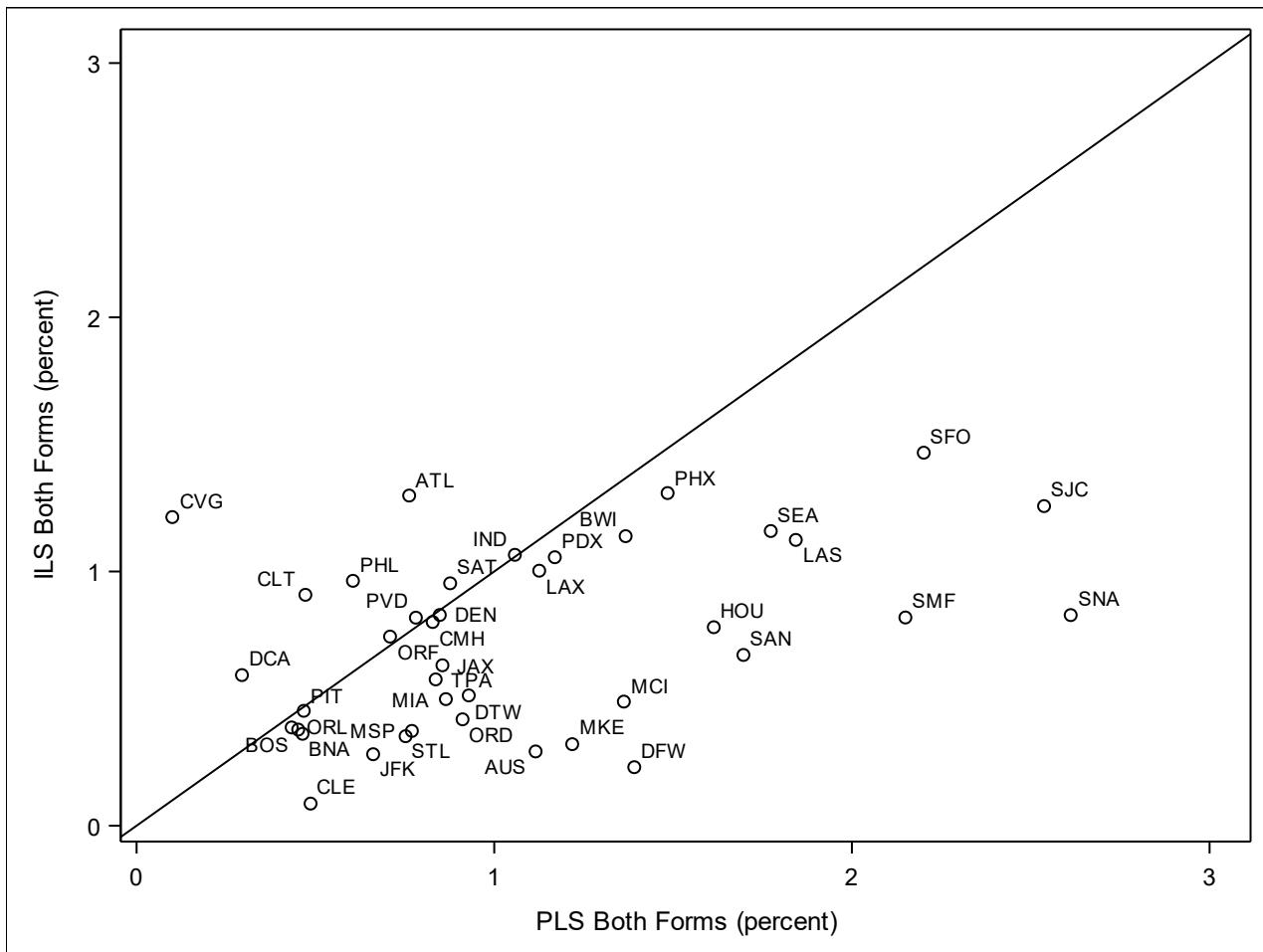
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-29. Households touched by motor vehicle theft: ILS Form B and PLS Form B



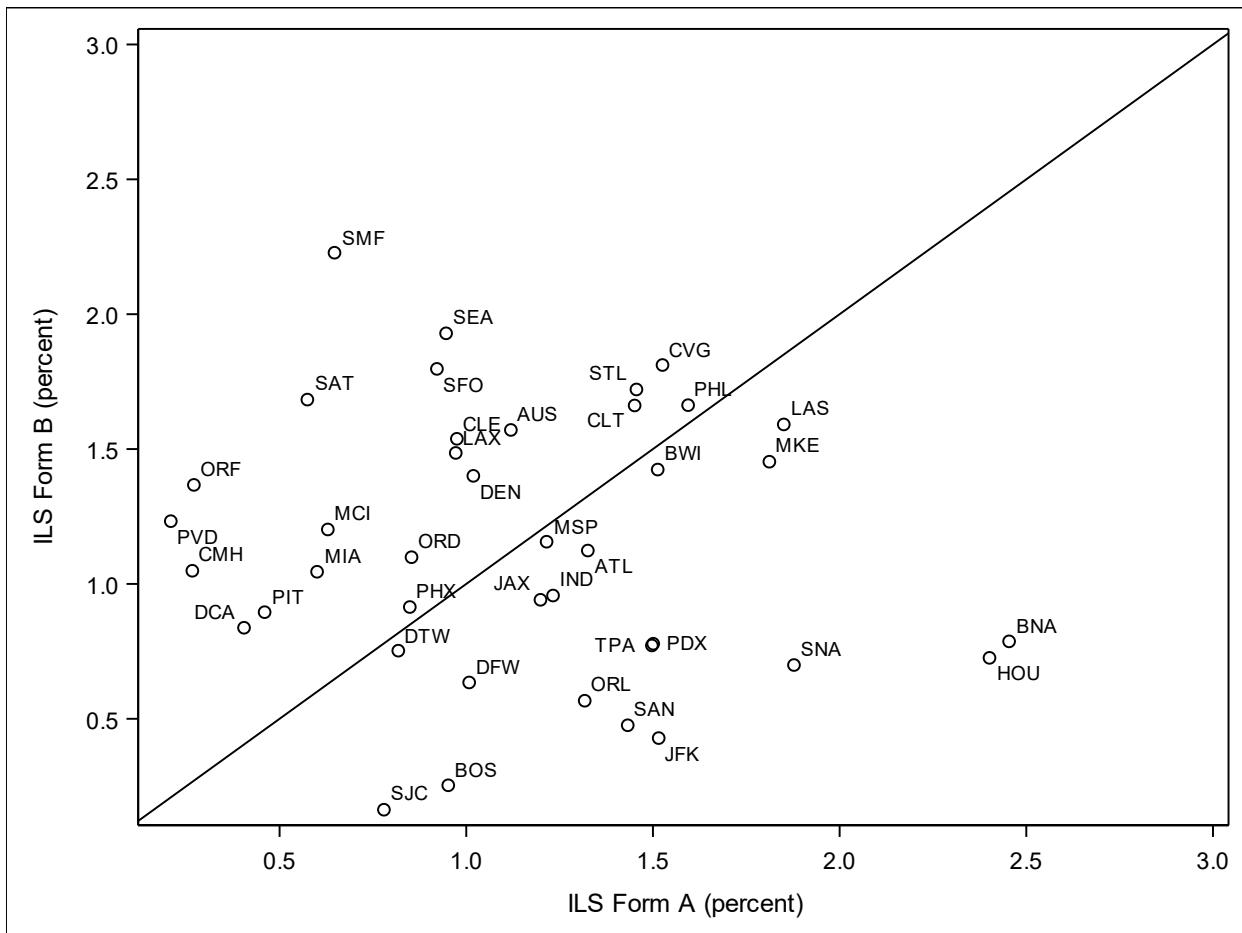
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-30. Households touched by motor vehicle theft: ILS both forms and PLS both forms



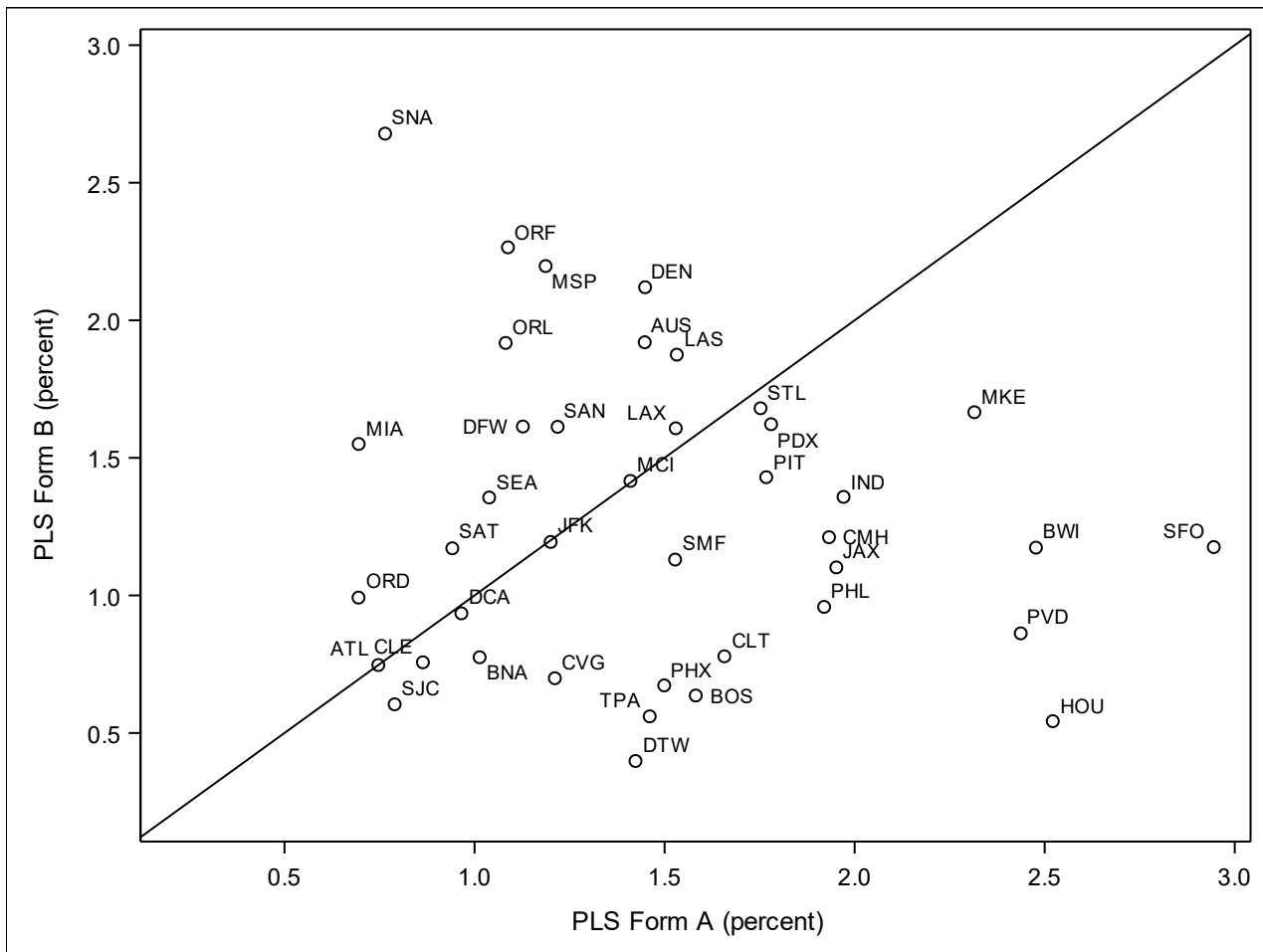
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-31. Persons touched by violent crime, excluding threats: ILS Form B and ILS Form A



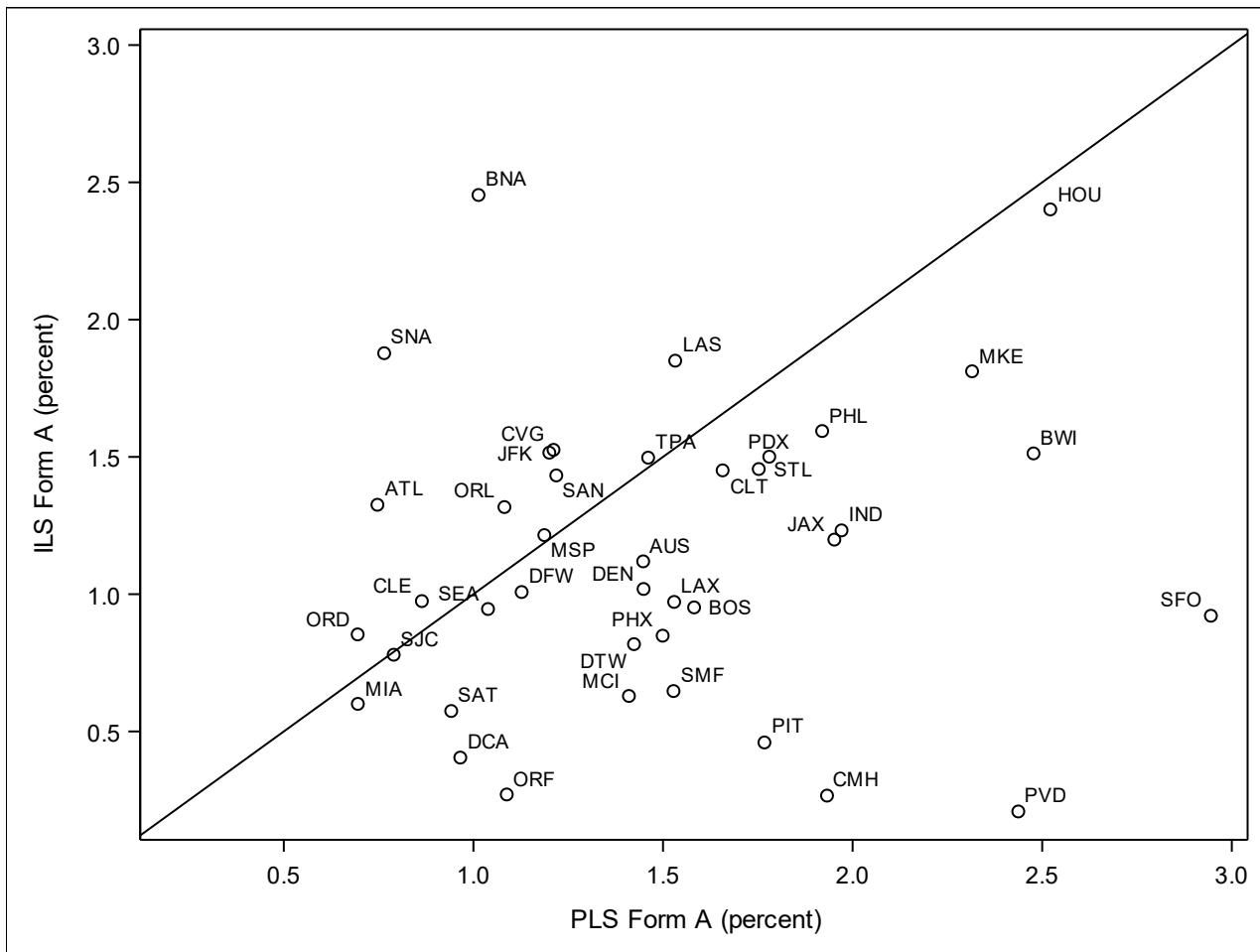
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-32. Persons touched by violent crime, excluding threats: PLS Form B and PLS Form A



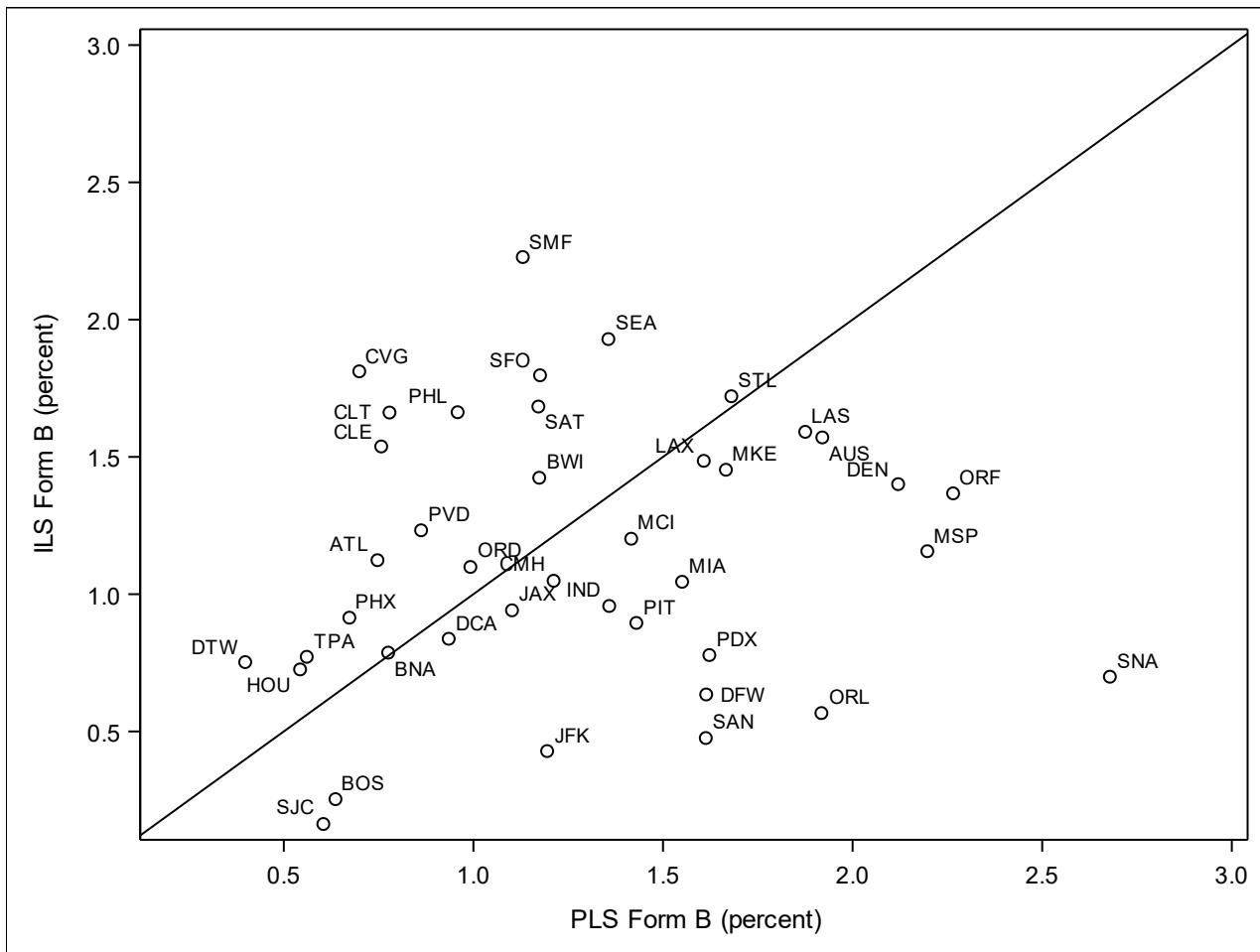
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-33. Persons touched by violent crime, excluding threats: ILS Form A and PLS Form A



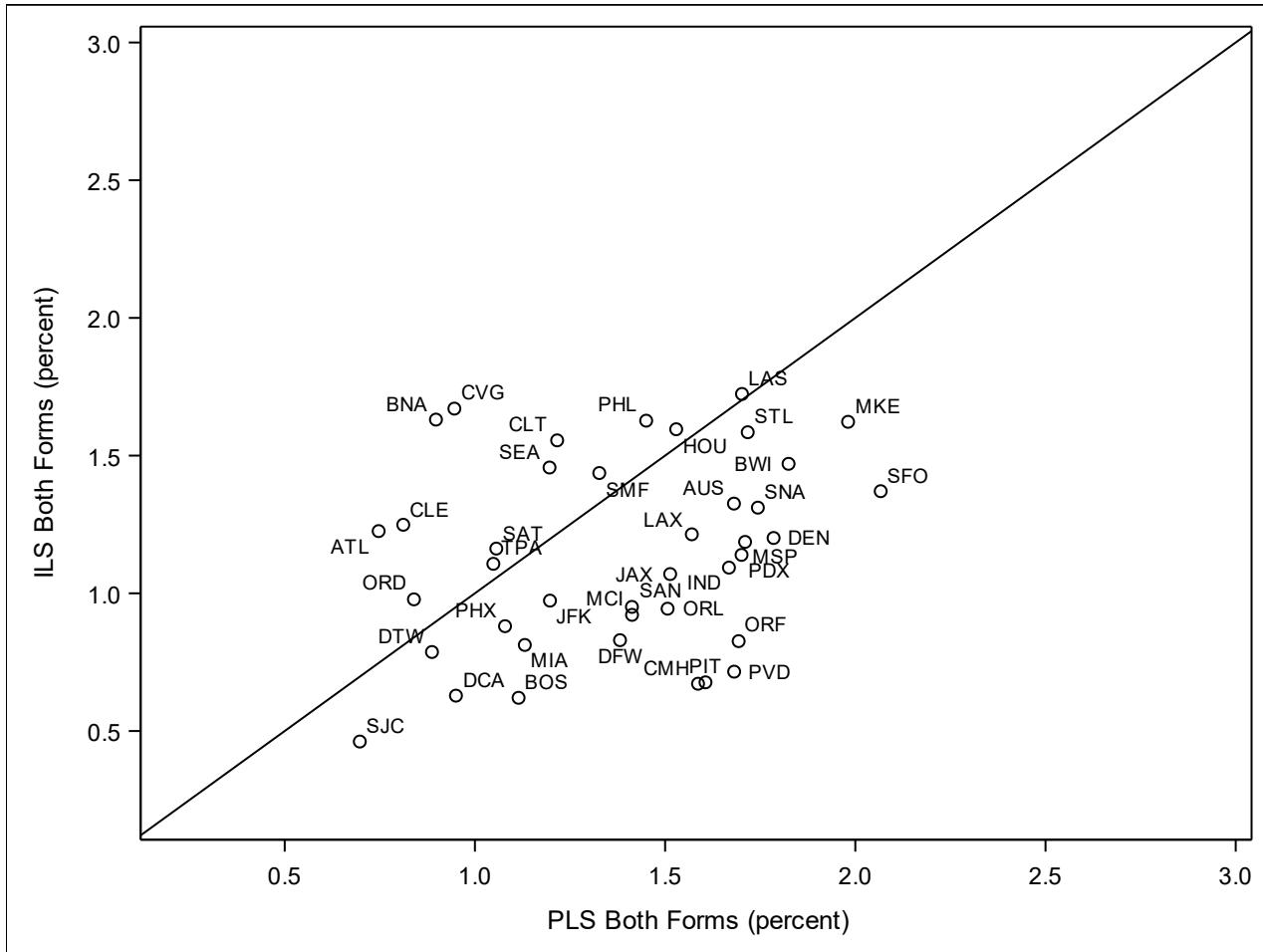
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-34. Persons touched by violent crime, excluding threats: ILS Form B and PLS Form B



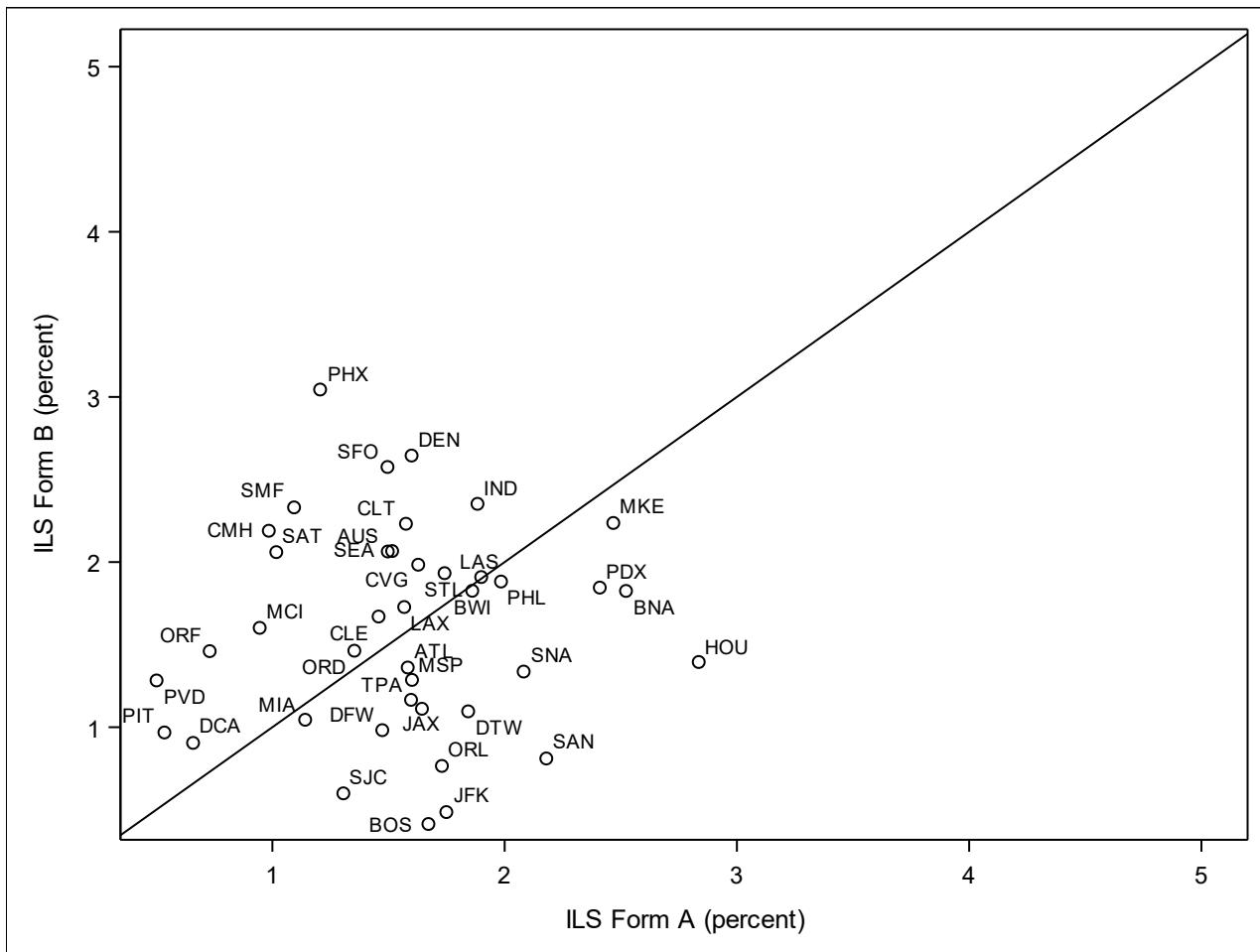
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-35. Persons touched by violent crime, excluding threats: ILS both forms and PLS both forms



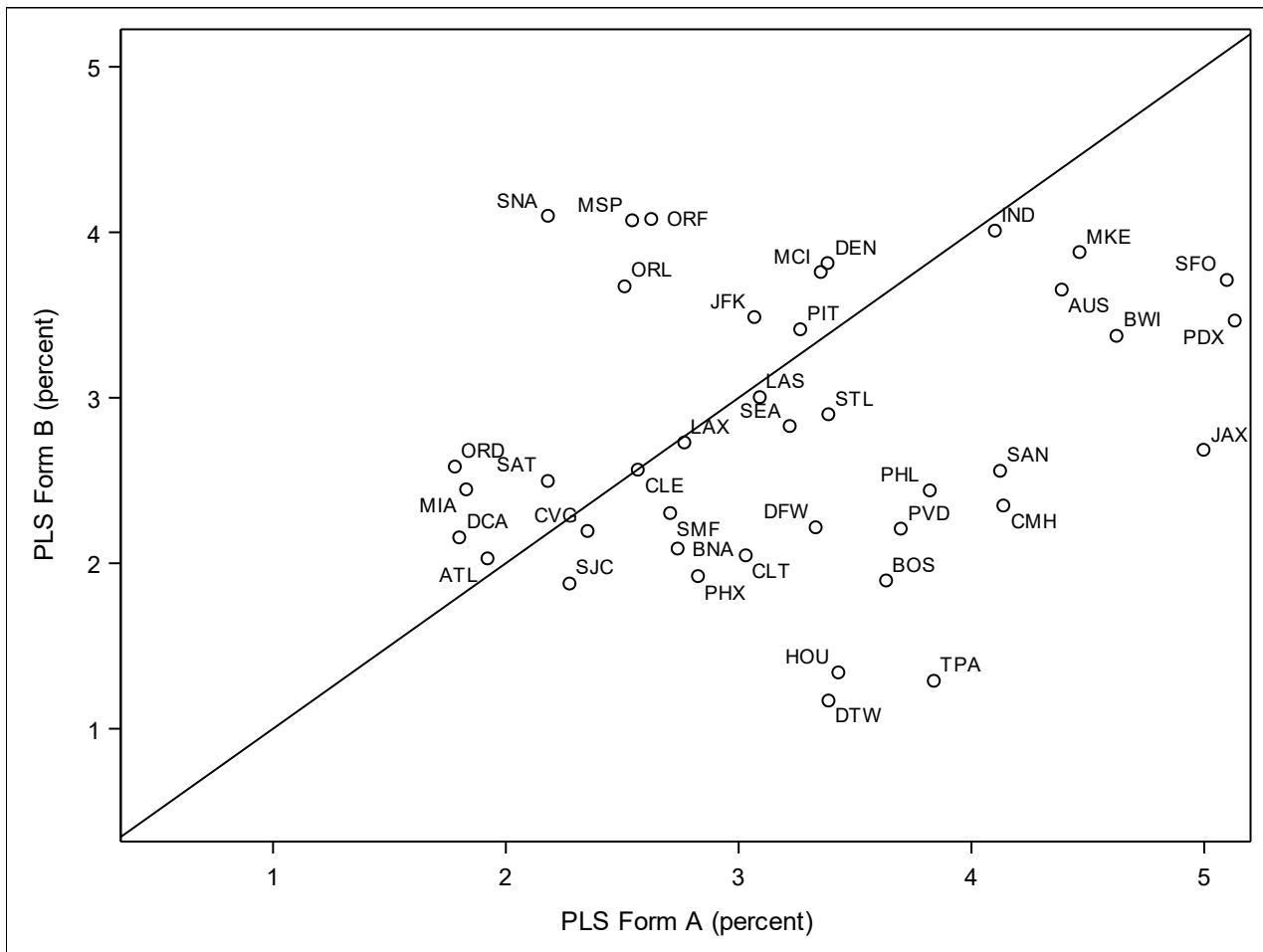
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-36. Persons touched by violent crime, including threats: ILS Form B and ILS Form A



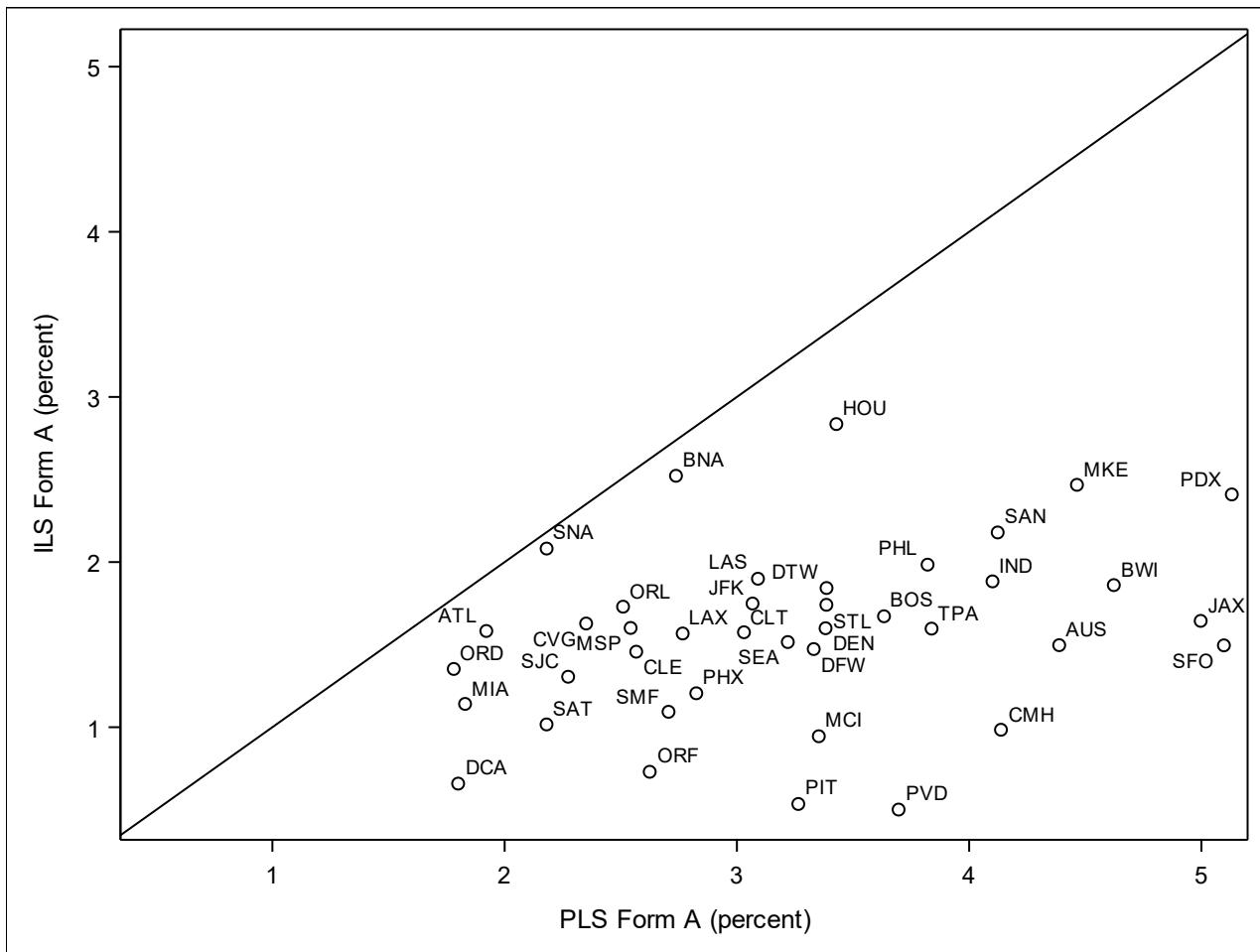
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-37. Persons touched by violent crime, including threats: PLS Form B and PLS Form A



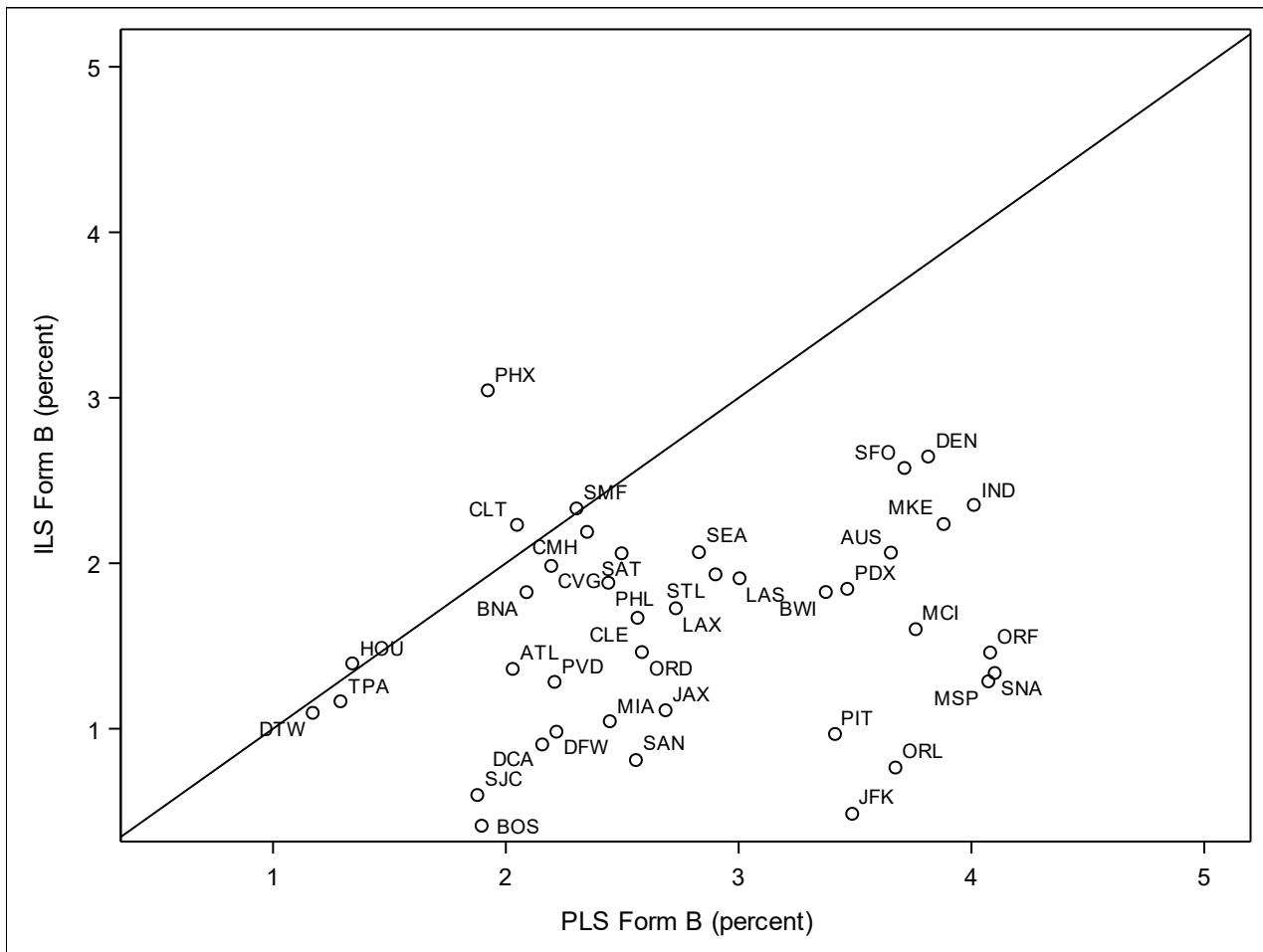
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-38. Persons touched by violent crime, including threats: ILS Form A and PLS Form A



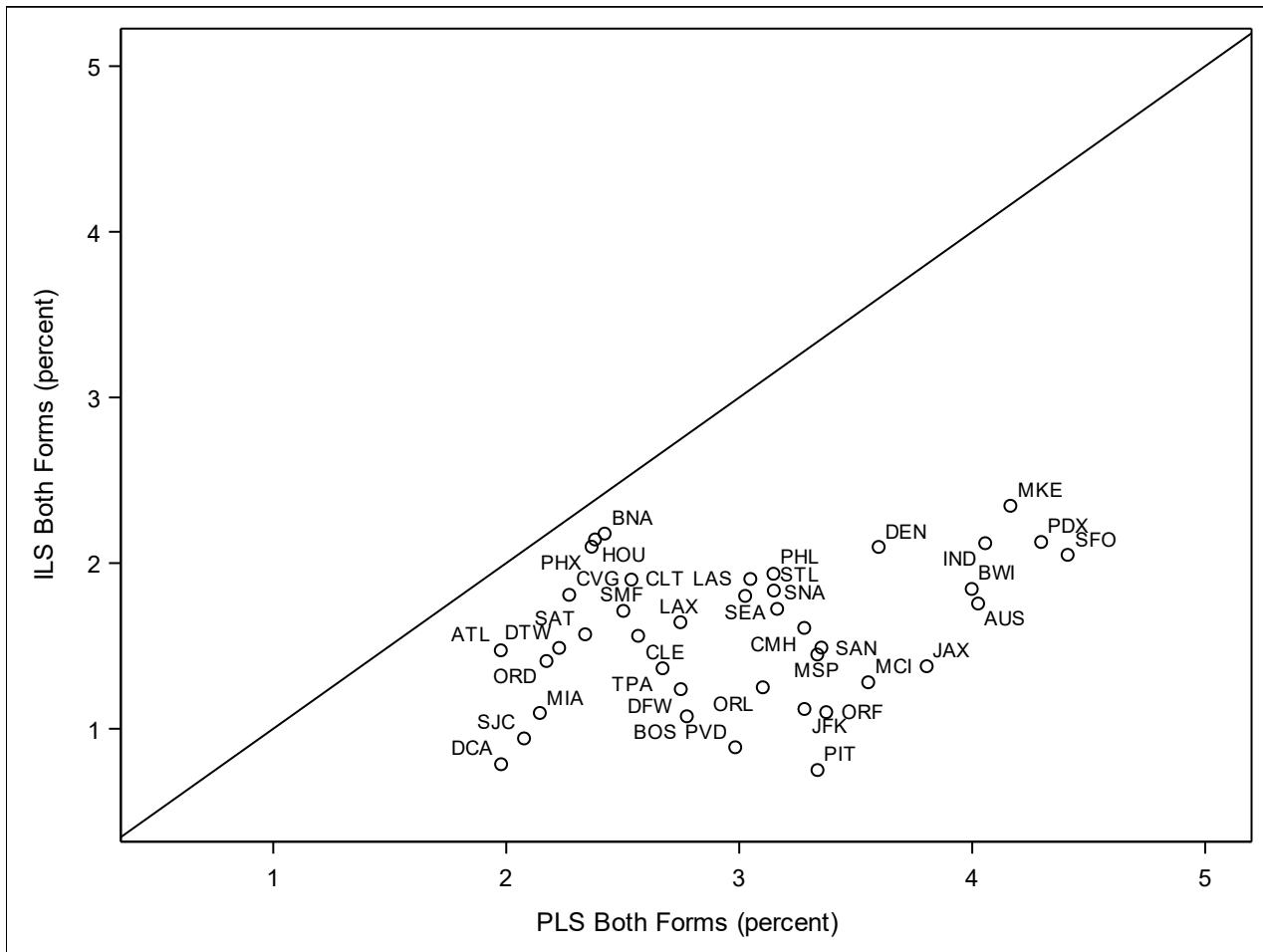
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-39. Persons touched by violent crime, including threats: ILS Form B and PLS Form B



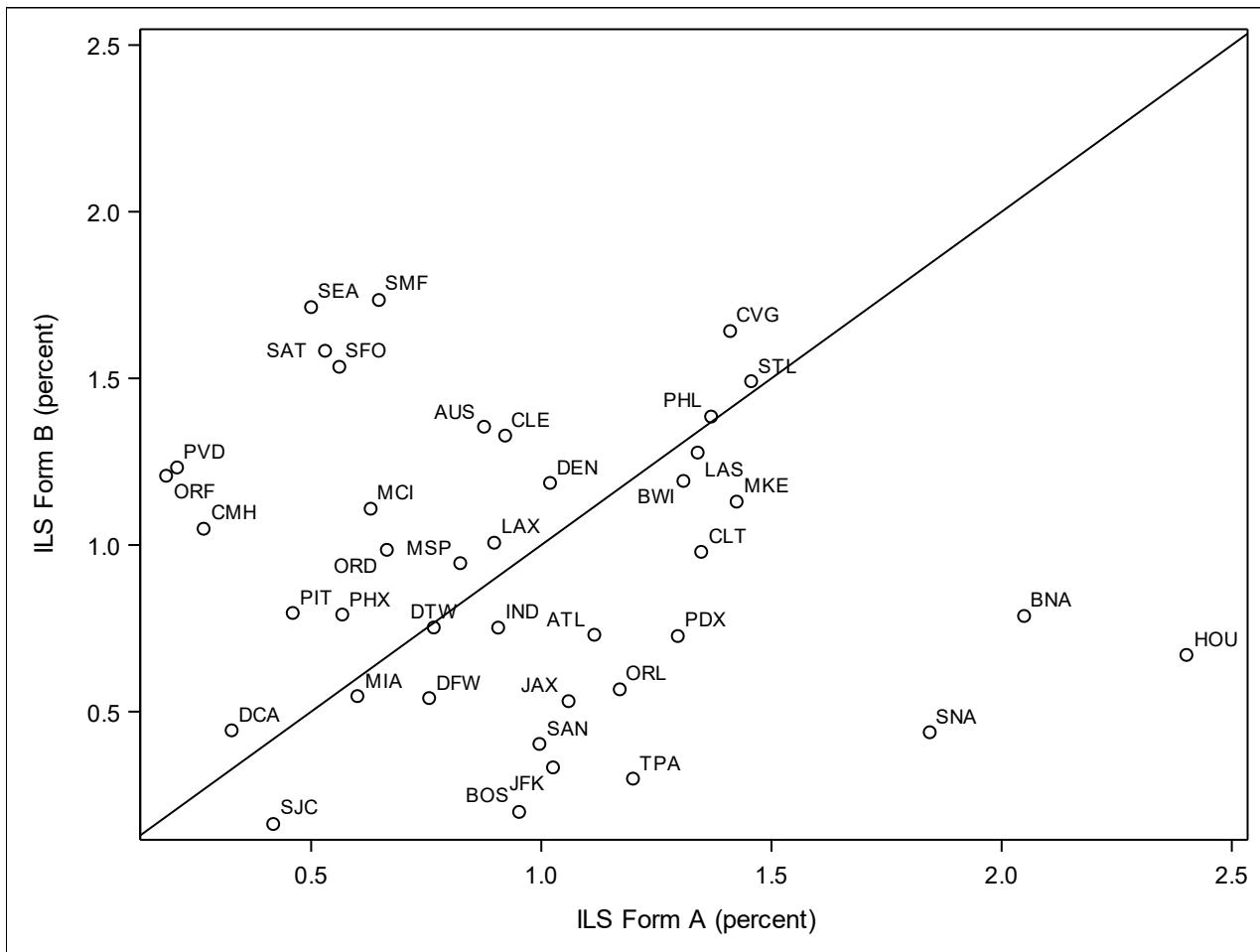
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-40. Persons touched by violent crime, including threats: ILS both forms and PLS both forms



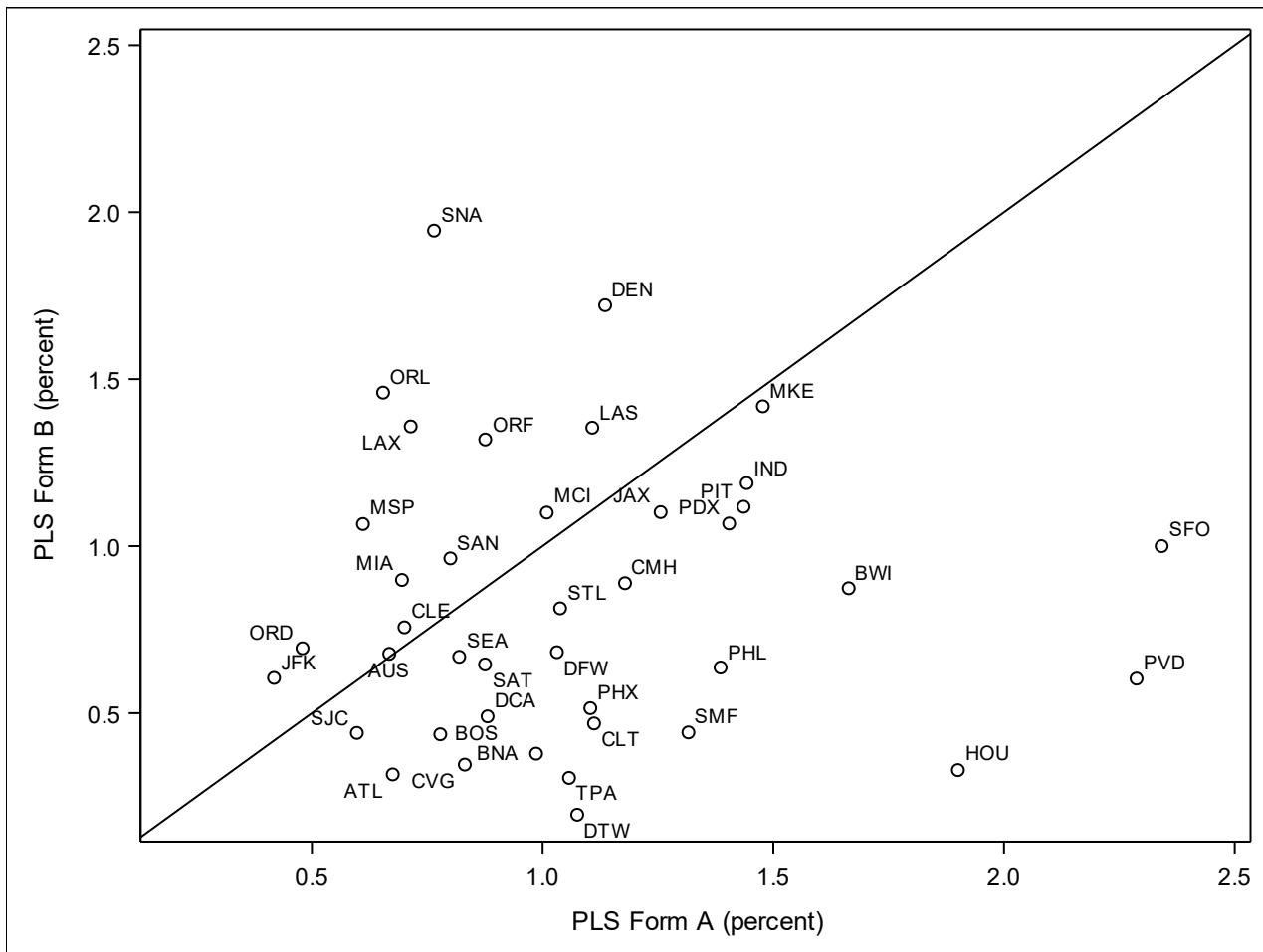
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-41. Persons touched by serious violent crime: ILS Form B and ILS Form A



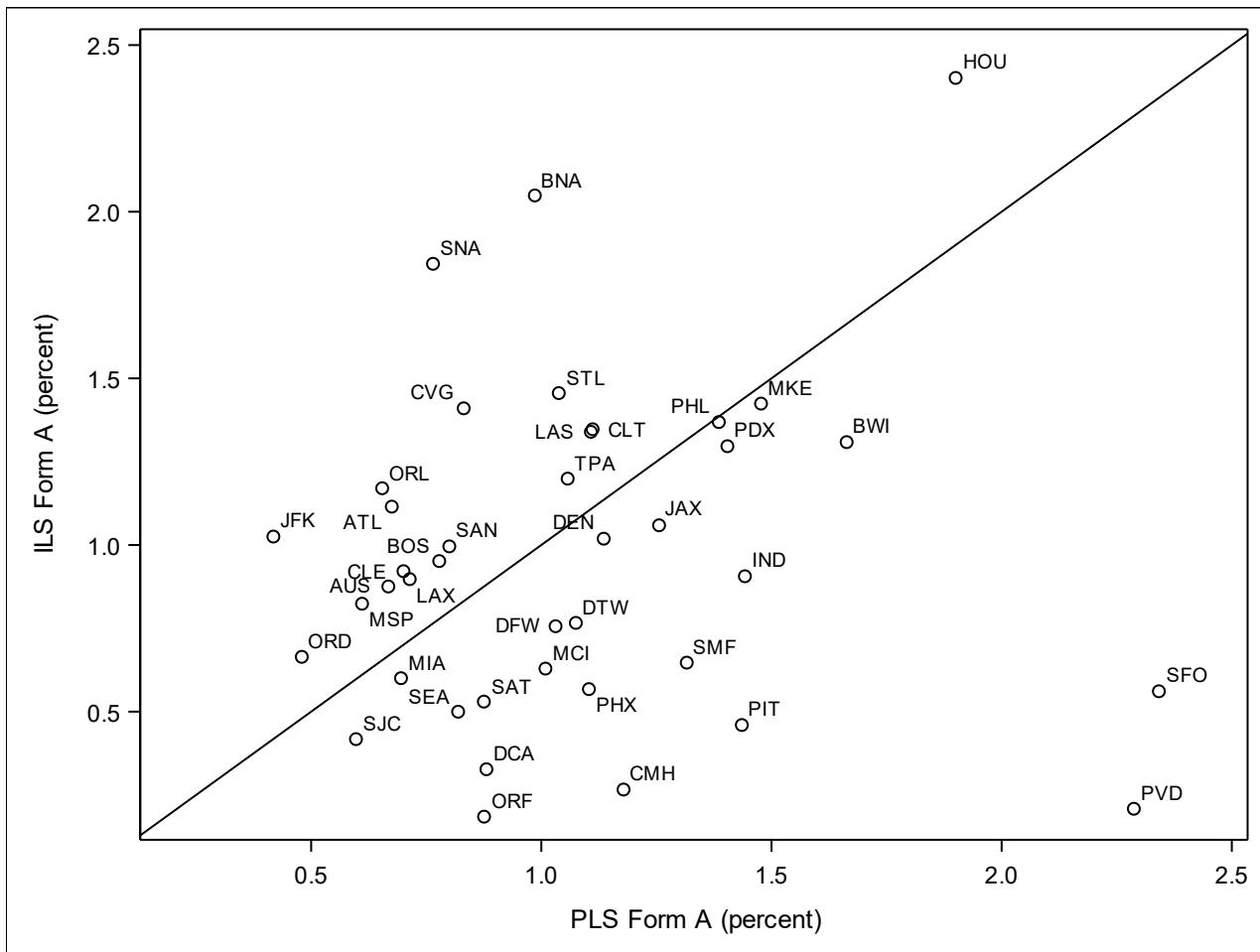
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-42. Persons touched by serious violent crime: PLS Form B and PLS Form A



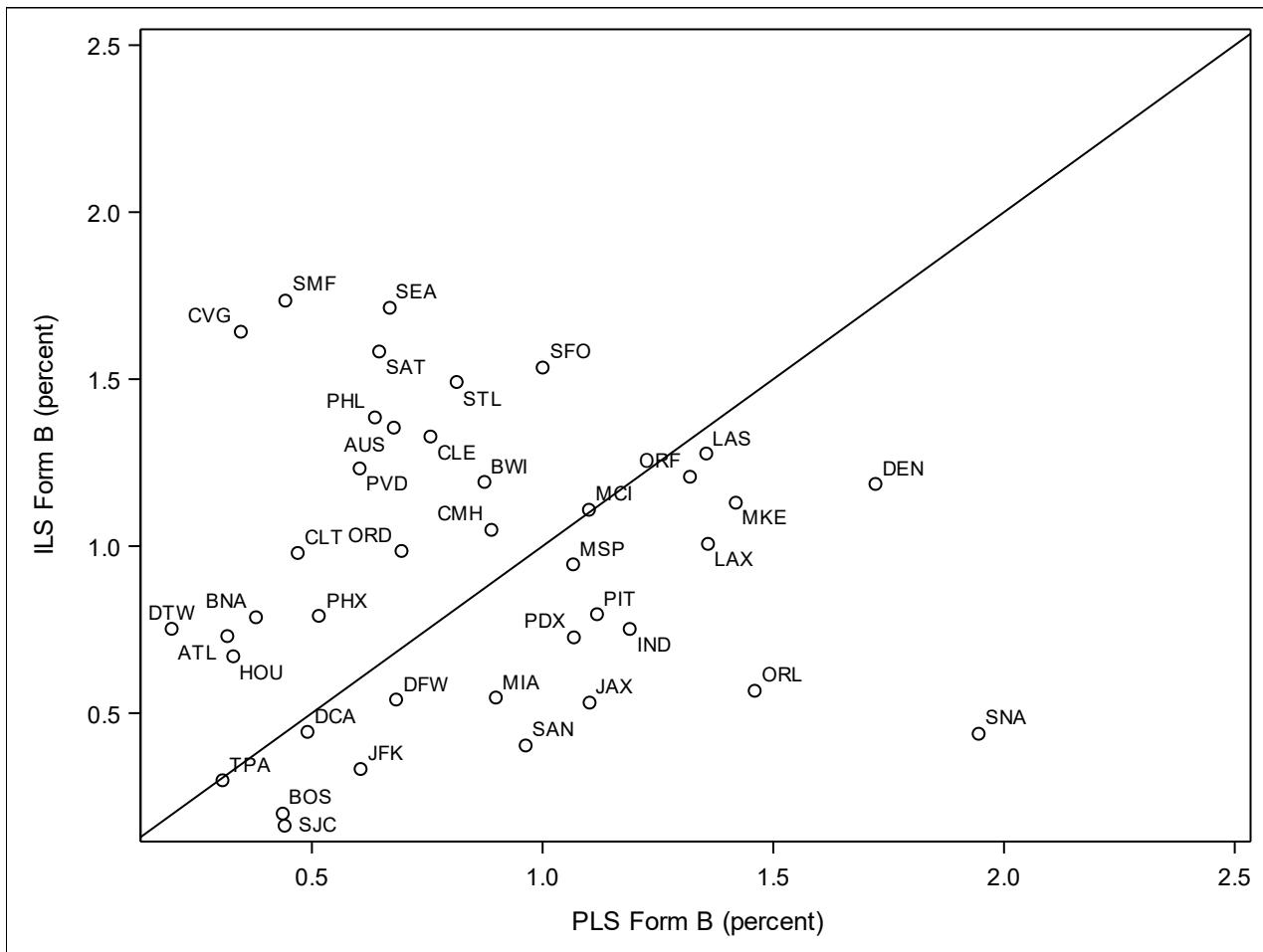
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-43. Persons touched by serious violent crime: ILS Form A and PLS Form A



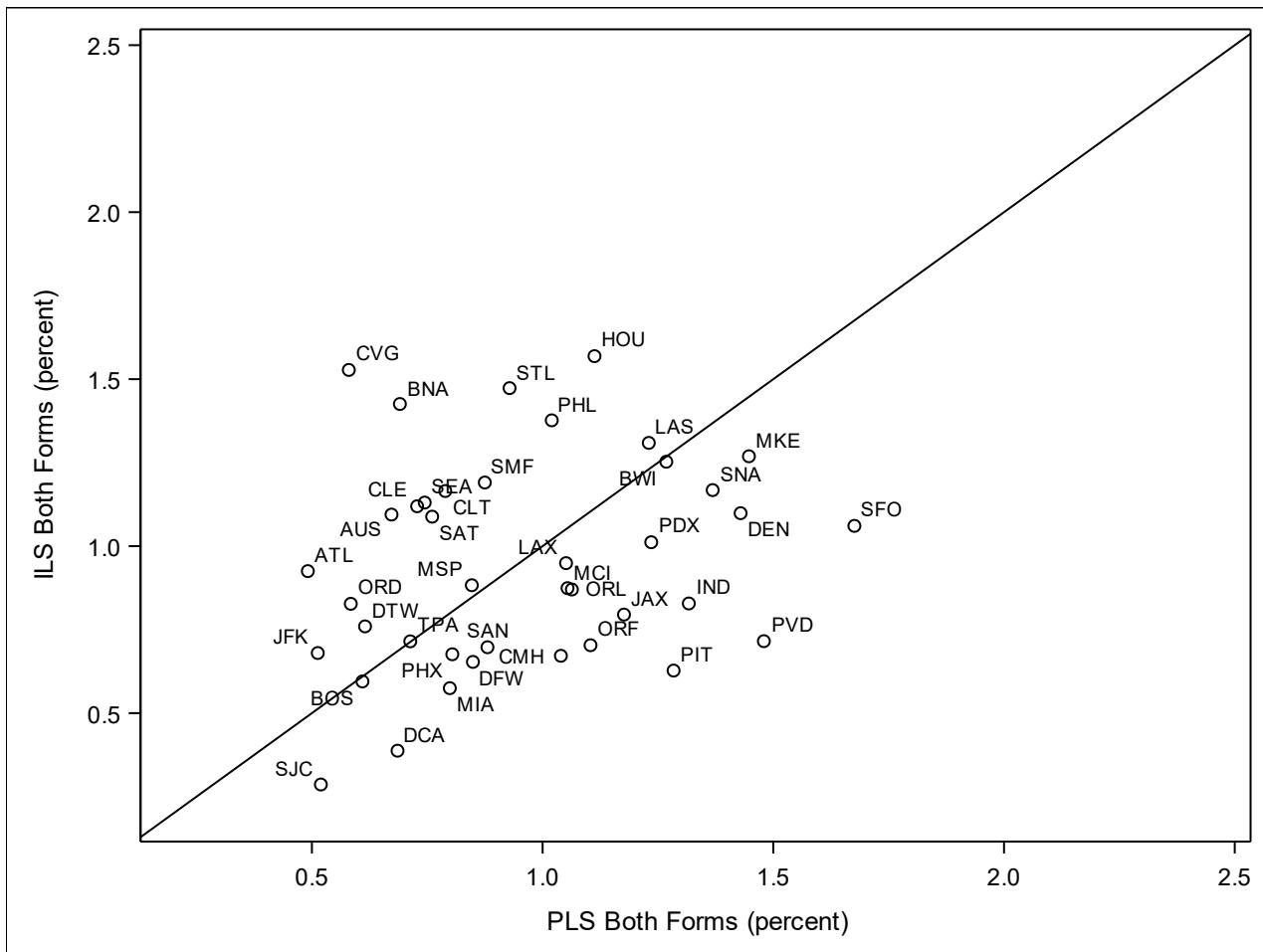
Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-44. Persons touched by serious violent crime: ILS Form B and PLS Form B



Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Figure F-45. Persons touched by serious violent crime: ILS both forms and PLS both forms



F.2 Correlation Coefficients for ILS and PLS Across 40 CBSAs

Tables F-2 through F-10 in this appendix give the full matrix of correlation coefficients across forms and instruments for each of the TBC response variables from Year 1. The variable names for the correlations are defined in Tables 6A-3 and 6A-4 of the report.

Table F-2. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response HHTBPROP1

| HHTBPROP1 | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------|-----------|----------|----------|-----------|----------|----------|
| ILS, both | N/A | 0.934*** | 0.917*** | 0.809*** | 0.847*** | 0.691*** |
| ILS A | 0.934*** | N/A | 0.715*** | 0.832*** | 0.862*** | 0.724*** |
| ILS B | 0.917*** | 0.715*** | N/A | 0.652*** | 0.696*** | 0.541*** |
| PLS, both | 0.809*** | 0.832*** | 0.652*** | N/A | 0.967*** | 0.951*** |
| PLS A | 0.847*** | 0.862*** | 0.696*** | 0.967*** | N/A | 0.842*** |
| PLS B | 0.691*** | 0.724*** | 0.541*** | 0.951*** | 0.842*** | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Table F-3. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response HHTBPROP2

| HHTBPROP2 | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------|-----------|----------|----------|-----------|----------|----------|
| ILS, both | N/A | 0.934*** | 0.919*** | 0.851*** | 0.847*** | 0.769*** |
| ILS A | 0.934*** | N/A | 0.718*** | 0.844*** | 0.831*** | 0.776*** |
| ILS B | 0.919*** | 0.718*** | N/A | 0.723*** | 0.732*** | 0.639*** |
| PLS, both | 0.851*** | 0.844*** | 0.723*** | N/A | 0.967*** | 0.941*** |
| PLS A | 0.847*** | 0.831*** | 0.732*** | 0.967*** | N/A | 0.824*** |
| PLS B | 0.769*** | 0.776*** | 0.639*** | 0.941*** | 0.824*** | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Table F-4. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response HHTBMVTHEFT

| HHTBMVTHEFT | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------|-----------|----------|----------|-----------|----------|----------|
| ILS, both | N/A | 0.814*** | 0.727*** | 0.414** | 0.292 | 0.437** |
| ILS A | 0.814*** | N/A | 0.193 | 0.491** | 0.408** | 0.441** |
| ILS B | 0.727*** | 0.193 | N/A | 0.118 | 0.009 | 0.216 |
| PLS, both | 0.414** | 0.491** | 0.118 | N/A | 0.893*** | 0.826*** |
| PLS A | 0.292 | 0.408** | 0.009 | 0.893*** | N/A | 0.484** |
| PLS B | 0.437** | 0.441** | 0.216 | 0.826*** | 0.484** | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Table F-5. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response HHTBVIOL1

| HHTBVIOL1 | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------|-----------|----------|----------|-----------|----------|----------|
| ILS, both | N/A | 0.739*** | 0.790*** | 0.259 | 0.201 | 0.119 |
| ILS A | 0.739*** | N/A | 0.172 | 0.247 | 0.198 | 0.108 |
| ILS B | 0.790*** | 0.172 | N/A | 0.152 | 0.115 | 0.072 |
| PLS, both | 0.259 | 0.247 | 0.152 | N/A | 0.580*** | 0.638*** |
| PLS A | 0.201 | 0.198 | 0.115 | 0.580*** | N/A | -0.257 |
| PLS B | 0.119 | 0.108 | 0.072 | 0.638*** | -0.257 | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Table F-6. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response HHTBVIOL2

| HHTBVIOL2 | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------|-----------|----------|----------|-----------|----------|----------|
| ILS, both | N/A | 0.769*** | 0.867*** | 0.401* | 0.324* | 0.264 |
| ILS A | 0.769*** | N/A | 0.349* | 0.425** | 0.424** | 0.192 |
| ILS B | 0.867*** | 0.349* | N/A | 0.259 | 0.145 | 0.239 |
| PLS, both | 0.401* | 0.425** | 0.259 | N/A | 0.782*** | 0.695*** |
| PLS A | 0.324* | 0.424** | 0.145 | 0.782*** | N/A | 0.096 |
| PLS B | 0.264 | 0.192 | 0.239 | 0.695*** | 0.096 | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Table F-7. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response HHTBSERVIOL

| HHTBSERVIOL | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------|-----------|----------|----------|-----------|----------|----------|
| ILS, both | N/A | 0.713*** | 0.794*** | 0.311 | 0.273 | 0.149 |
| ILS A | 0.713*** | N/A | 0.141 | 0.223 | 0.157 | 0.145 |
| ILS B | 0.794*** | 0.141 | N/A | 0.240 | 0.243 | 0.082 |
| PLS, both | 0.311 | 0.223 | 0.240 | N/A | 0.673*** | 0.677*** |
| PLS A | 0.273 | 0.157 | 0.243 | 0.673*** | N/A | -0.088 |
| PLS B | 0.149 | 0.145 | 0.082 | 0.677*** | -0.088 | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Appendix F
Scatterplots and Correlations of TBC Year 1 Rates by Instrument and Form

Table F-8. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response PTBVIOL1

| PTBVIOL1 | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------------|------------------|--------------|--------------|------------------|--------------|--------------|
| ILS, both | N/A | 0.710*** | 0.631*** | 0.259 | 0.256 | 0.095 |
| ILS A | 0.710*** | N/A | -0.098 | 0.103 | 0.130 | 0.013 |
| ILS B | 0.631*** | -0.098 | N/A | 0.252 | 0.218 | 0.122 |
| PLS, both | 0.259 | 0.103 | 0.252 | N/A | 0.662*** | 0.659*** |
| PLS A | 0.256 | 0.130 | 0.218 | 0.662*** | N/A | -0.127 |
| PLS B | 0.095 | 0.013 | 0.122 | 0.659*** | -0.127 | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Table F-9. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response PTBVIOL2

| PTBVIOL2 | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-----------------|------------------|--------------|--------------|------------------|--------------|--------------|
| ILS, both | N/A | 0.676*** | 0.777*** | 0.333* | 0.373* | 0.139 |
| ILS A | 0.676*** | N/A | 0.064 | 0.212 | 0.321* | -0.001 |
| ILS B | 0.777*** | 0.064 | N/A | 0.274 | 0.233 | 0.193 |
| PLS, both | 0.333* | 0.212 | 0.274 | N/A | 0.802*** | 0.751*** |
| PLS A | 0.373* | 0.321* | 0.233 | 0.802*** | N/A | 0.209 |
| PLS B | 0.139 | -0.001 | 0.193 | 0.751*** | 0.209 | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Table F-10. Pearson correlation coefficients for ILS and PLS CBSA-level summary statistics, for response PTBSERVIOL

| PTBSERVIOL | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B |
|-------------------|------------------|--------------|--------------|------------------|--------------|--------------|
| ILS, both | N/A | 0.713*** | 0.616*** | 0.217 | 0.255 | 0.057 |
| ILS A | 0.713*** | N/A | -0.112 | 0.073 | 0.072 | 0.034 |
| ILS B | 0.616*** | -0.112 | N/A | 0.223 | 0.279 | 0.040 |
| PLS, both | 0.217 | 0.073 | 0.223 | N/A | 0.729*** | 0.695*** |
| PLS A | 0.255 | 0.072 | 0.279 | 0.729*** | N/A | 0.016 |
| PLS B | 0.057 | 0.034 | 0.040 | 0.695*** | 0.016 | N/A |

*p-value < 0.05.

**p-value < 0.01.

***p-value < 0.001.

Appendix G

Scatterplots of UCR and Year 1 LACS Statistics

Figure G-1. Violent crime: UCR rate and ILS household TBC percentage

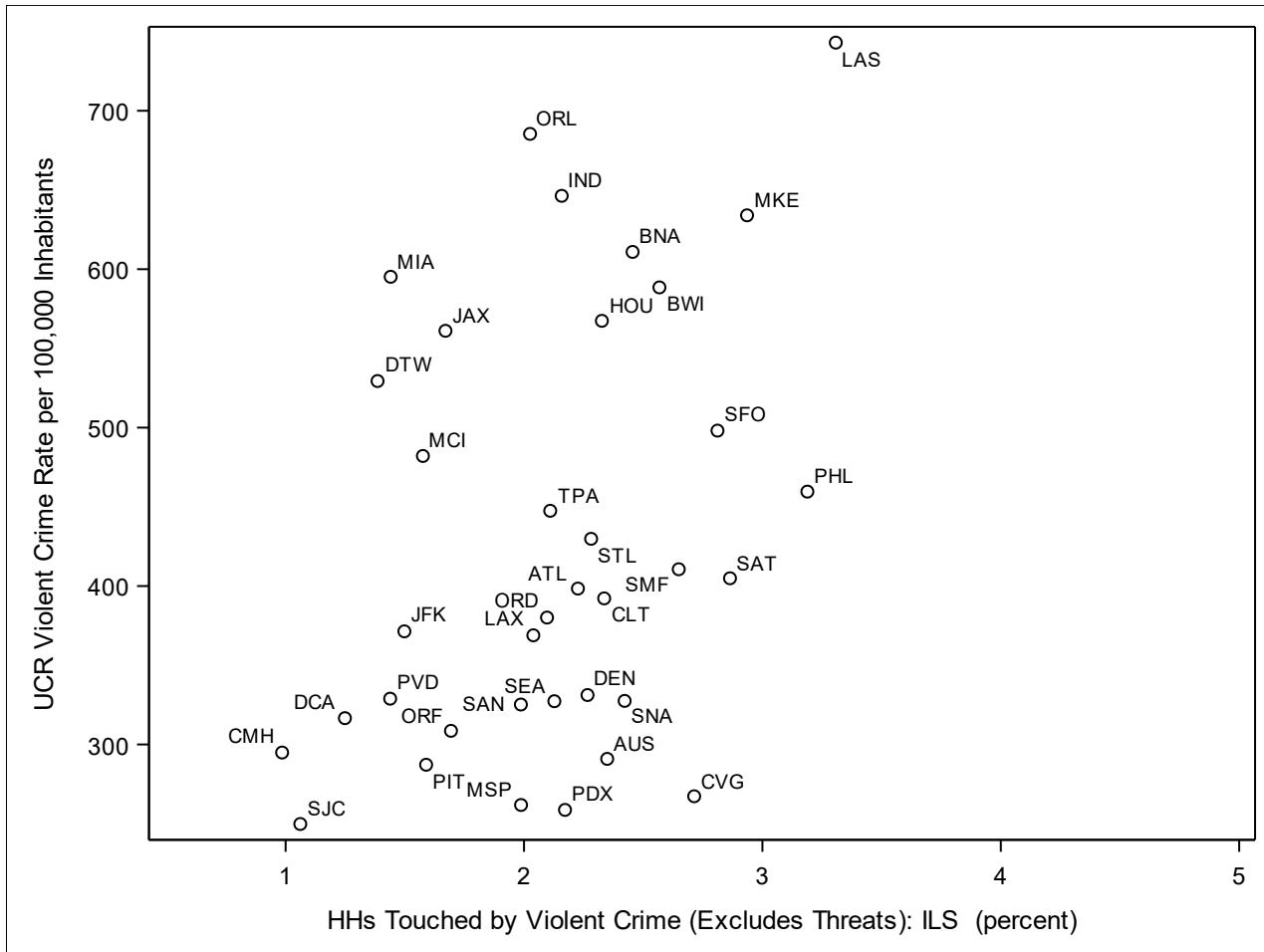


Figure G-2. Violent crime: UCR rate and ILS Form A household TBC percentage

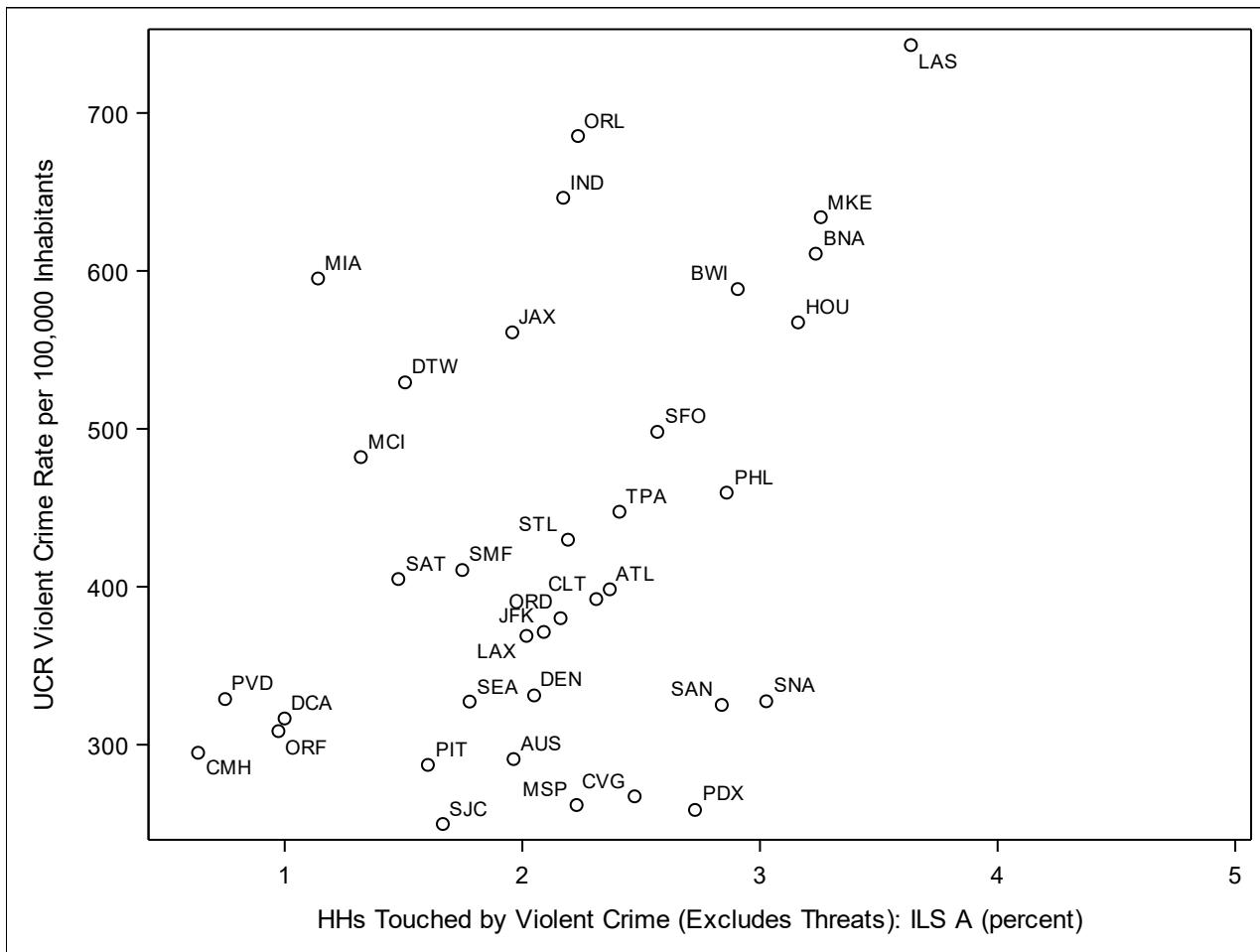


Figure G-3. Violent crime: UCR rate and ILS Form B household TBC percentage

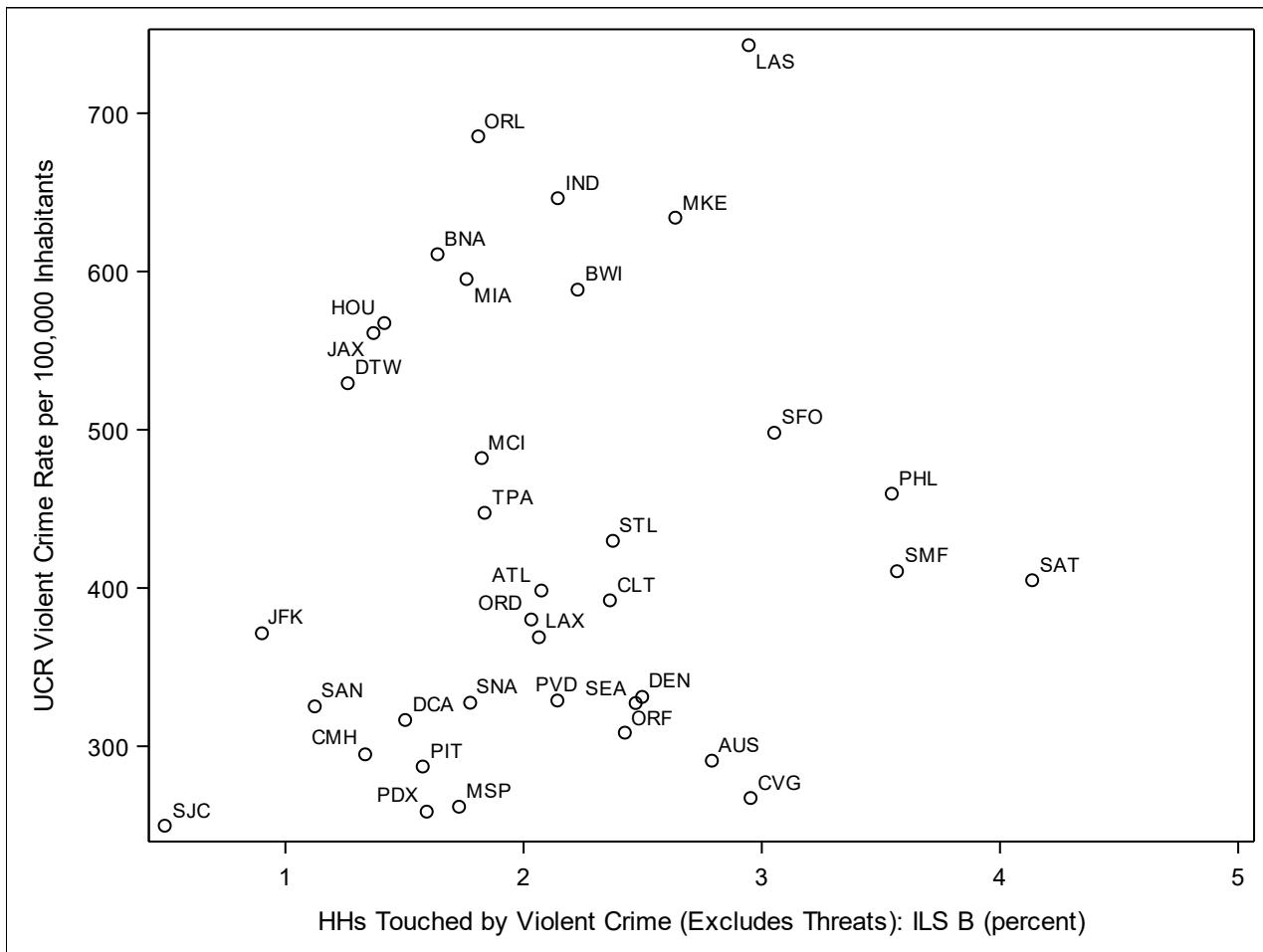


Figure G-4. Violent crime: UCR rate and PLS household TBC percentage

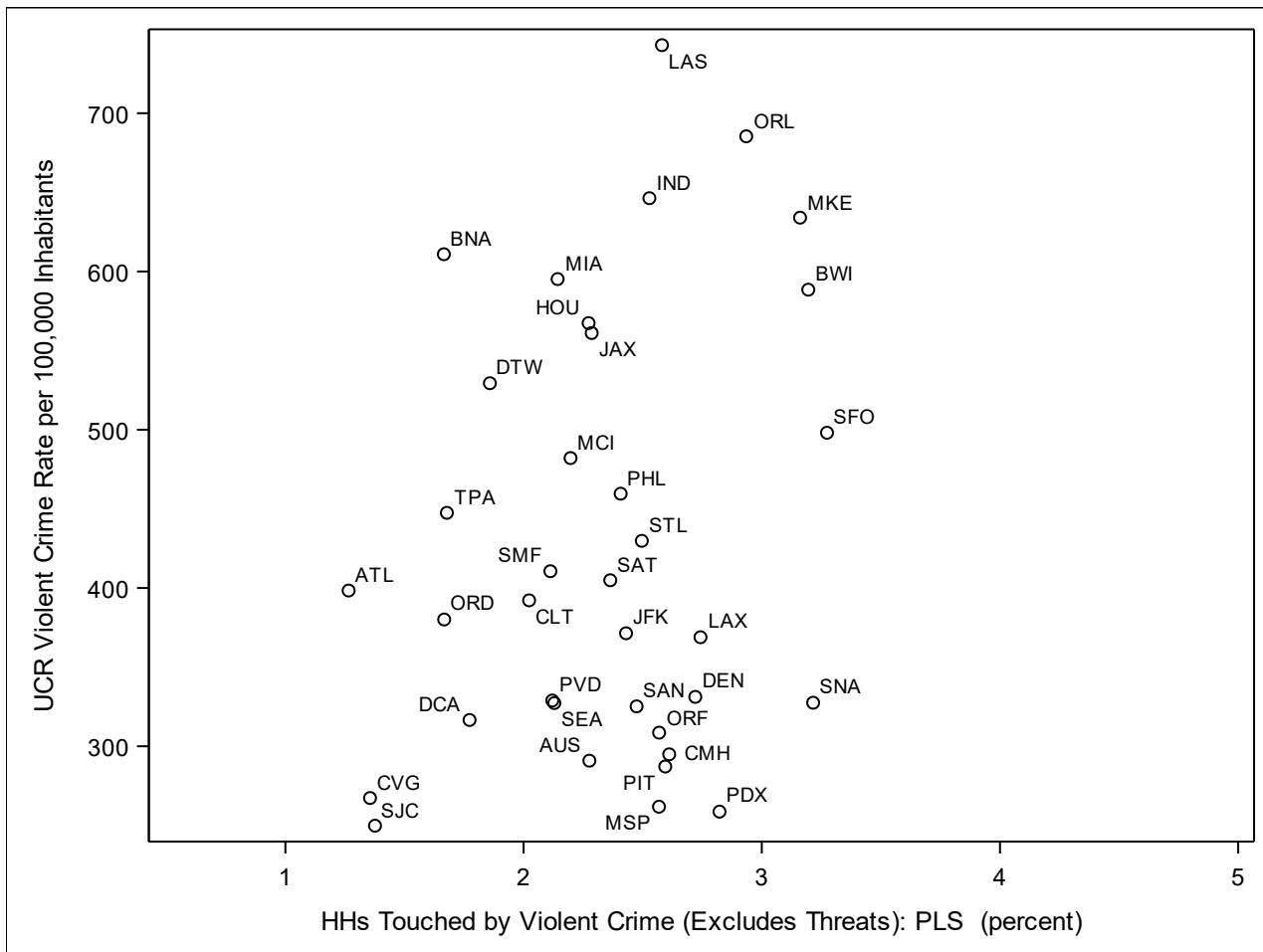


Figure G-5. Violent crime: UCR rate and PLS Form A household TBC percentage

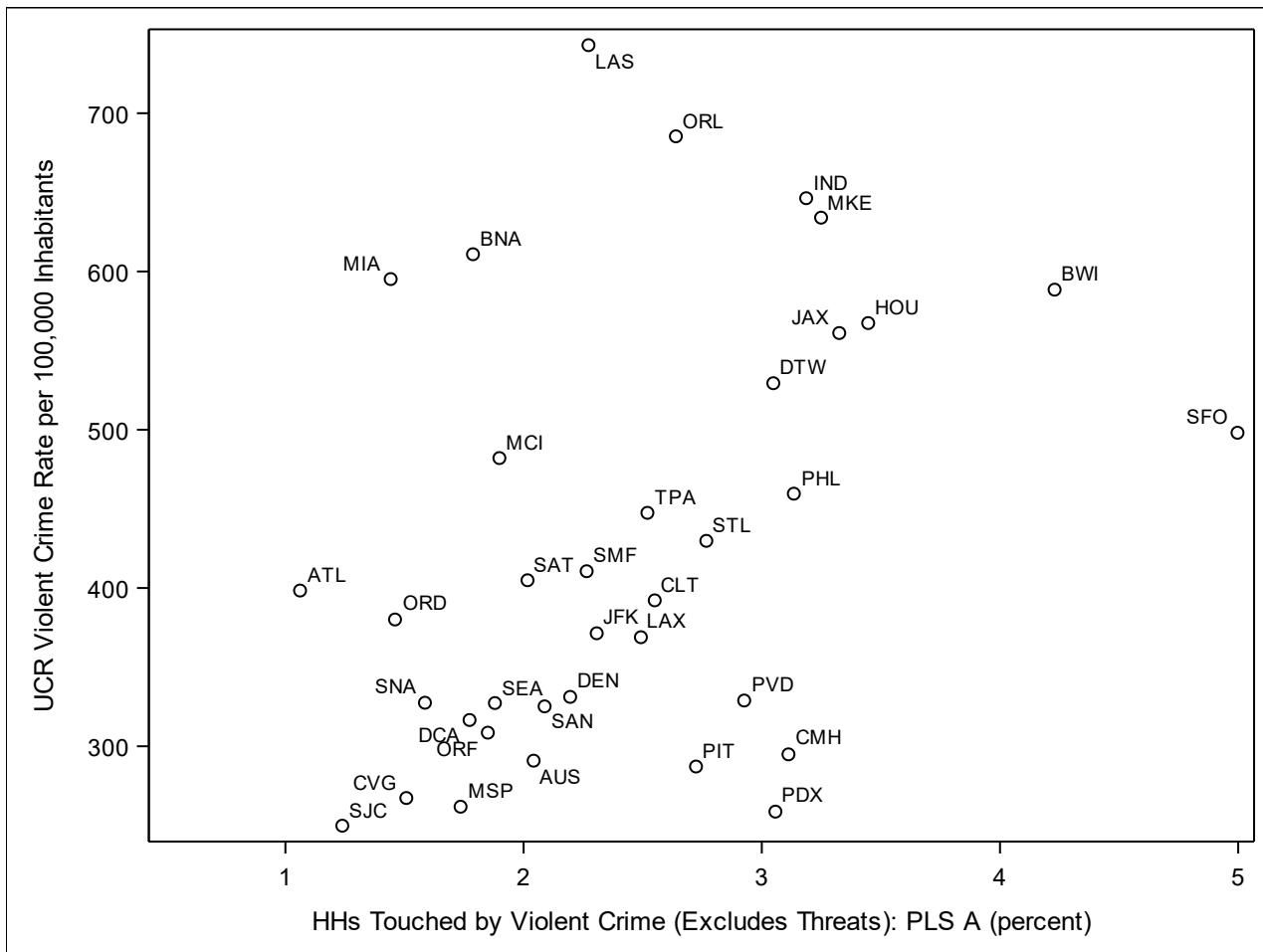


Figure G-6. Violent crime: UCR rate and PLS Form B household TBC percentage

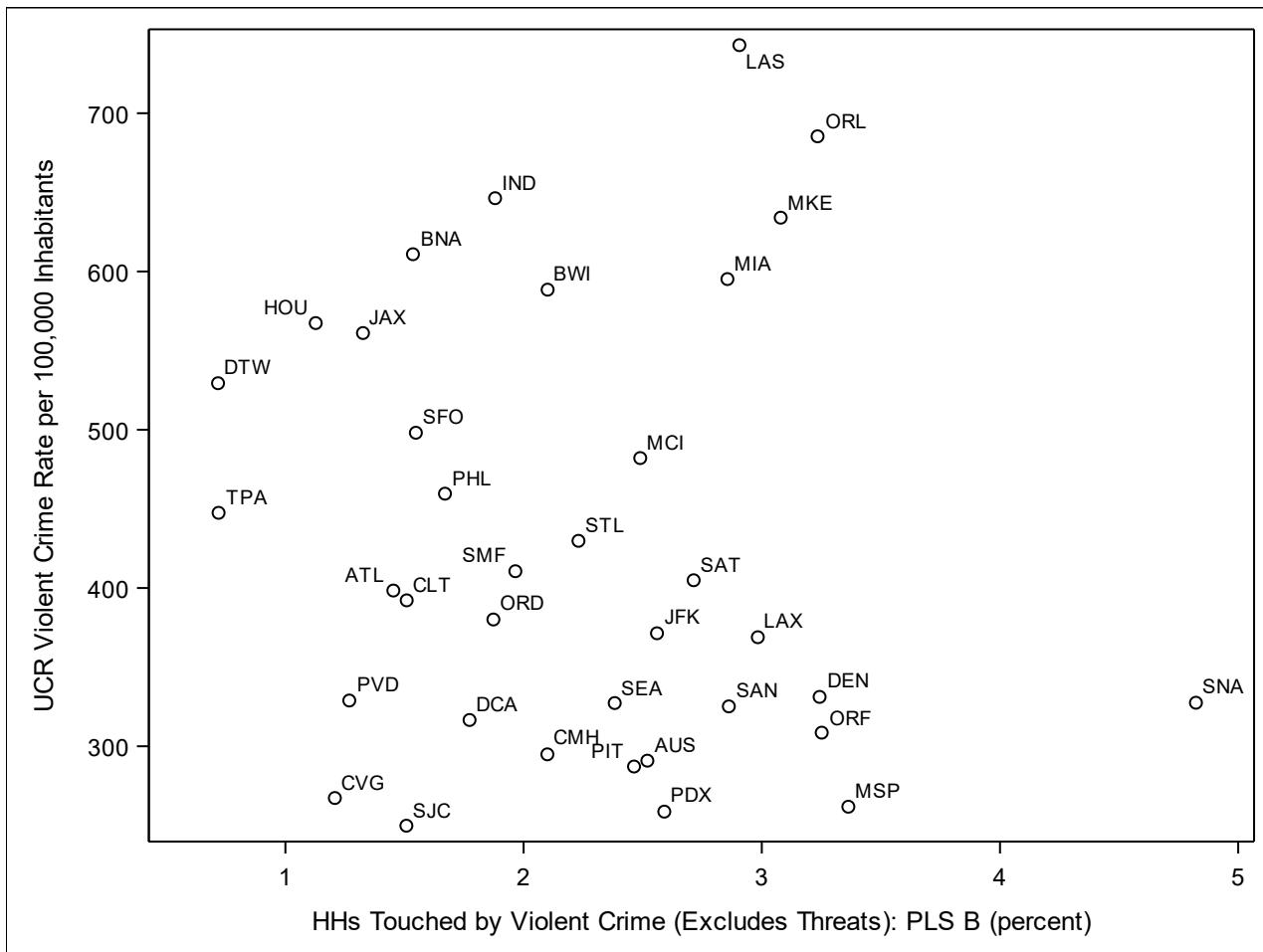


Figure G-7. Serious violent crime: UCR rate and ILS household TBC percentage

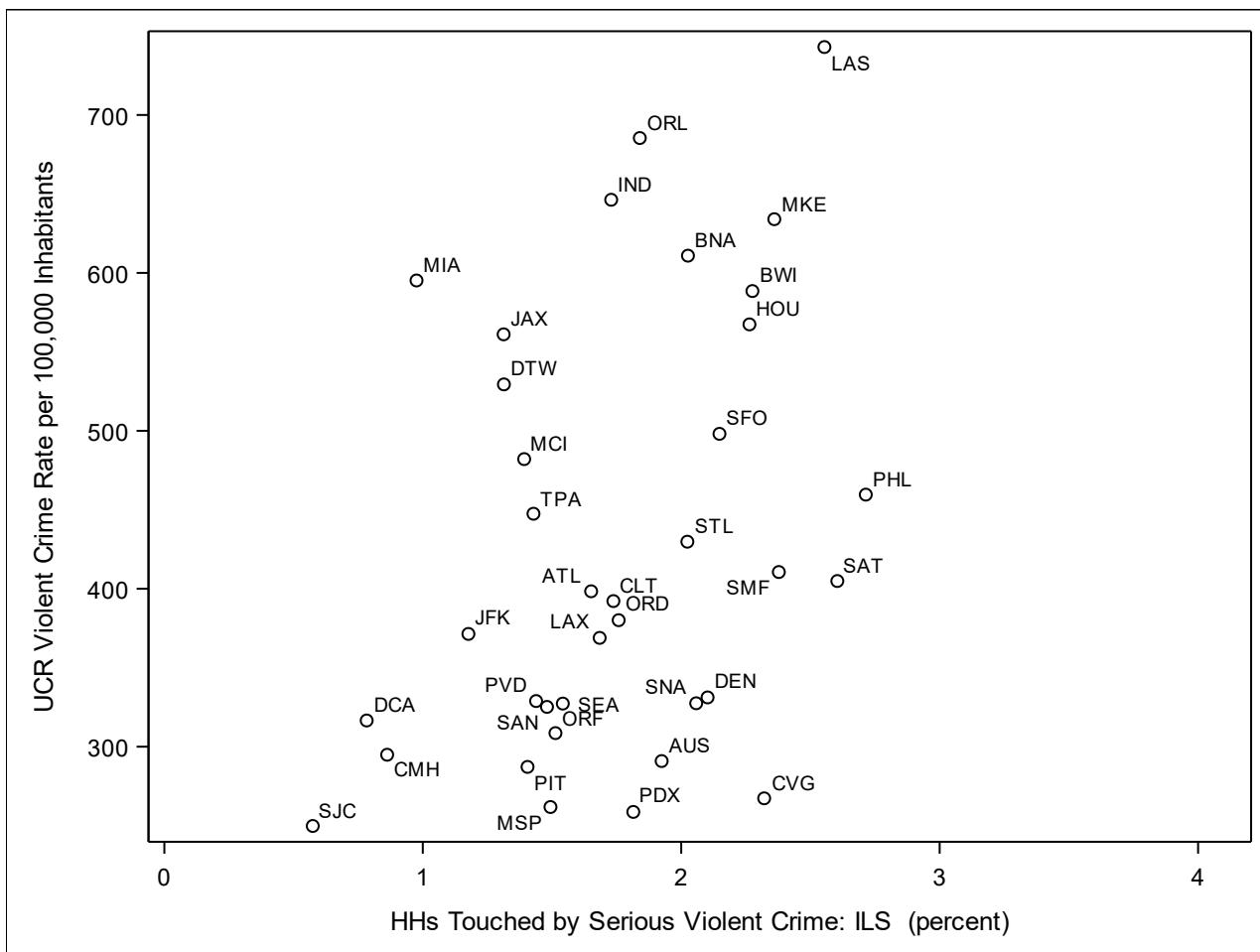


Figure G-8. Serious violent crime: UCR rate and ILS Form A household TBC percentage

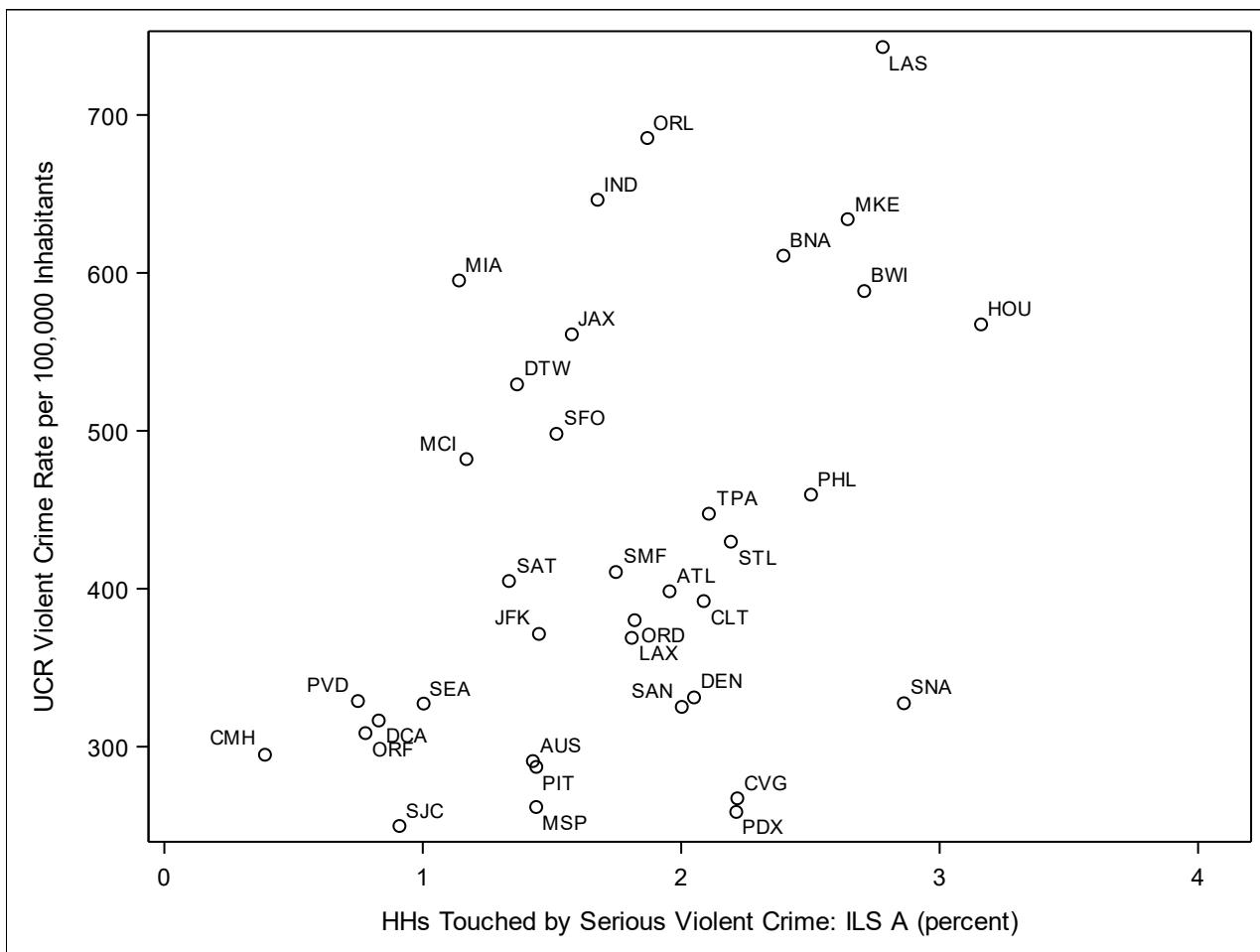


Figure G-9. Serious violent crime: UCR rate and ILS Form B household TBC percentage

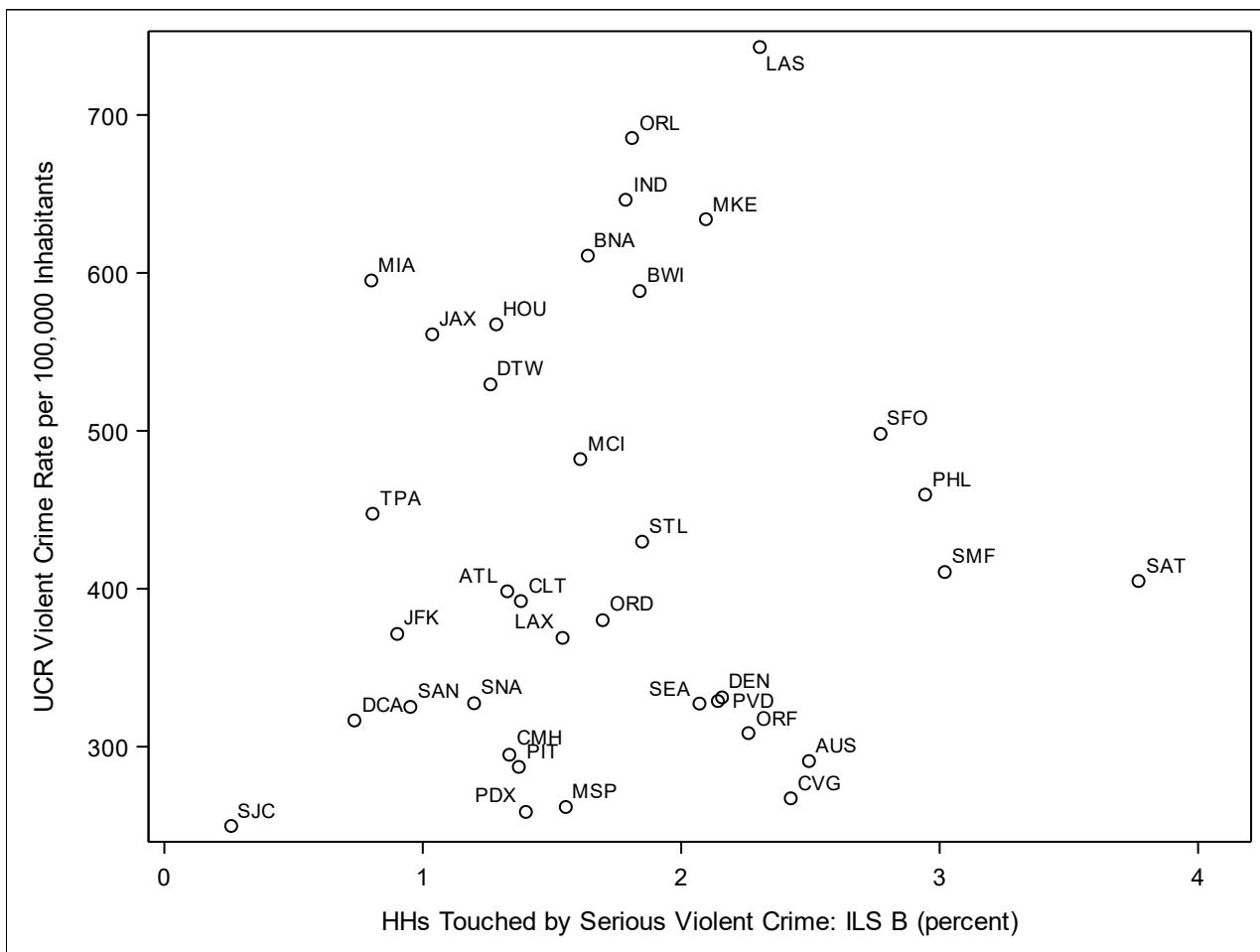


Figure G-10. Serious violent crime: UCR rate and PLS household TBC percentage

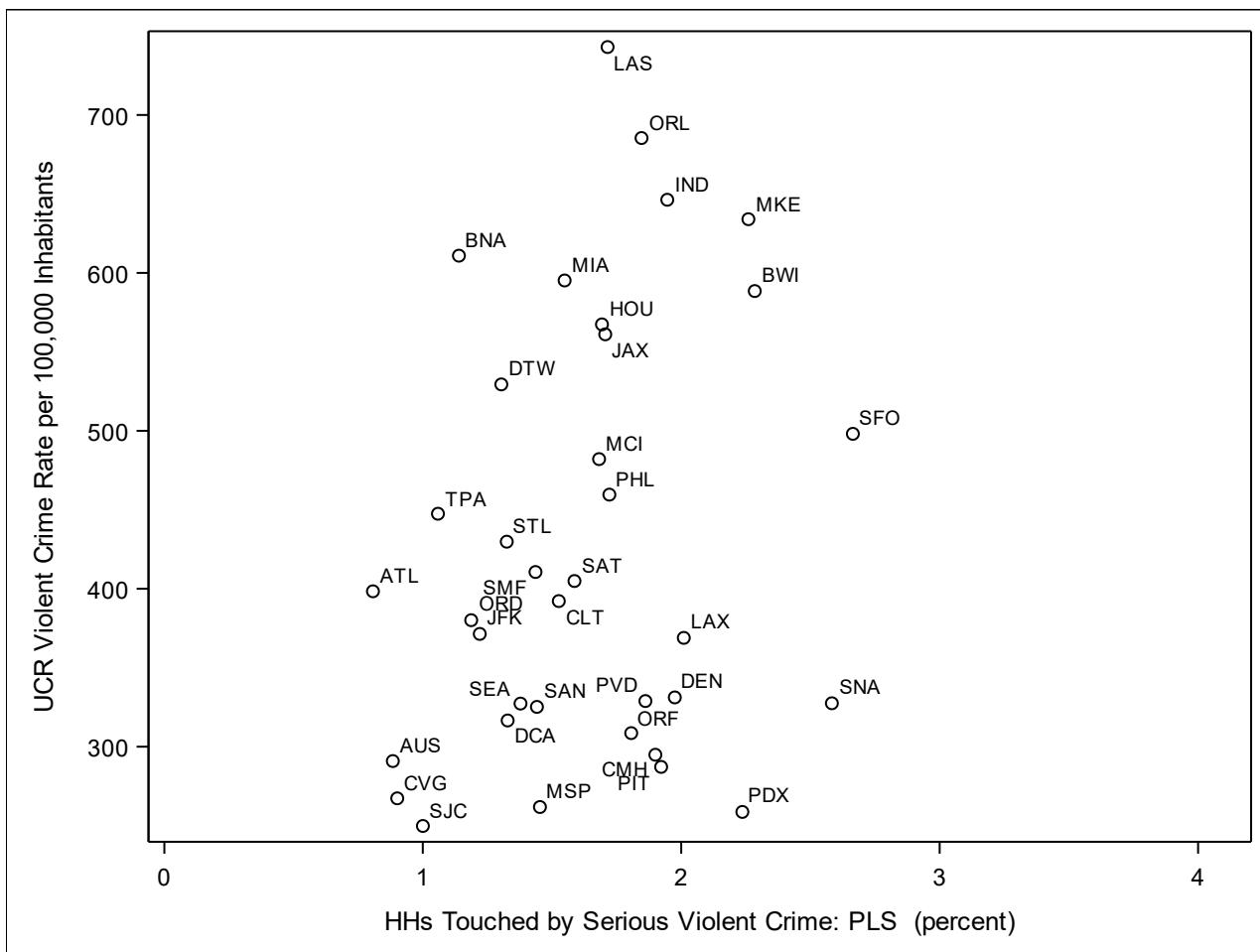


Figure G-11. Serious violent crime: UCR rate and PLS Form A household TBC percentage

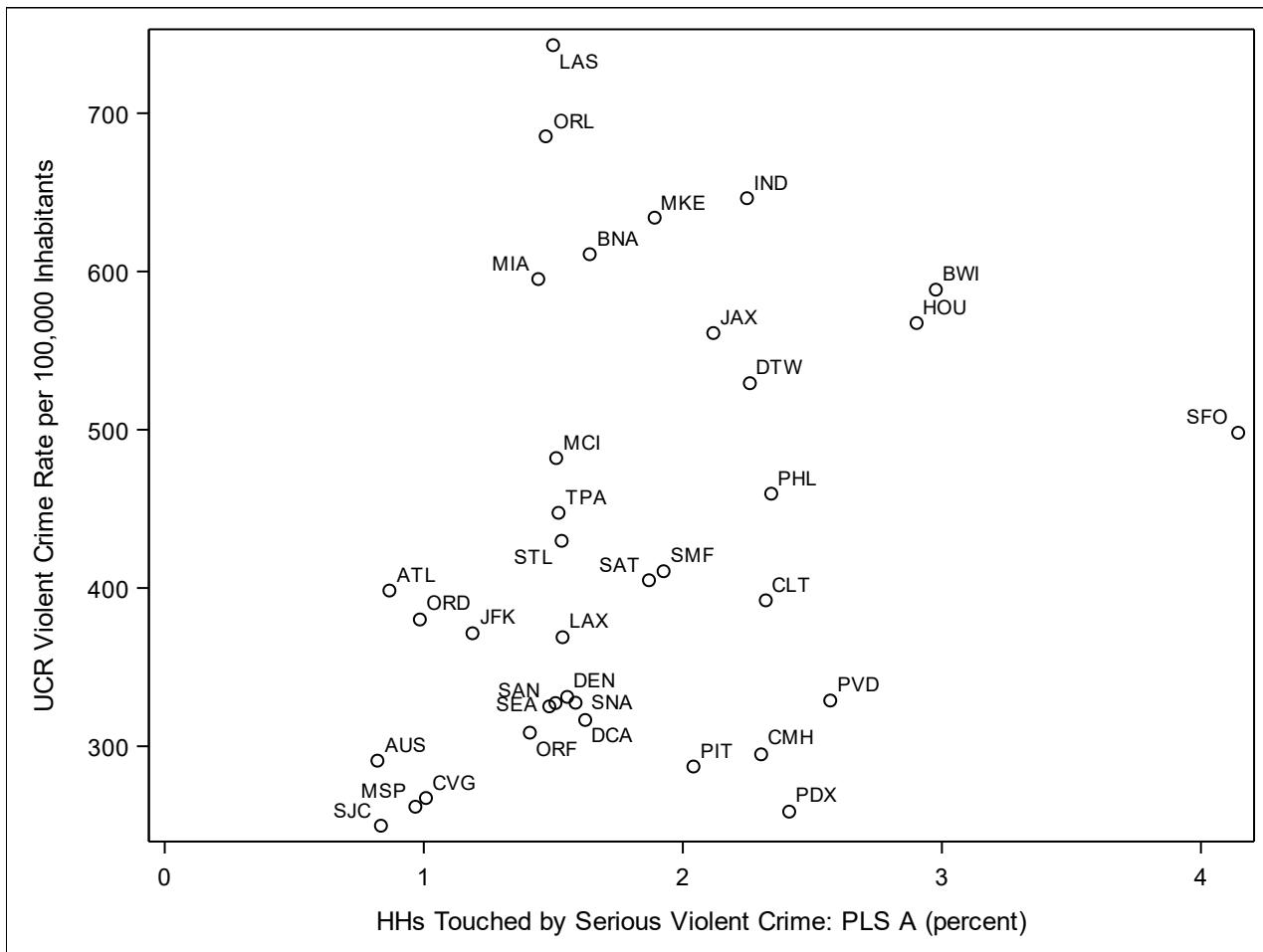


Figure G-12. Serious violent crime: UCR rate and PLS Form B household TBC percentage

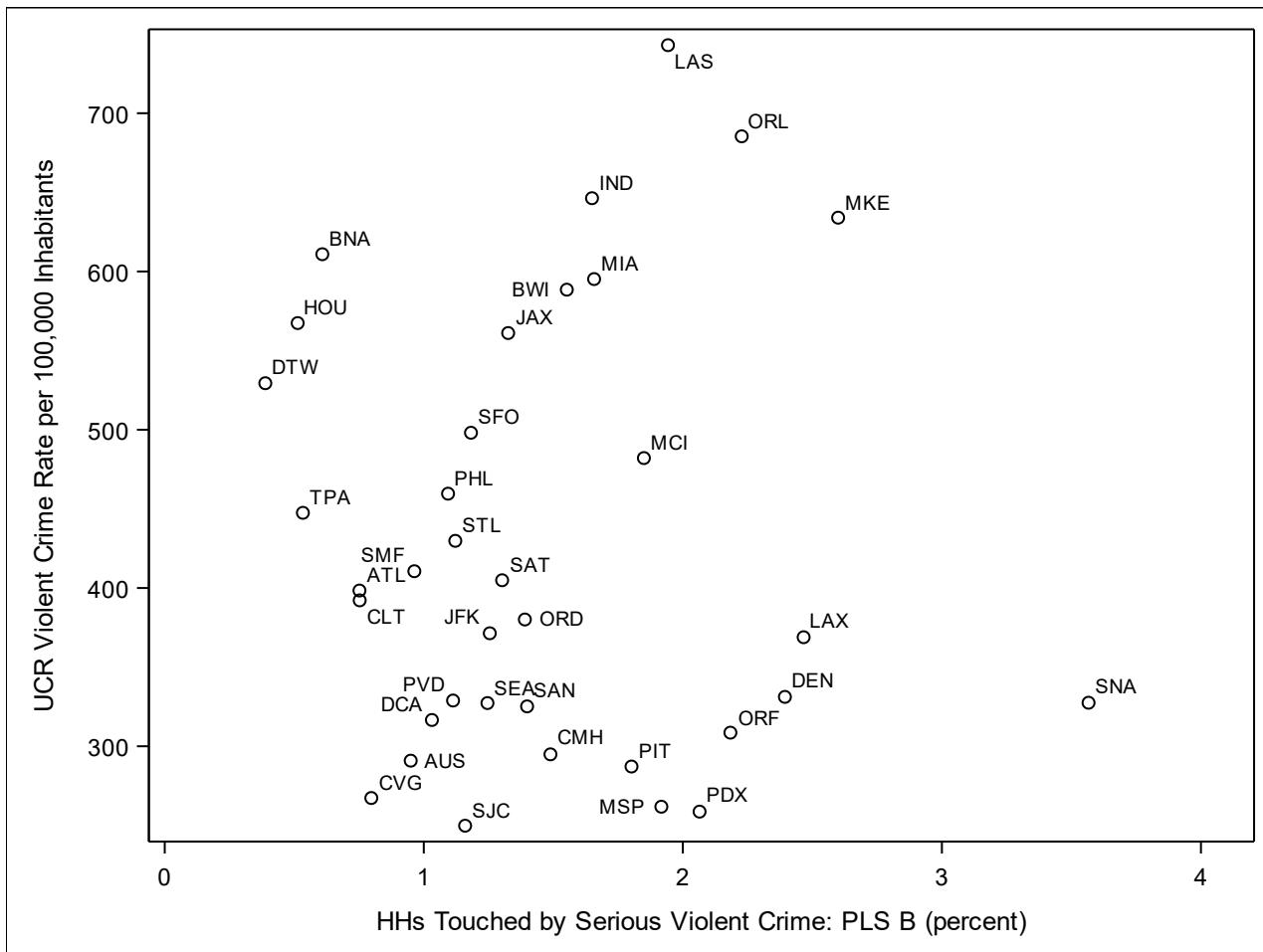


Figure G-13. Property crime: UCR rate and ILS household TBC percentage (excludes attempts)

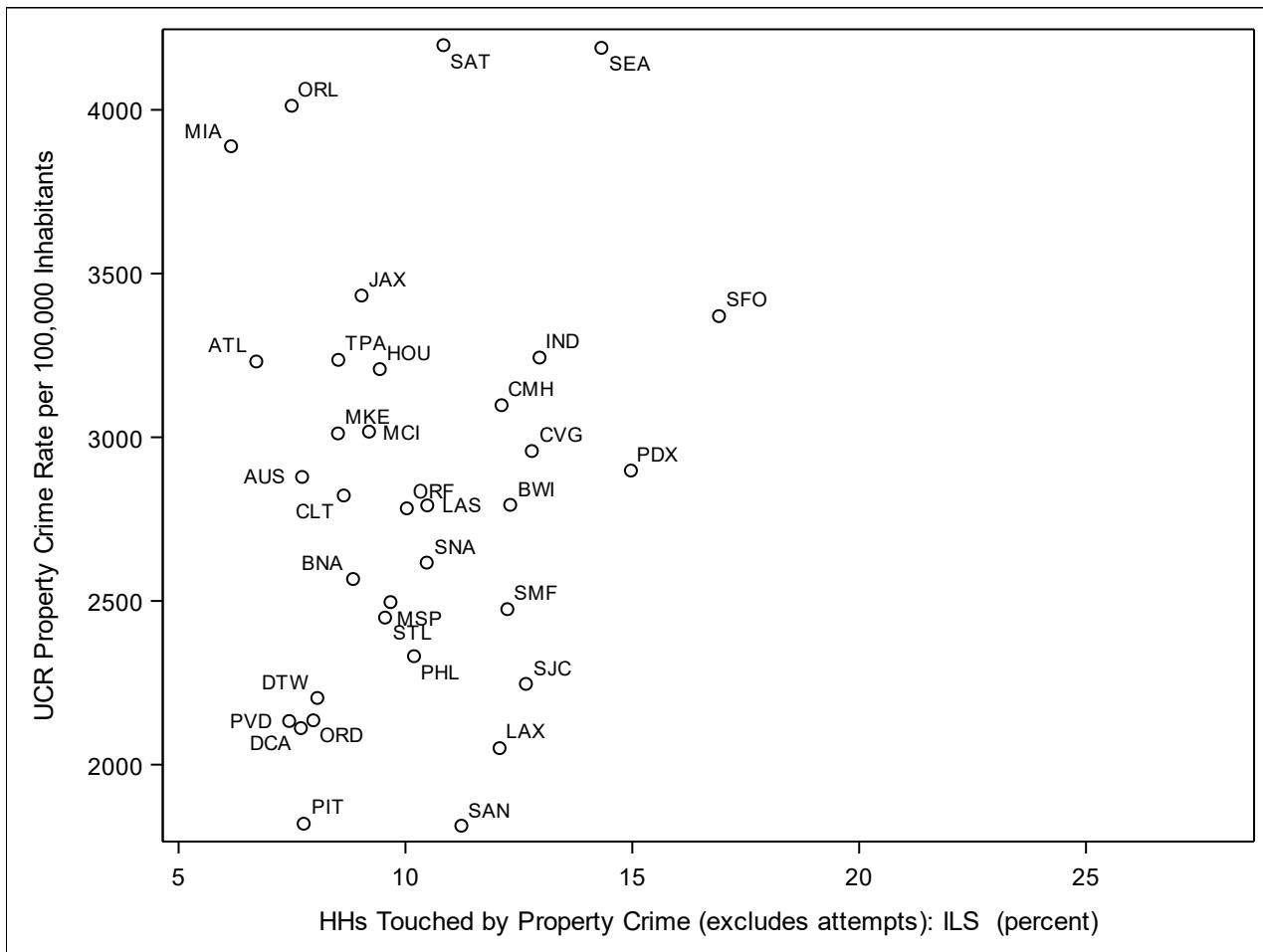


Figure G-14. Property crime: UCR rate and ILS Form A household TBC percentage (excludes attempts)

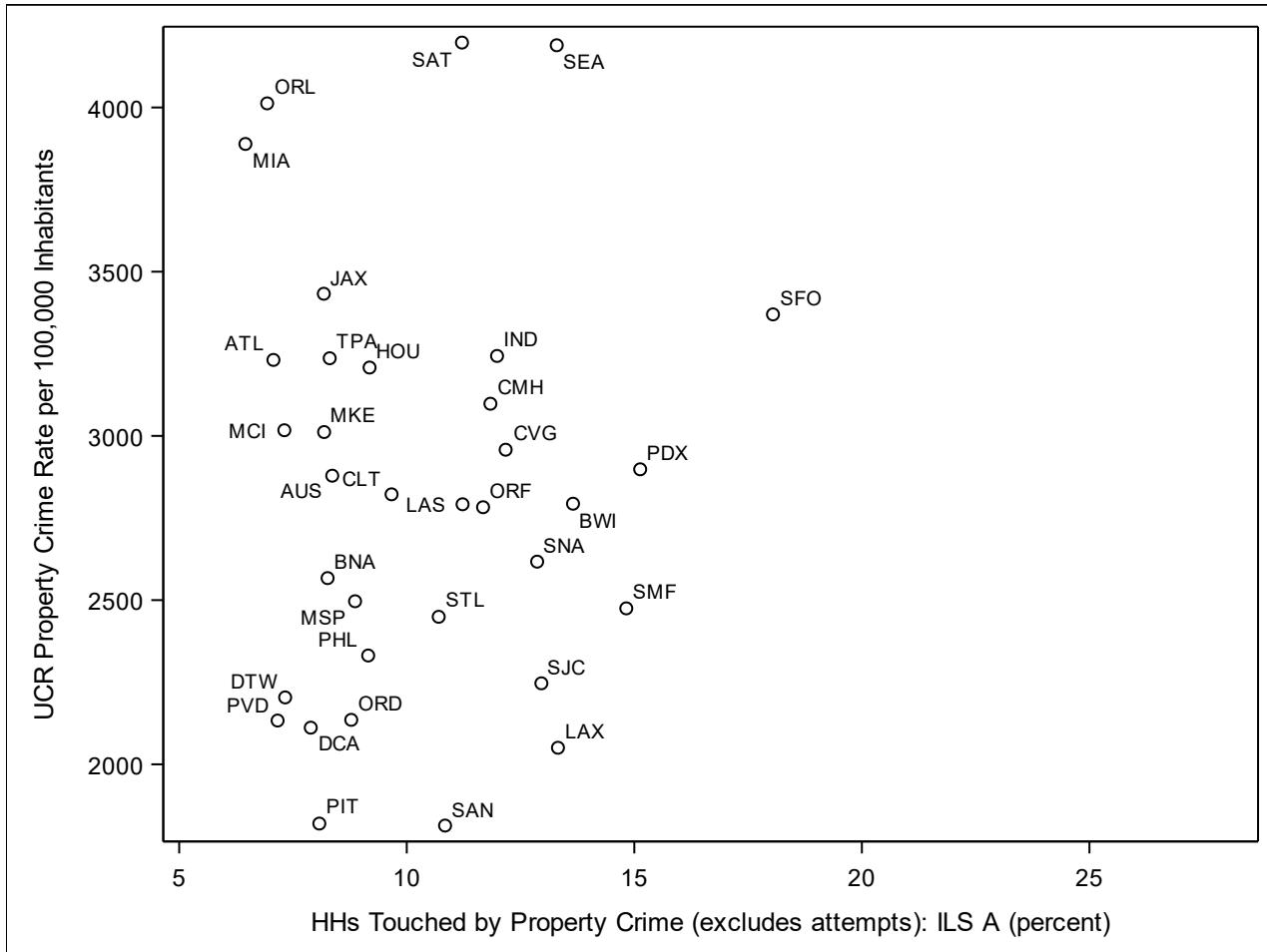


Figure G-15. Property crime: UCR rate and ILS Form B household TBC percentage (excludes attempts)

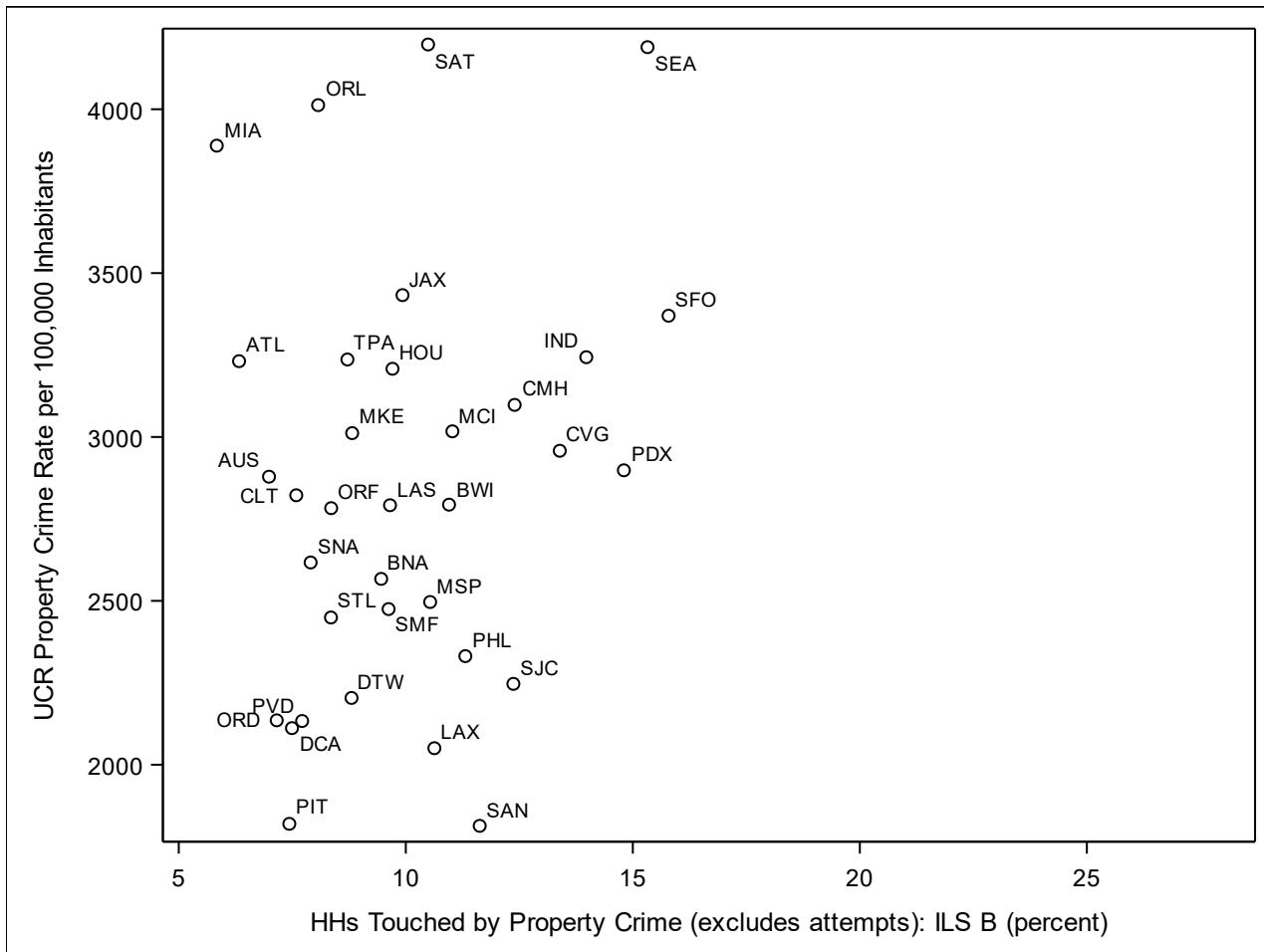


Figure G-16. Property crime: UCR rate and PLS household TBC percentage (excludes attempts)

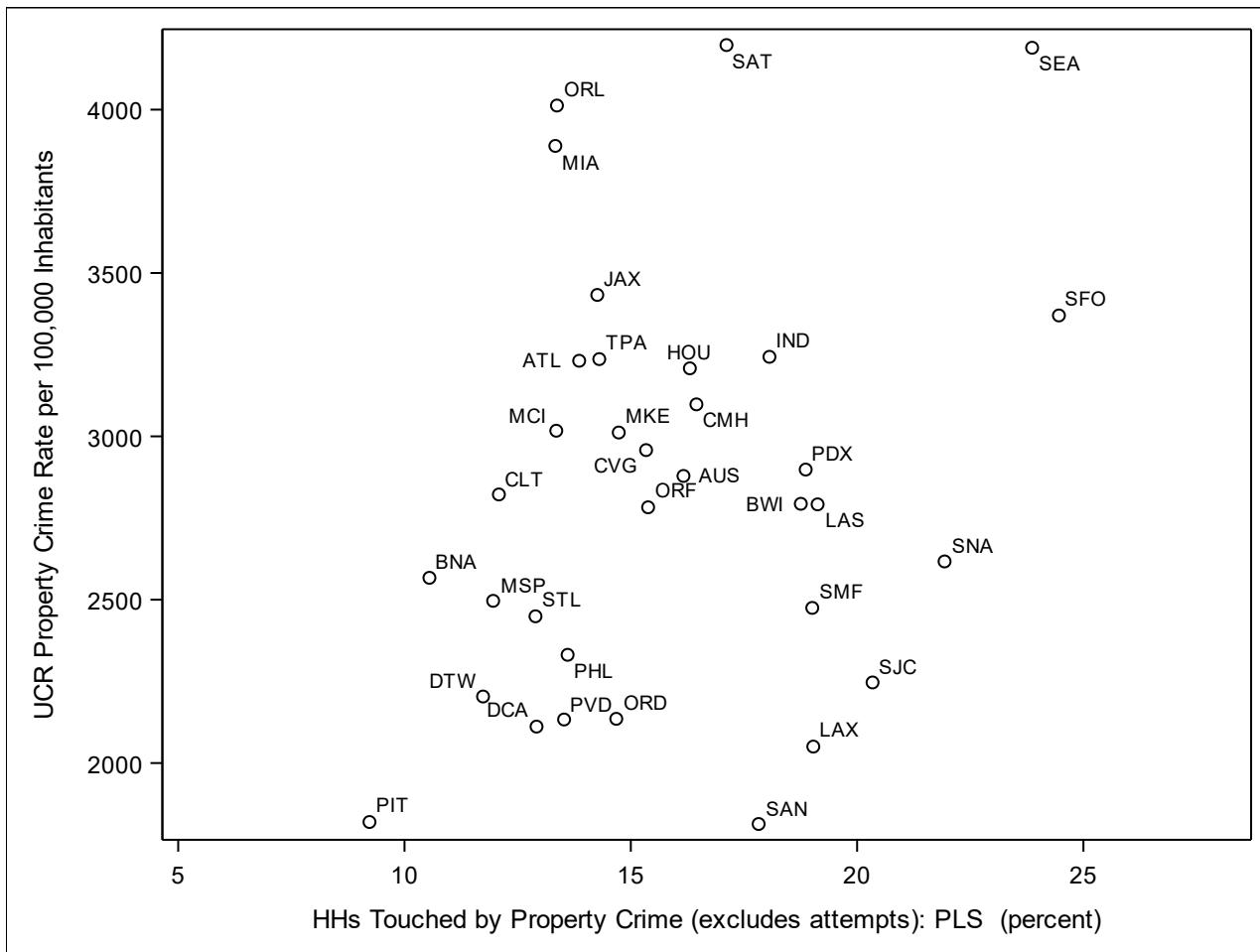


Figure G-17. Property crime: UCR rate and PLS Form A household TBC percentage (excludes attempts)

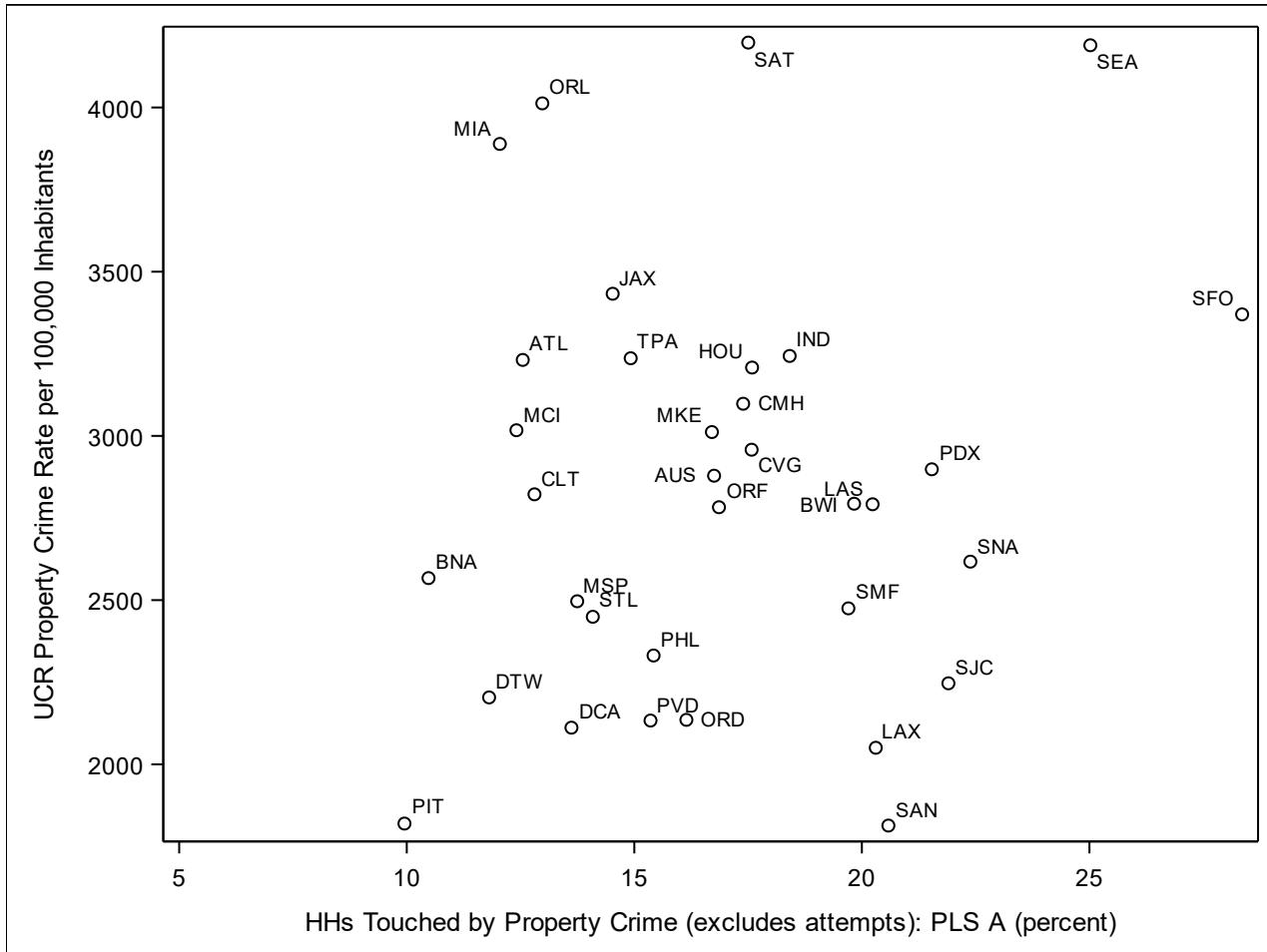


Figure G-18. Property crime: UCR rate and PLS Form B household TBC percentage (excludes attempts)

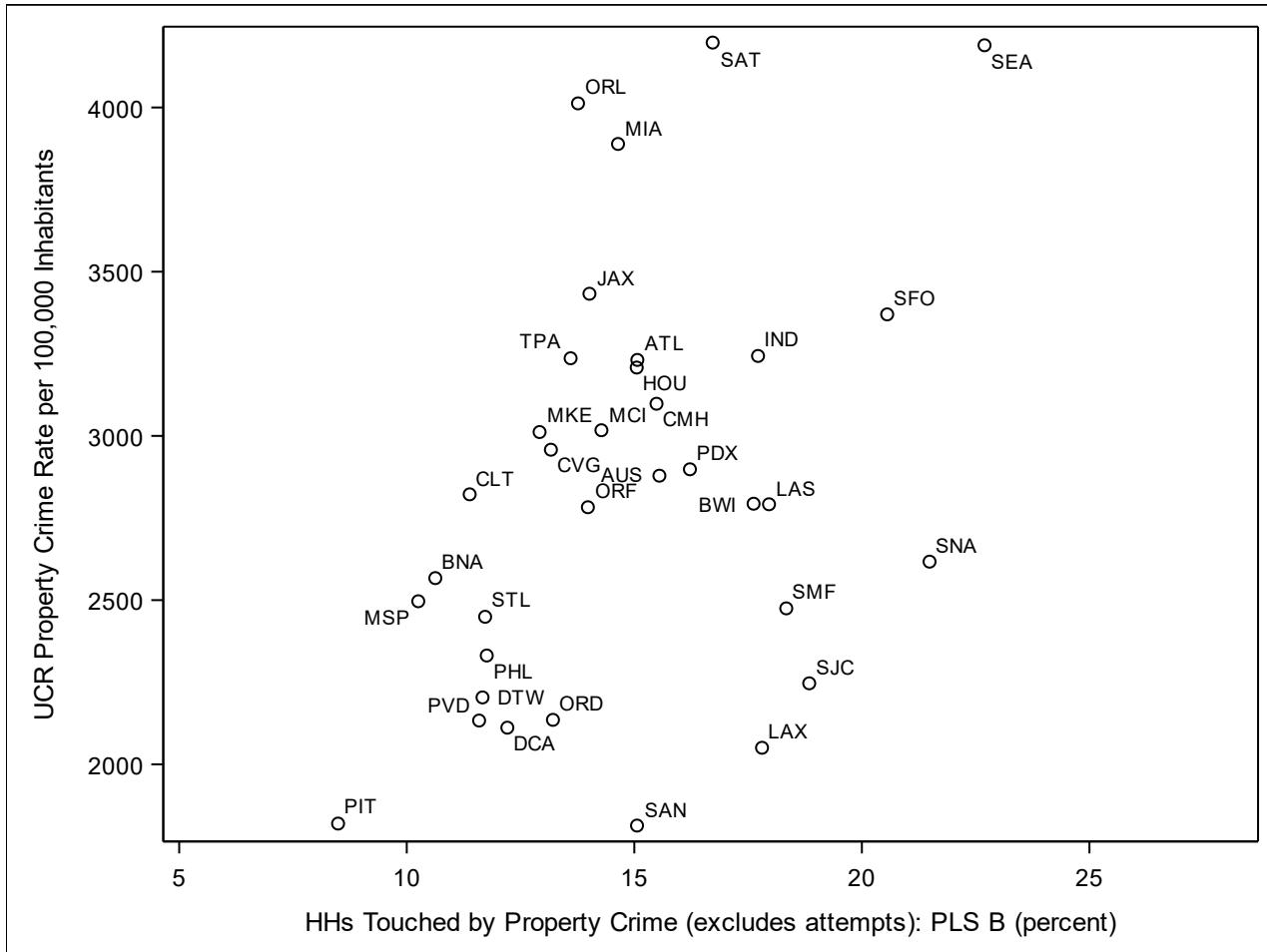


Figure G-19. Violent crime: UCR rate and ILS person TBC percentage (excludes threats)

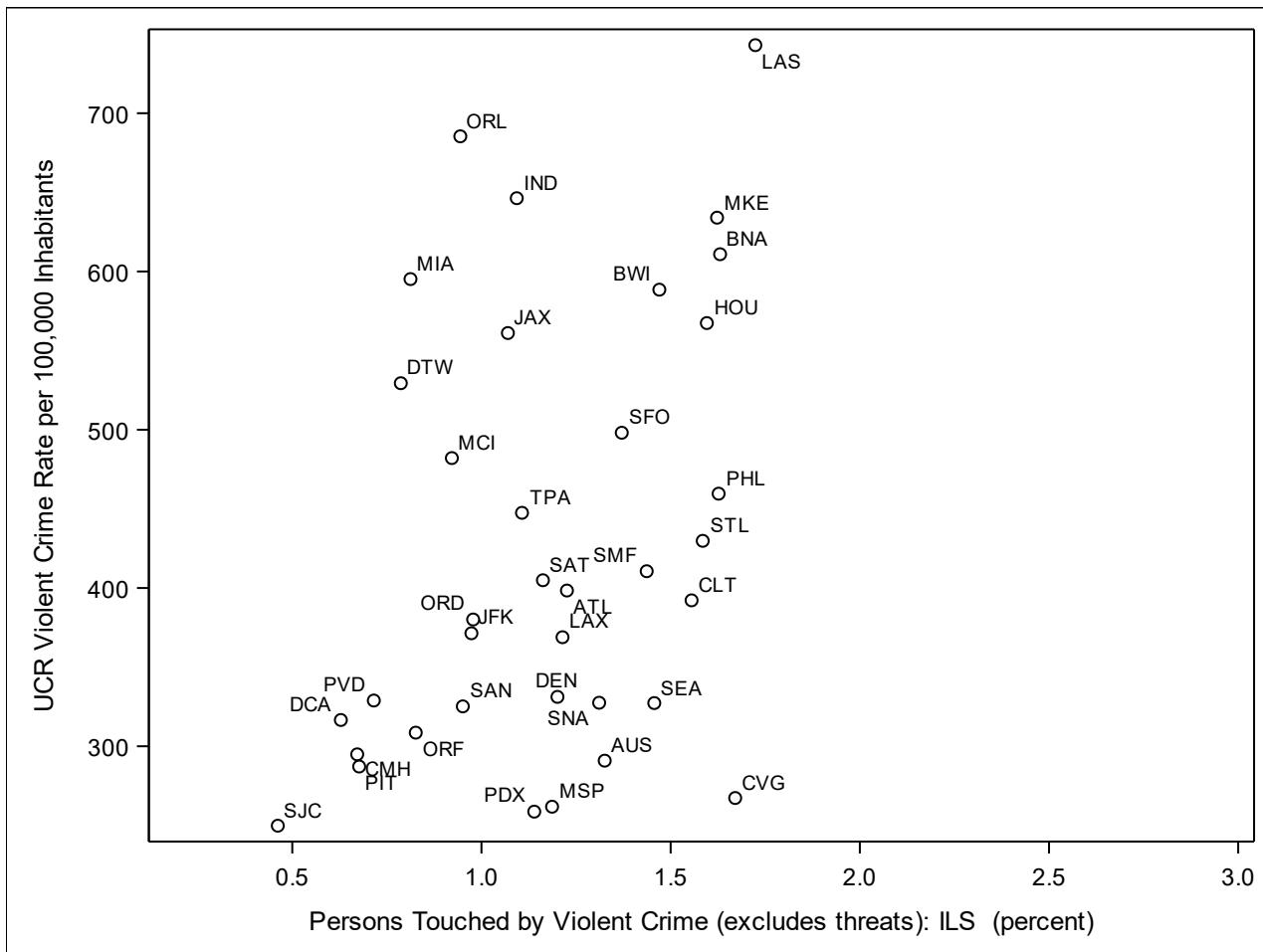


Figure G-20. Violent crime: UCR rate and ILS Form A person TBC percentage (excludes threats)

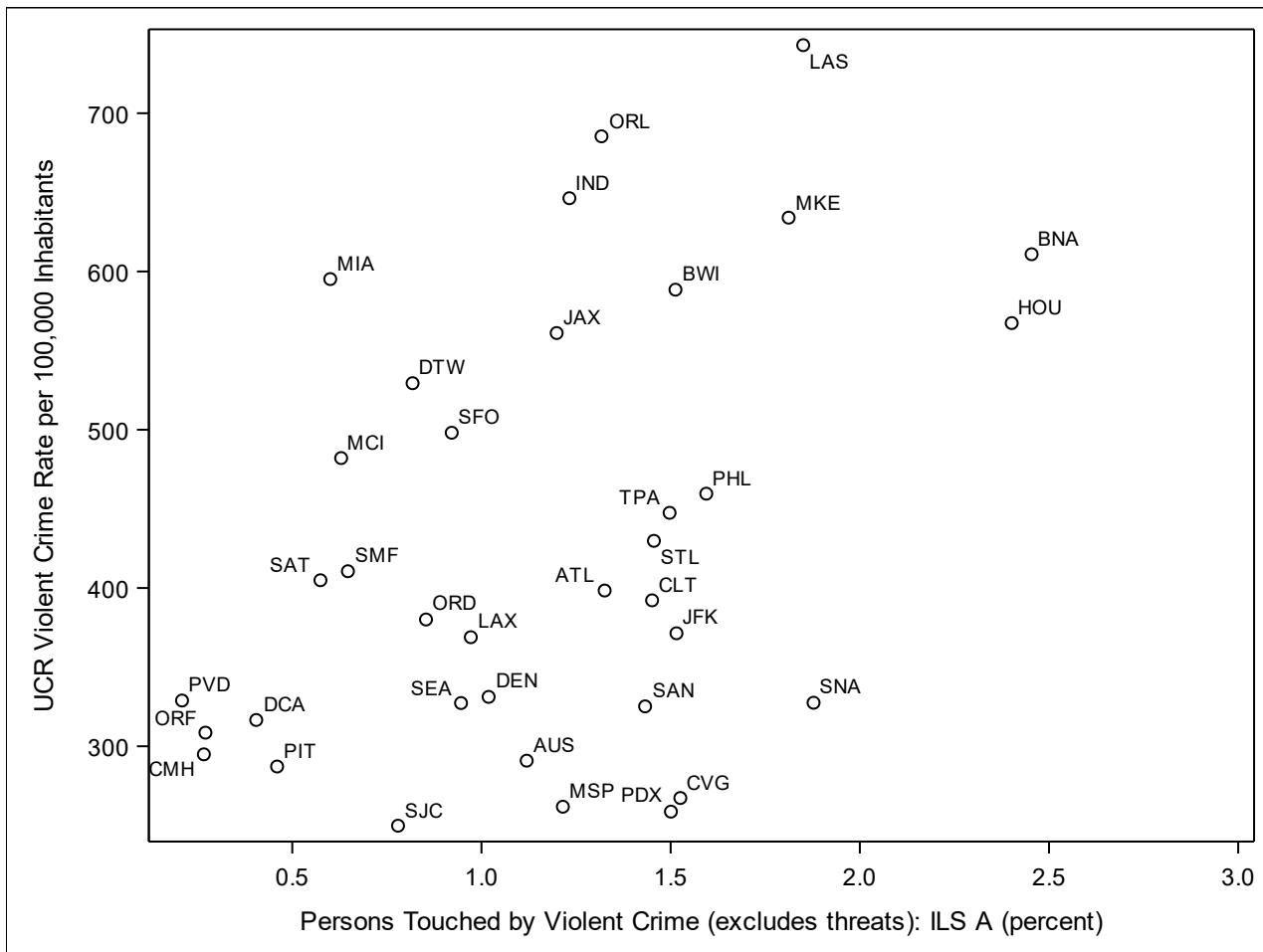


Figure G-21. Violent crime: UCR rate and ILS Form B person TBC percentage (excludes threats)

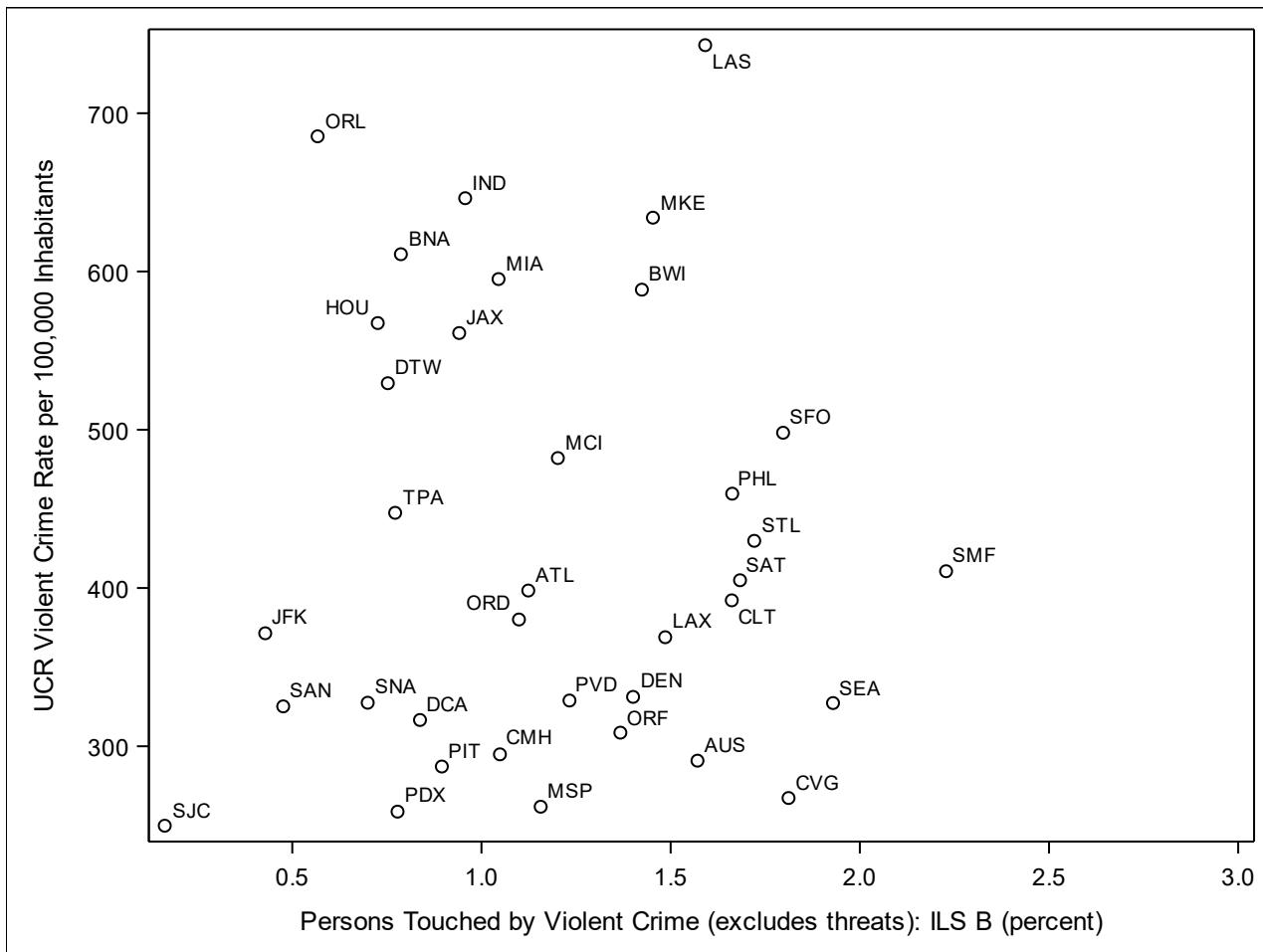


Figure G-22. Violent crime: UCR rate and PLS person TBC percentage (excludes threats)

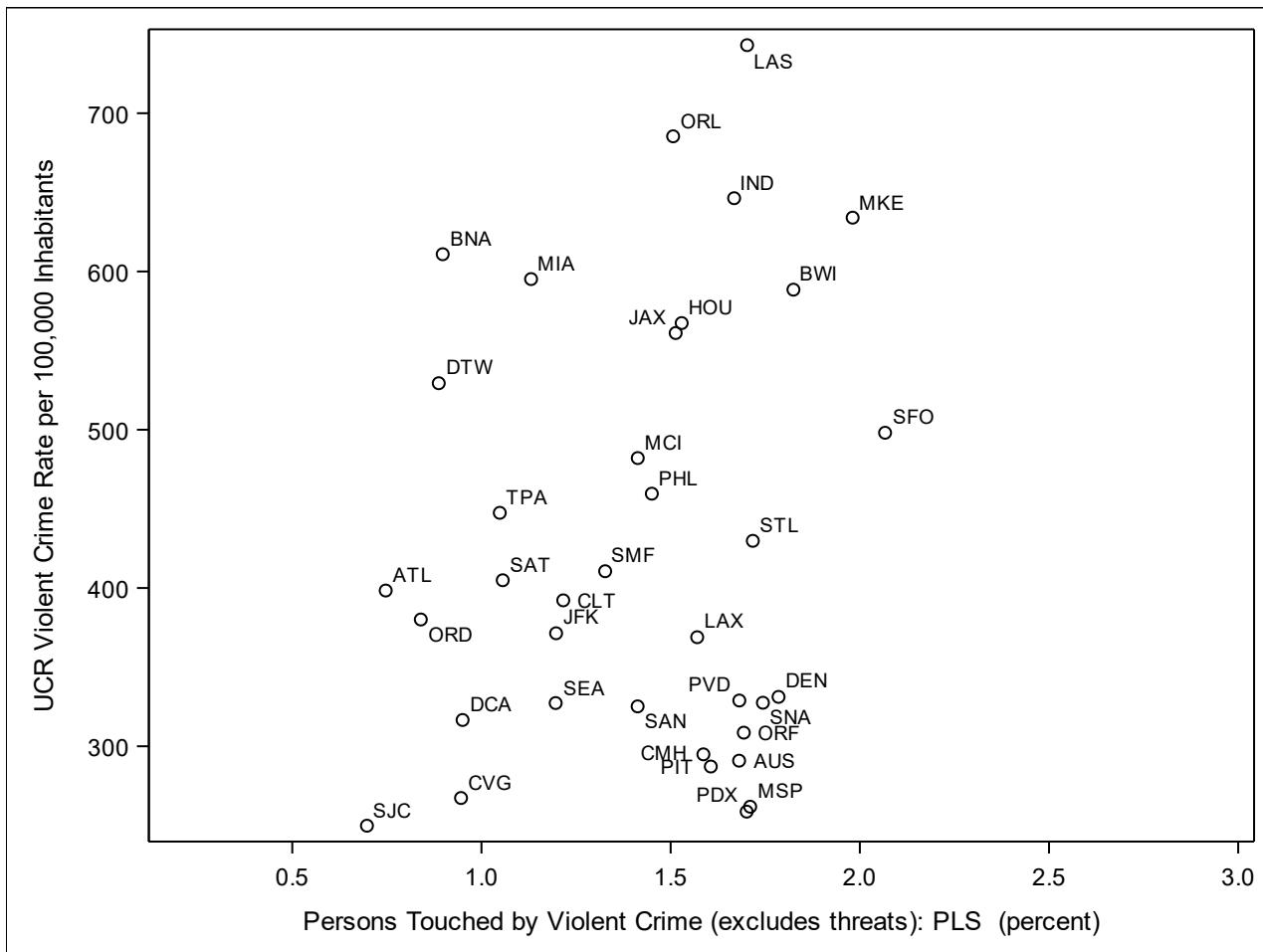


Figure G-23. Violent crime: UCR rate and PLS Form A person TBC percentage (excludes threats)

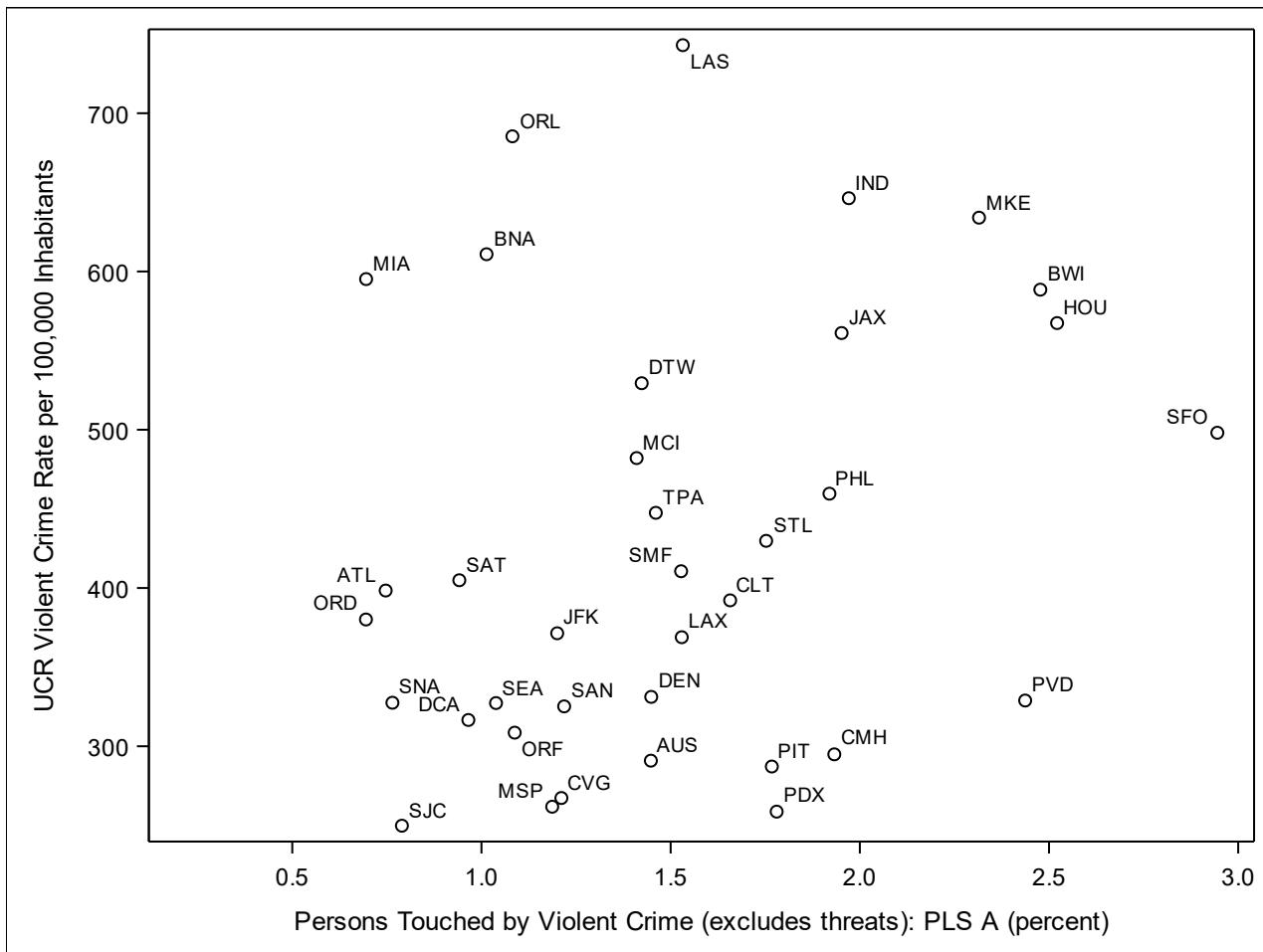


Figure G-24. Violent crime: UCR rate and PLS Form B person TBC percentage (excludes threats)

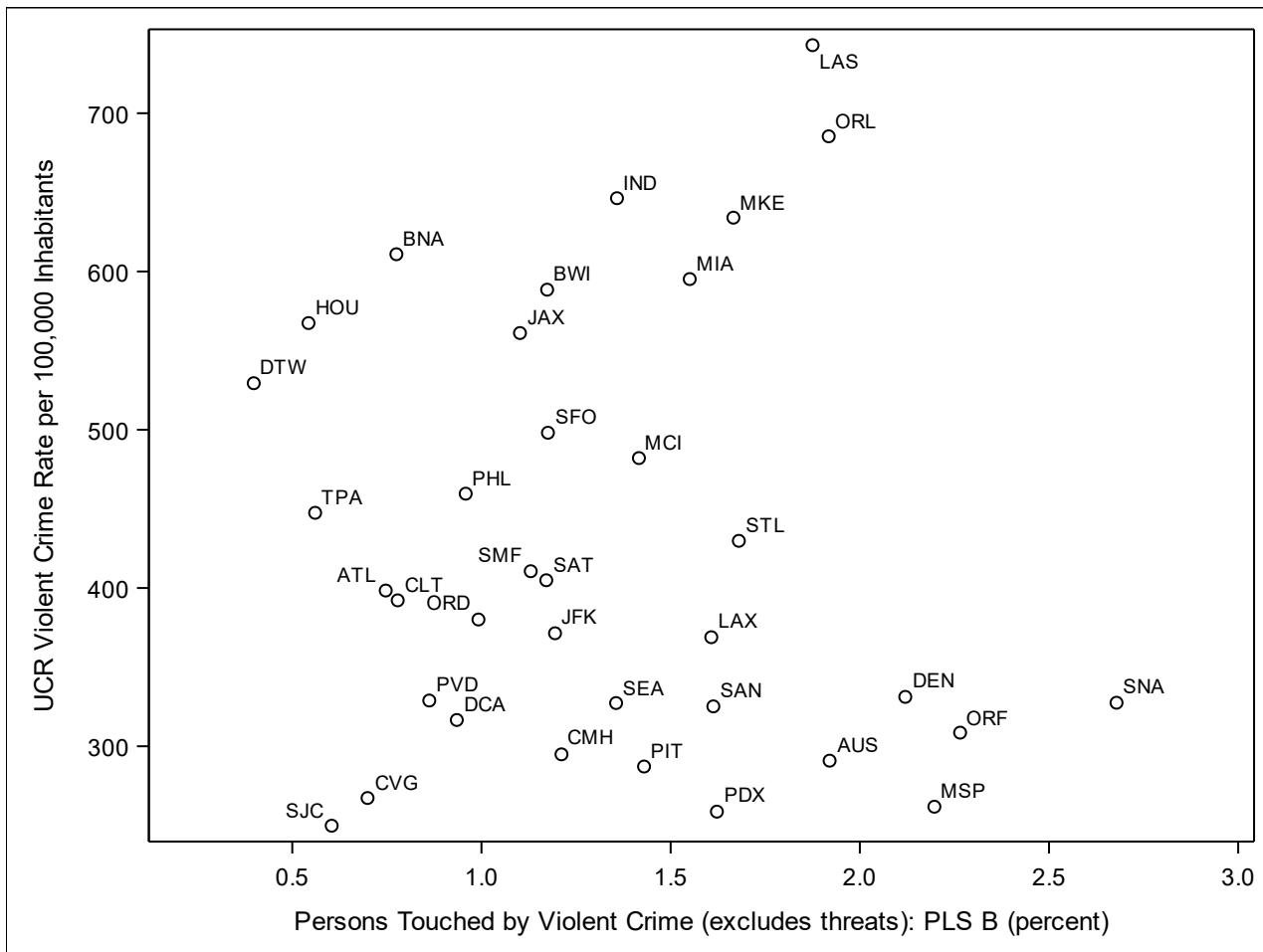


Figure G-25. Violent crime: UCR rate and ILS person TBC percentage (includes threats)

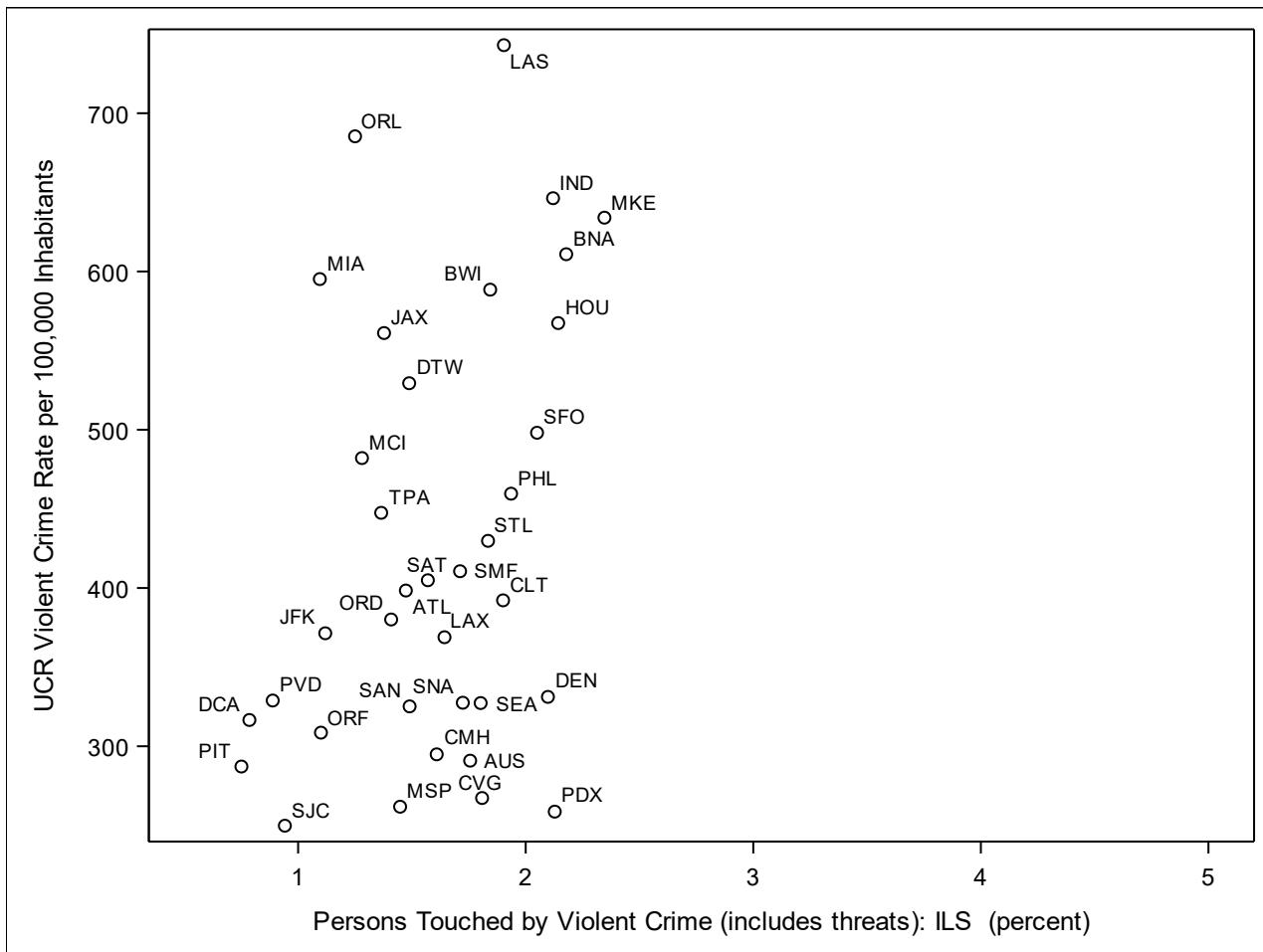


Figure G-26. Violent crime: UCR rate and ILS Form A person TBC percentage (includes threats)

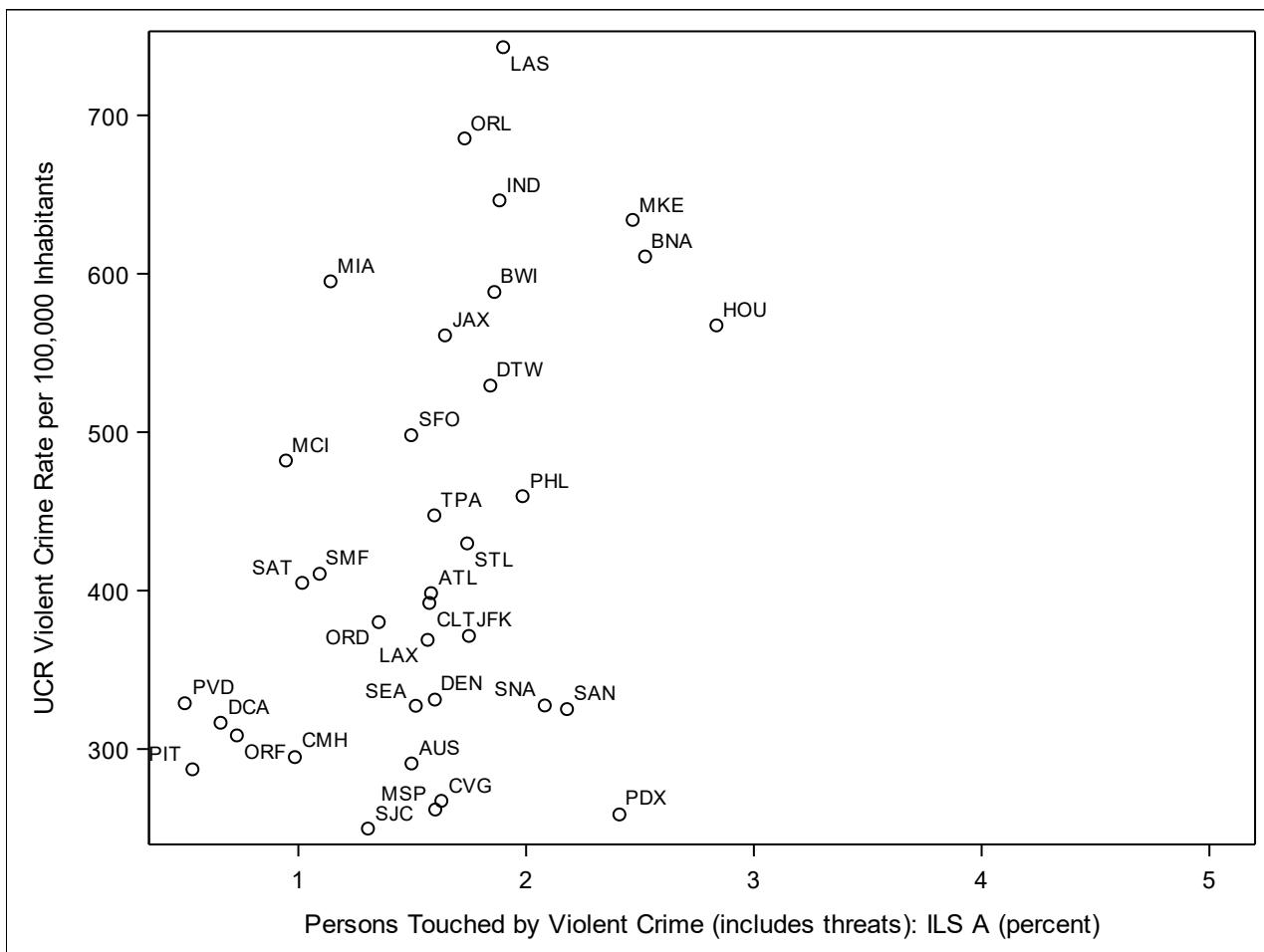


Figure G-27. Violent crime: UCR rate and ILS Form B person TBC percentage (includes threats)

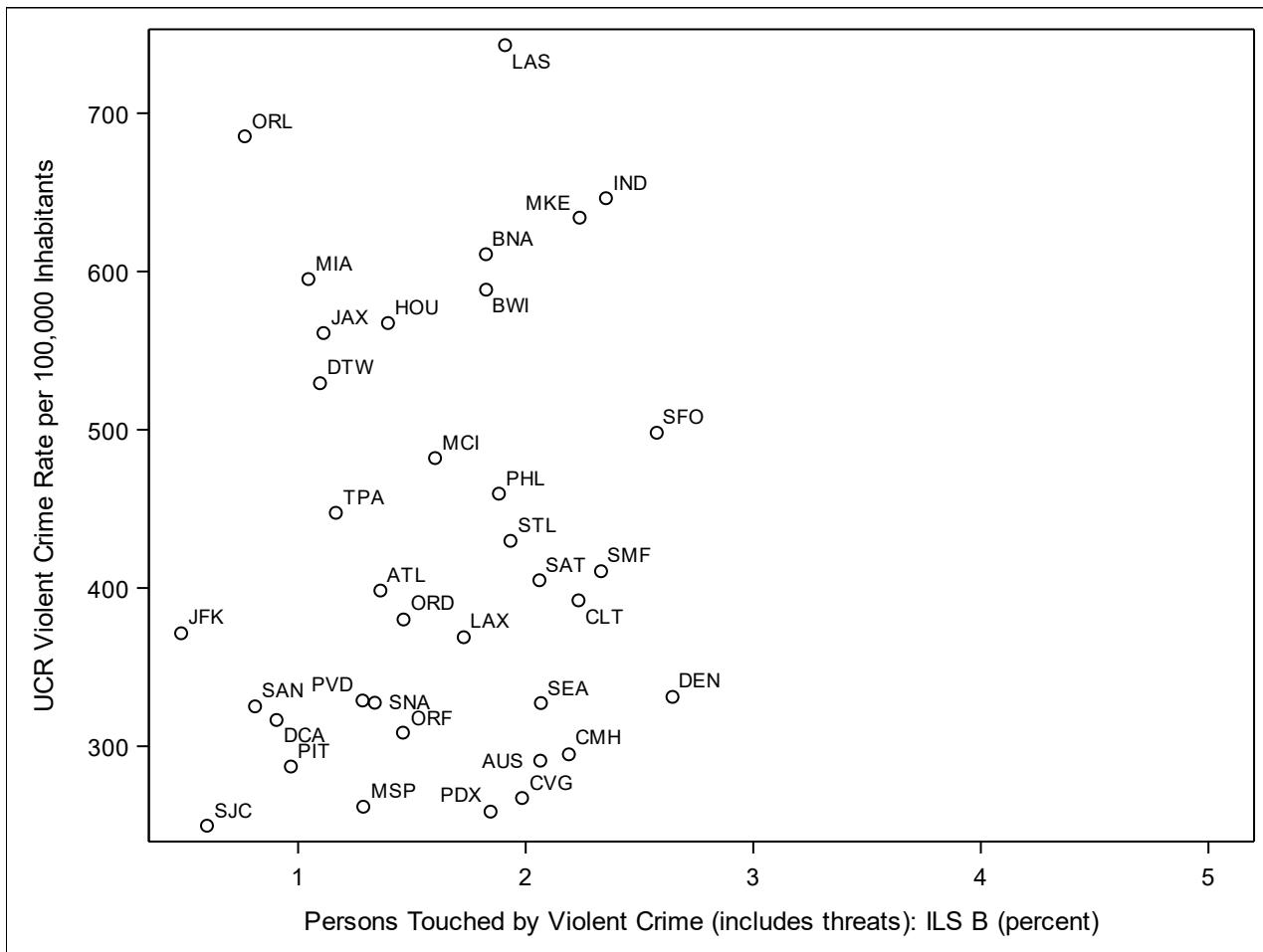


Figure G-28. Violent crime: UCR rate and PLS person TBC percentage (includes threats)

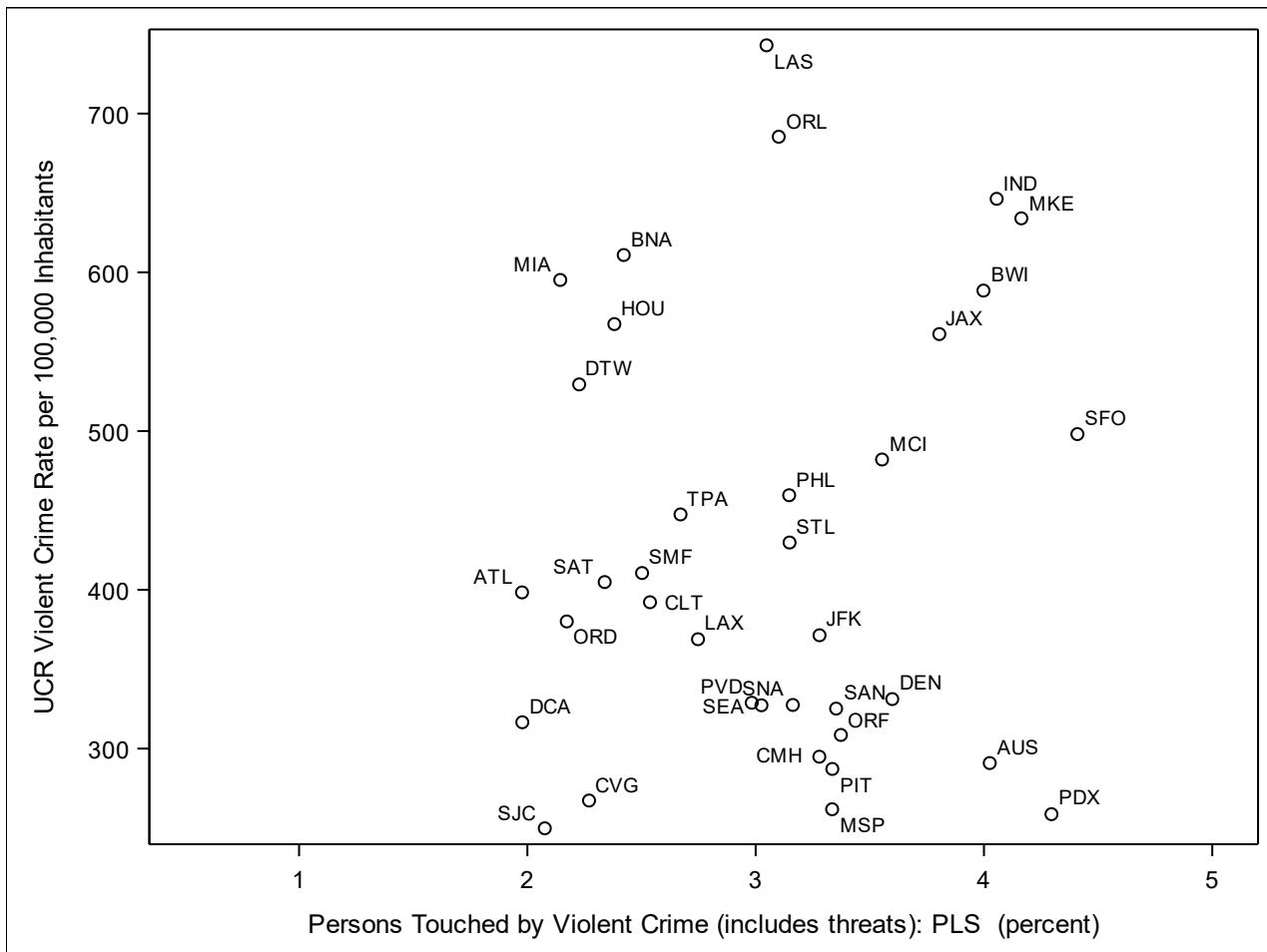


Figure G-29. Violent crime: UCR rate and PLS Form A person TBC percentage (includes threats)

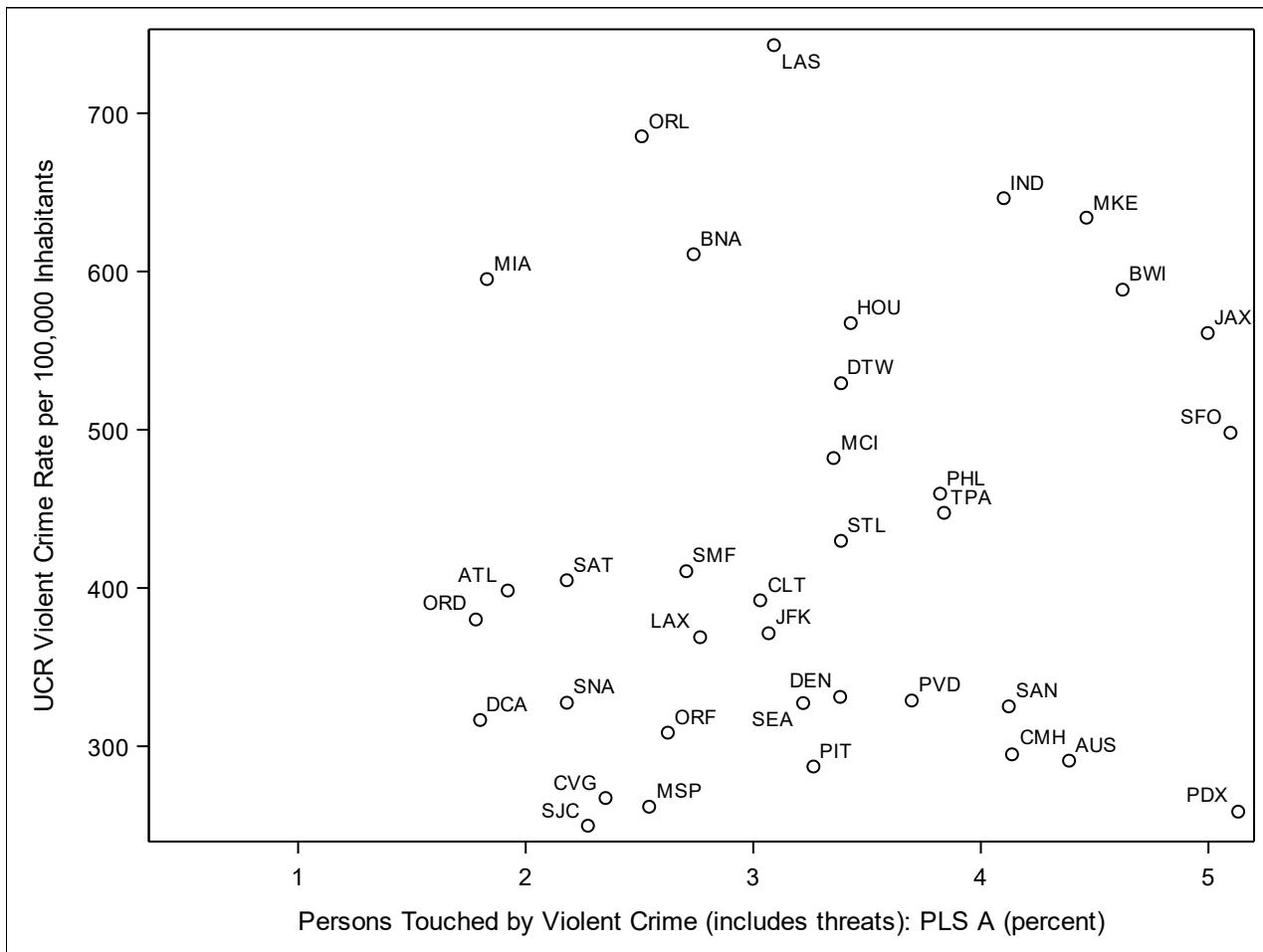


Figure G-30. Violent crime: UCR rate and PLS Form B person TBC percentage (includes threats)

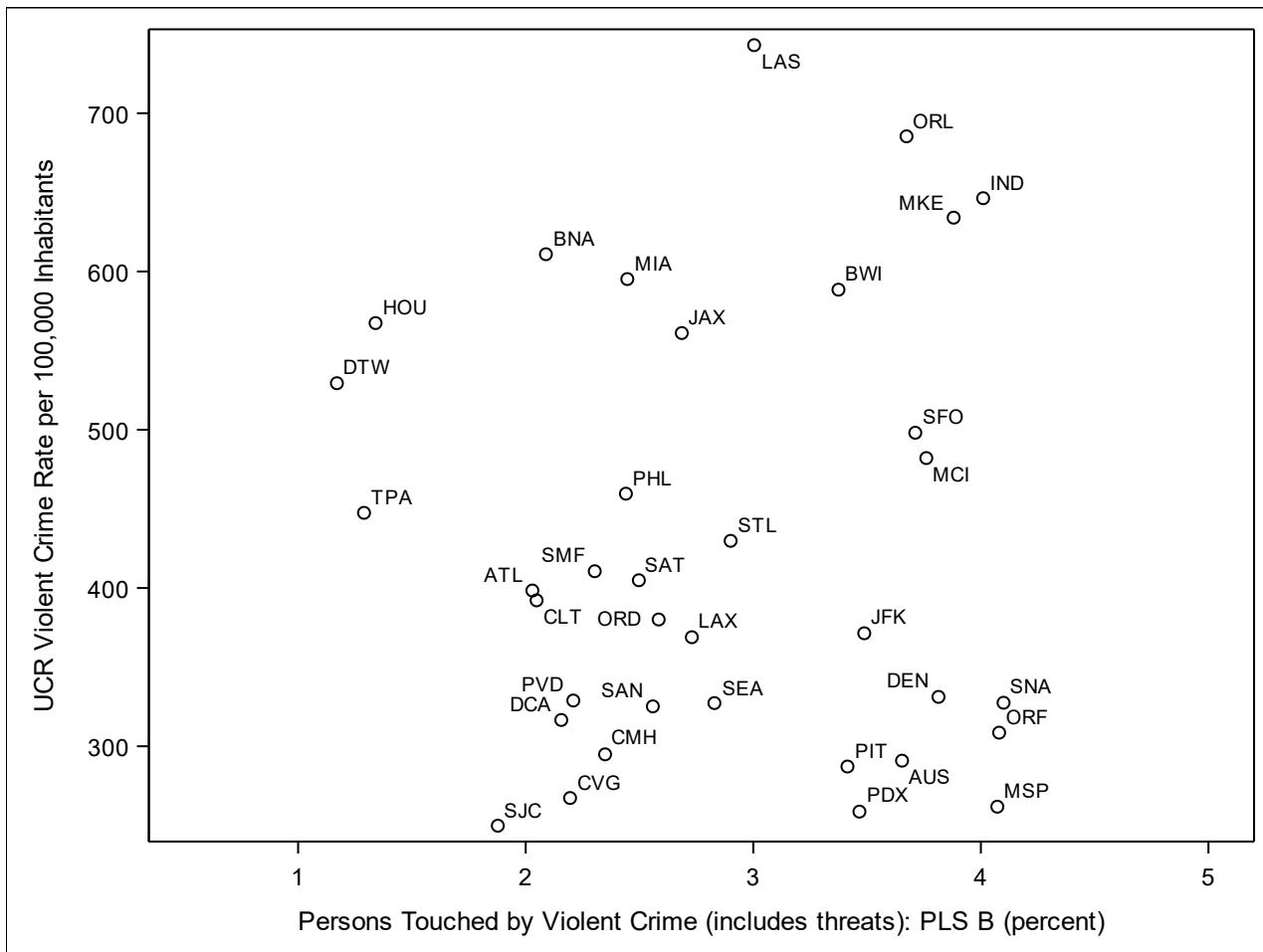


Figure G-31. Serious violent crime: UCR rate and ILS person TBC percentage

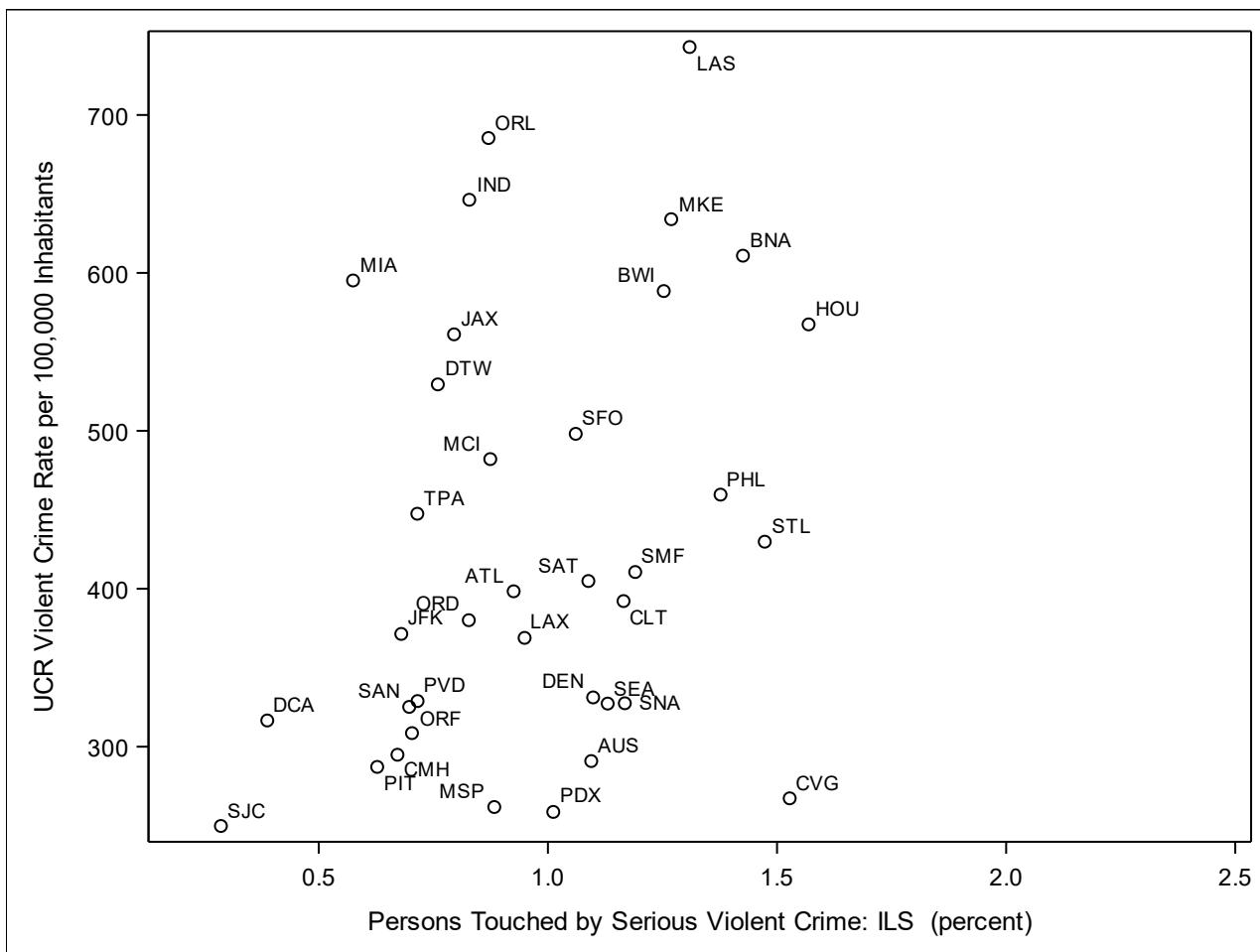


Figure G-32. Serious violent crime: UCR rate and ILS Form A person TBC percentage

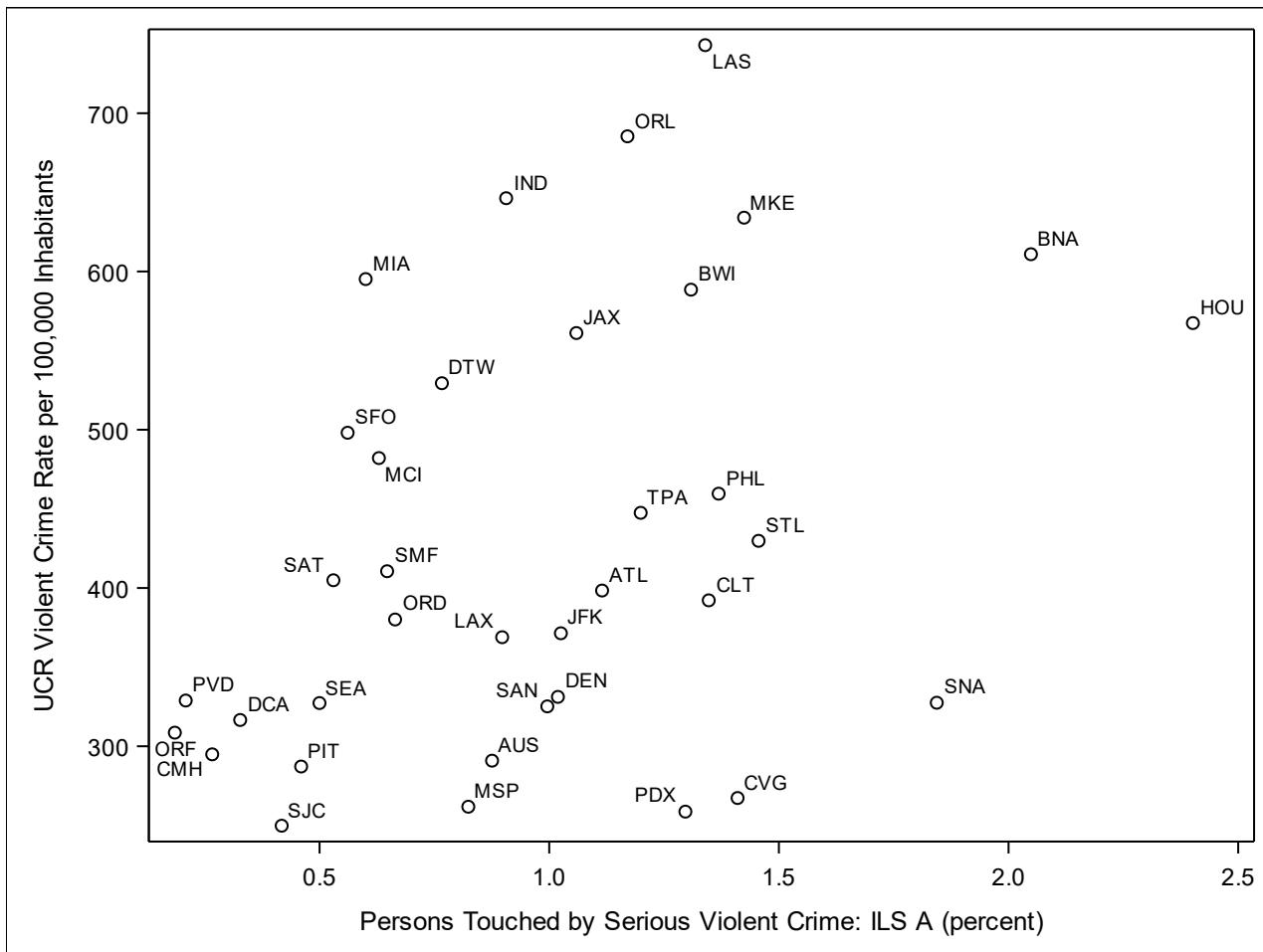


Figure G-33. Serious violent crime: UCR rate and ILS Form B person TBC percentage

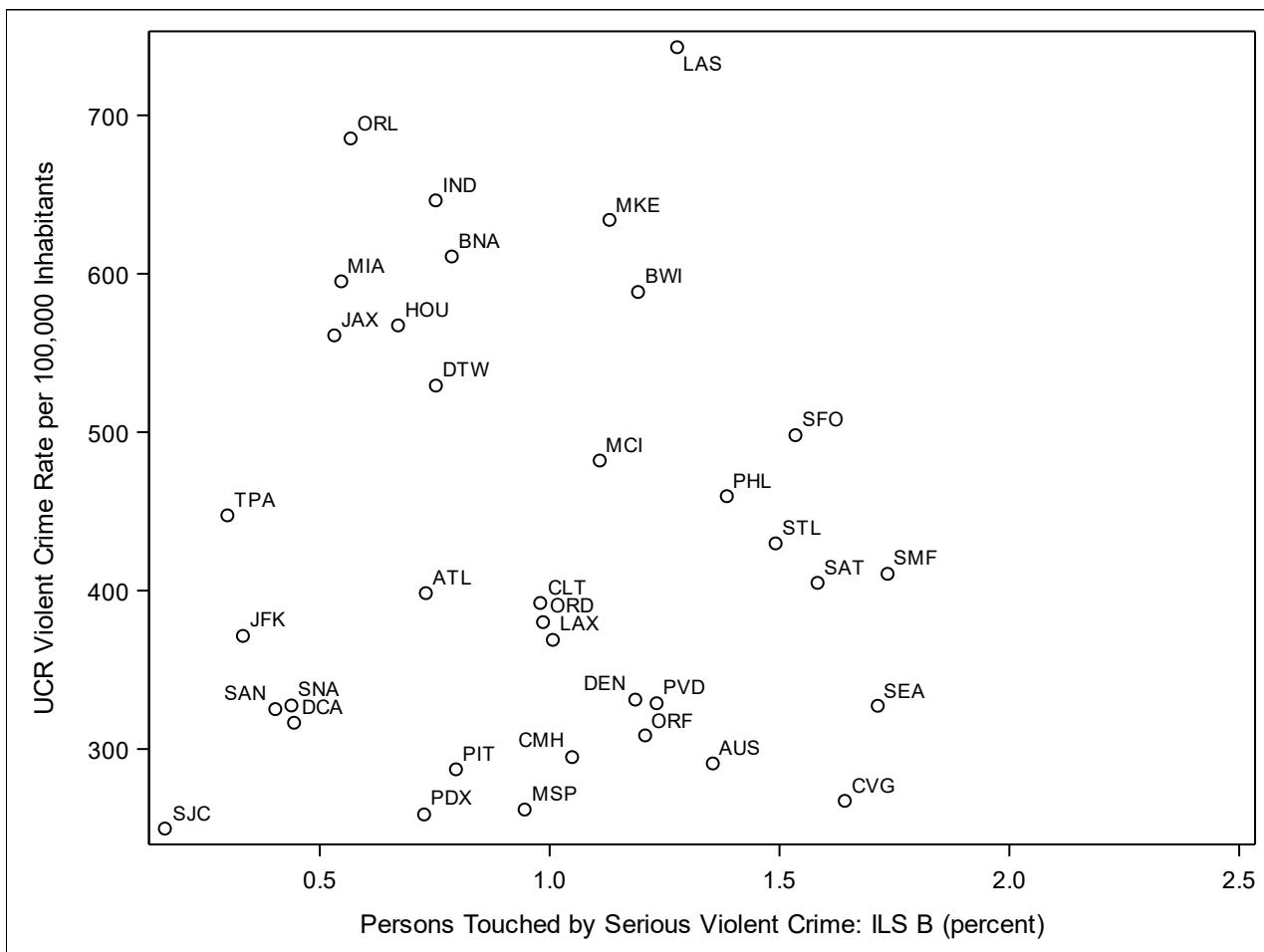


Figure G-34. Serious violent crime: UCR rate and PLS person TBC percentage

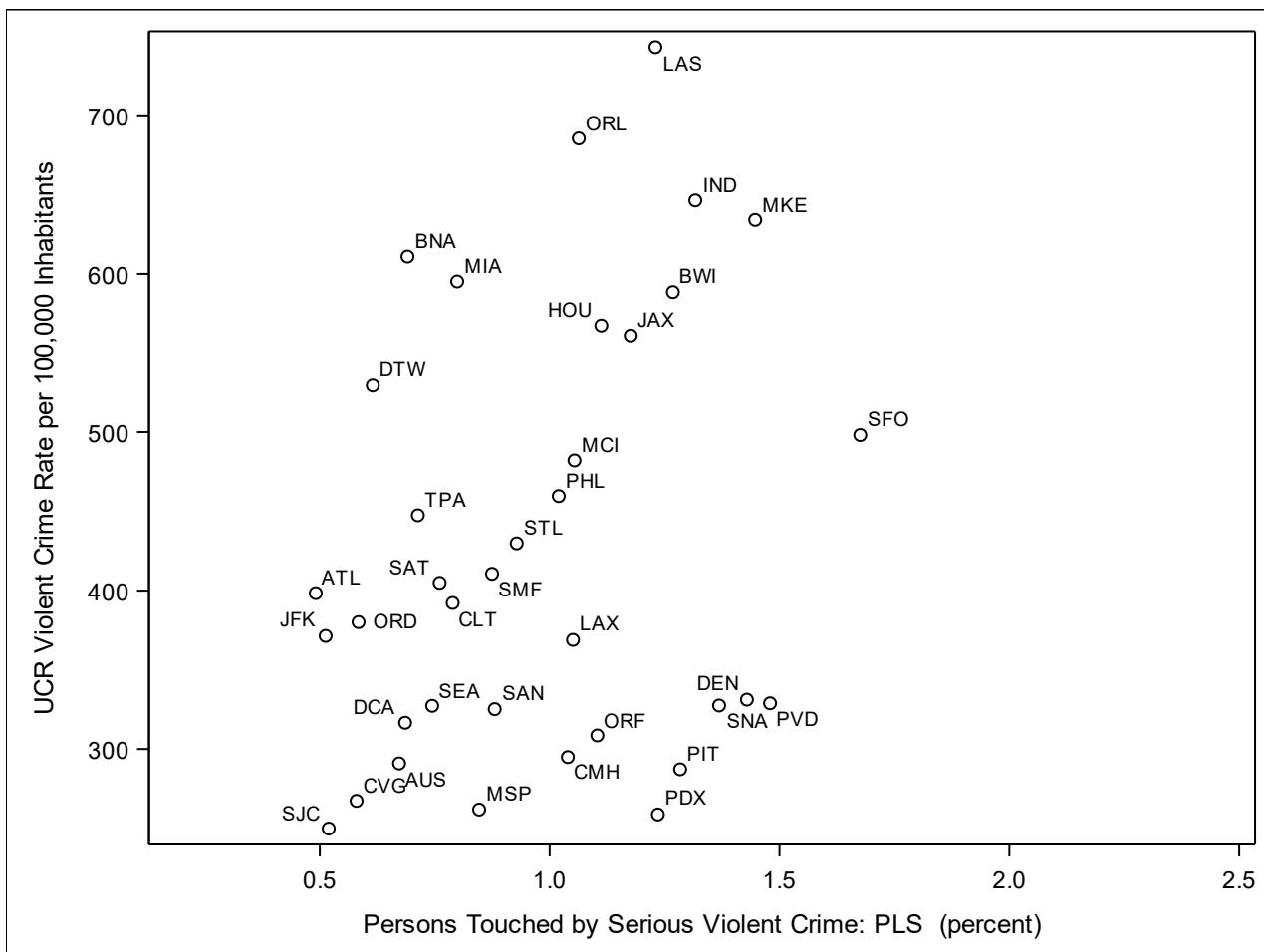


Figure G-35. Serious violent crime: UCR rate and PLS Form A person TBC percentage

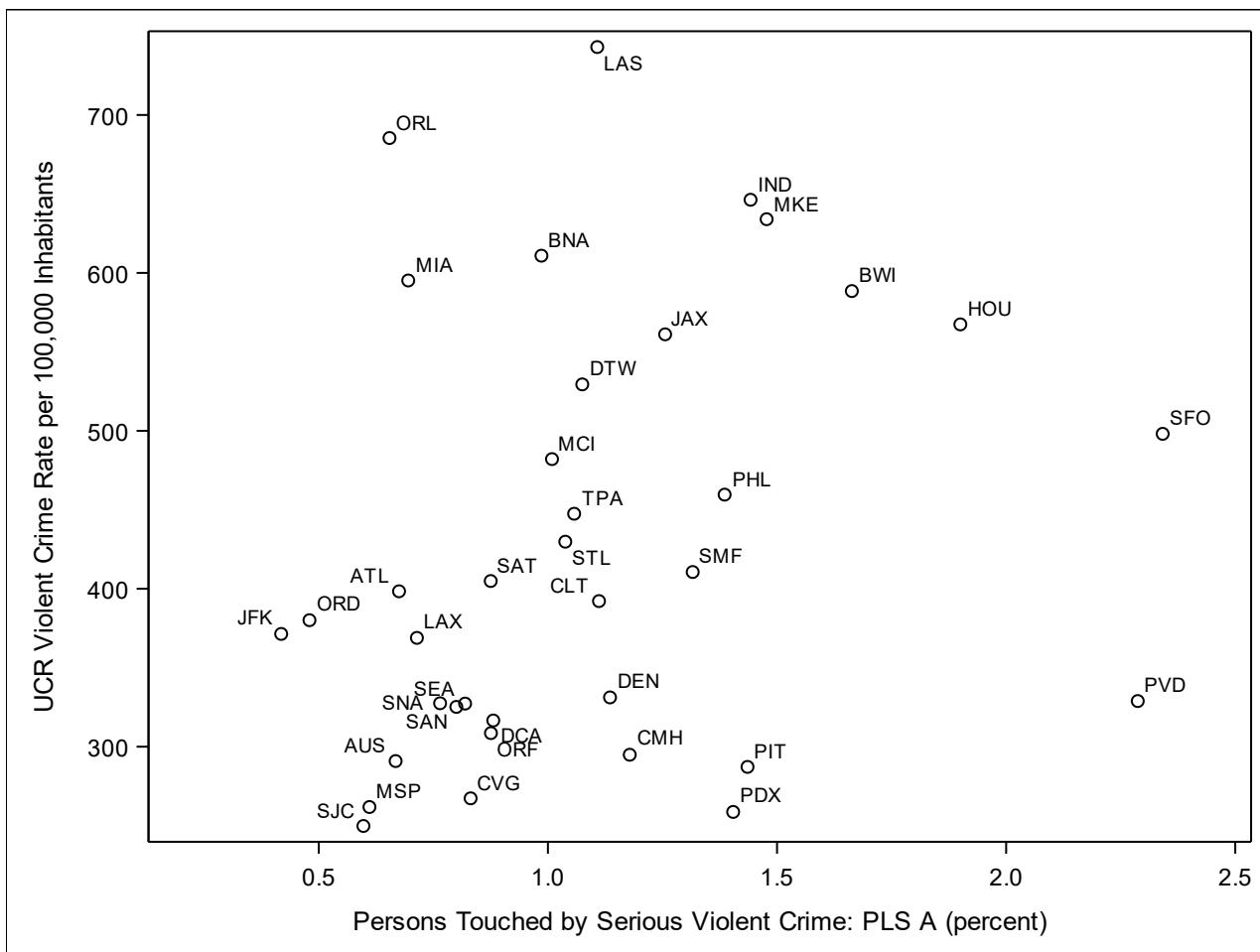


Figure G-36. Serious violent crime: UCR rate and PLS Form B person TBC percentage

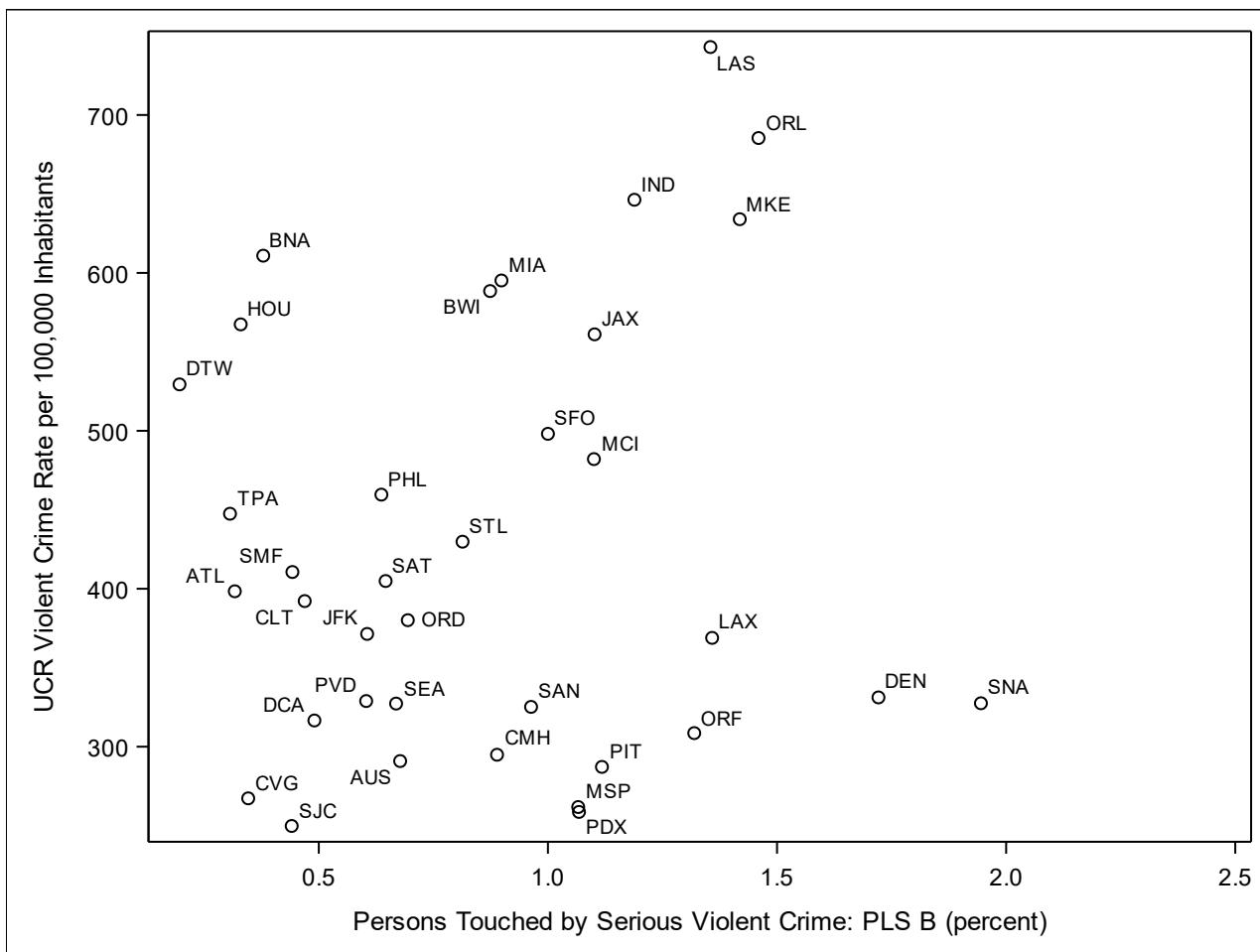


Figure G-37. Motor vehicle theft: UCR rate and ILS household TBC percentage

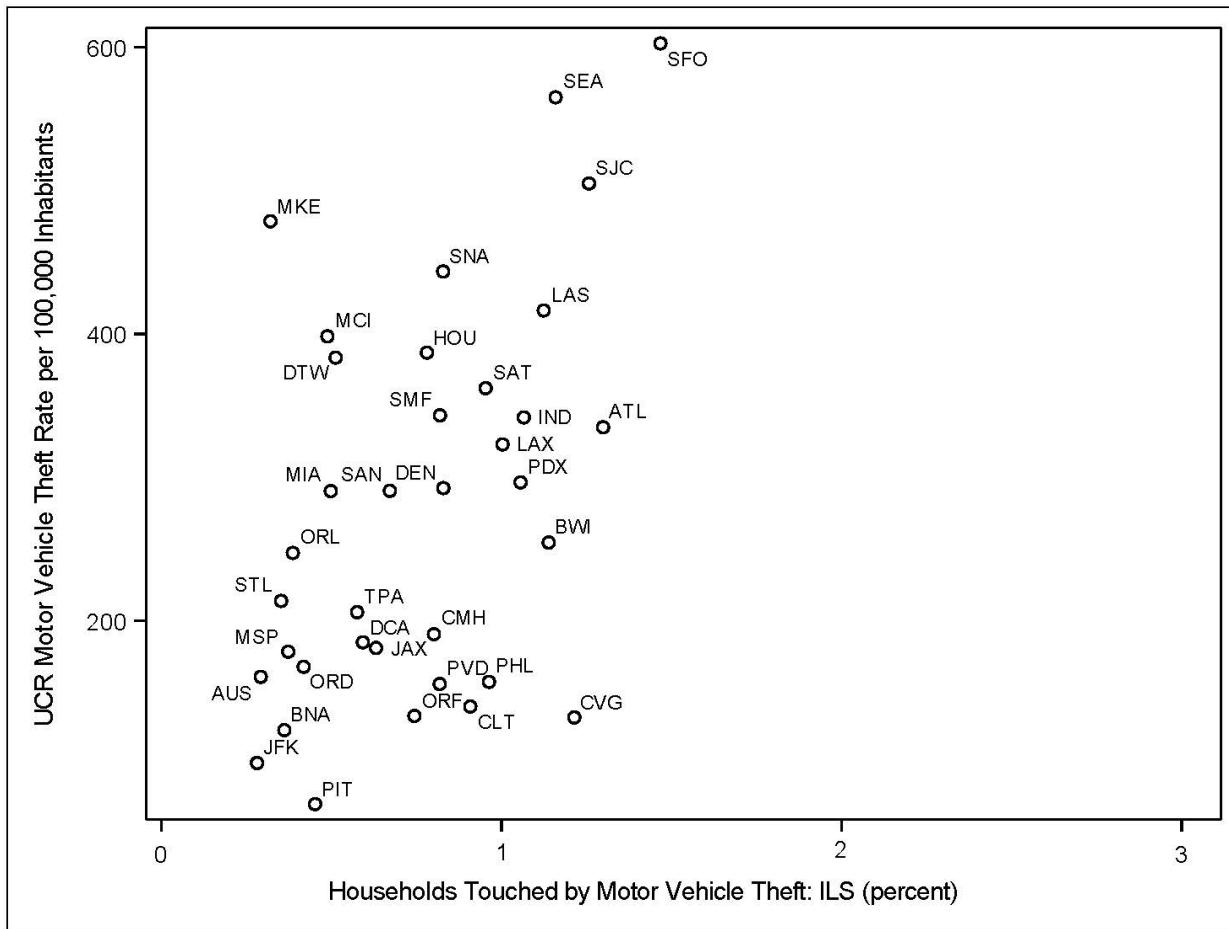


Figure G-38. Motor vehicle theft: UCR rate and ILS Form A household TBC percentage

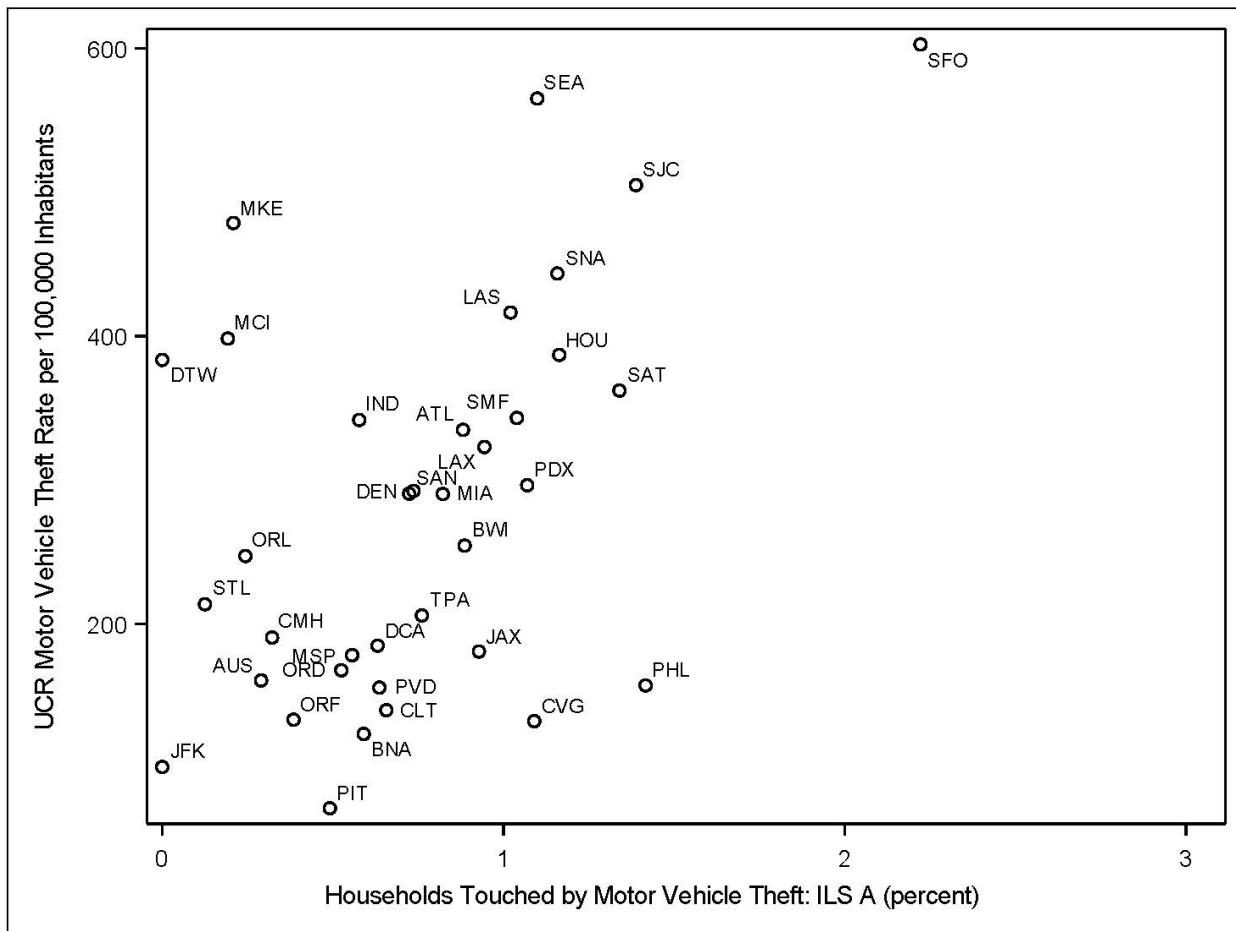


Figure G-39. Motor vehicle theft: UCR rate and ILS Form B household TBC percentage

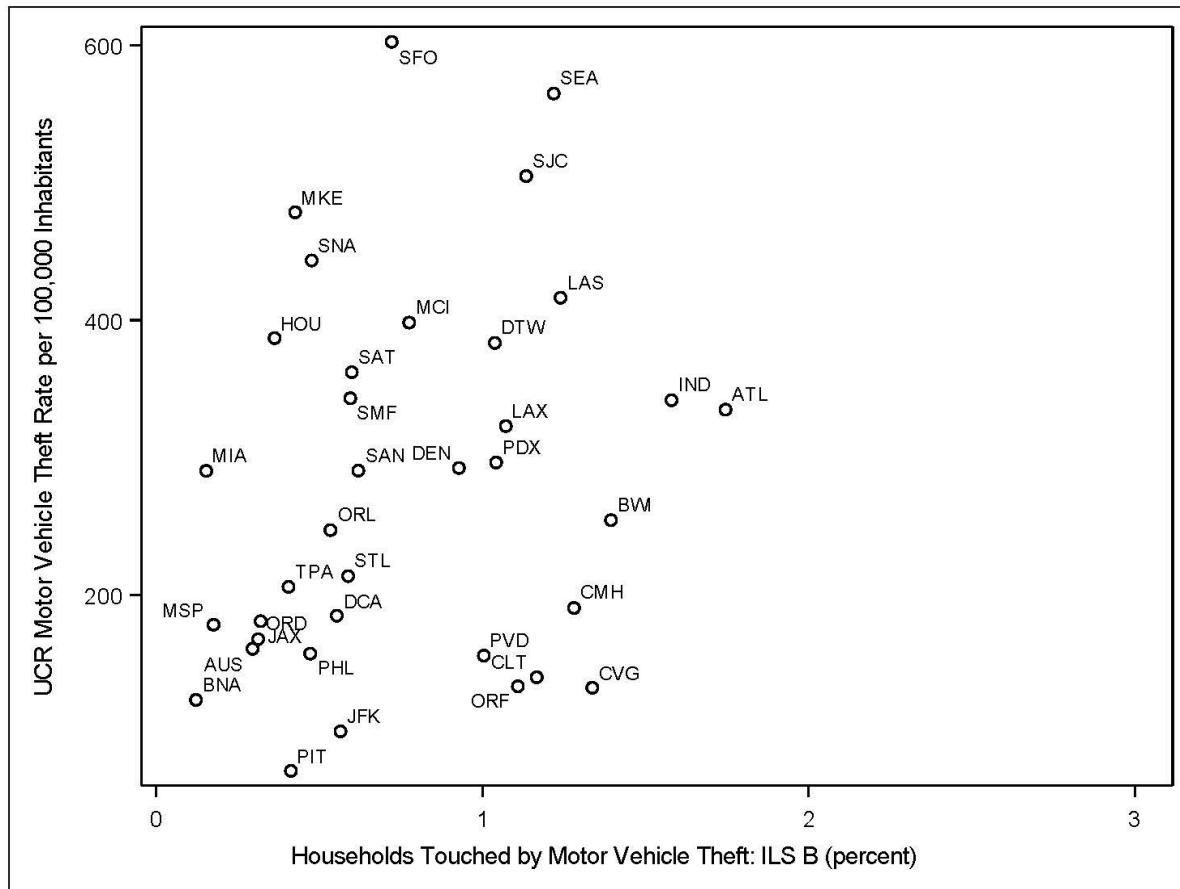


Figure G-40. Motor vehicle theft: UCR rate and PLS household TBC percentage

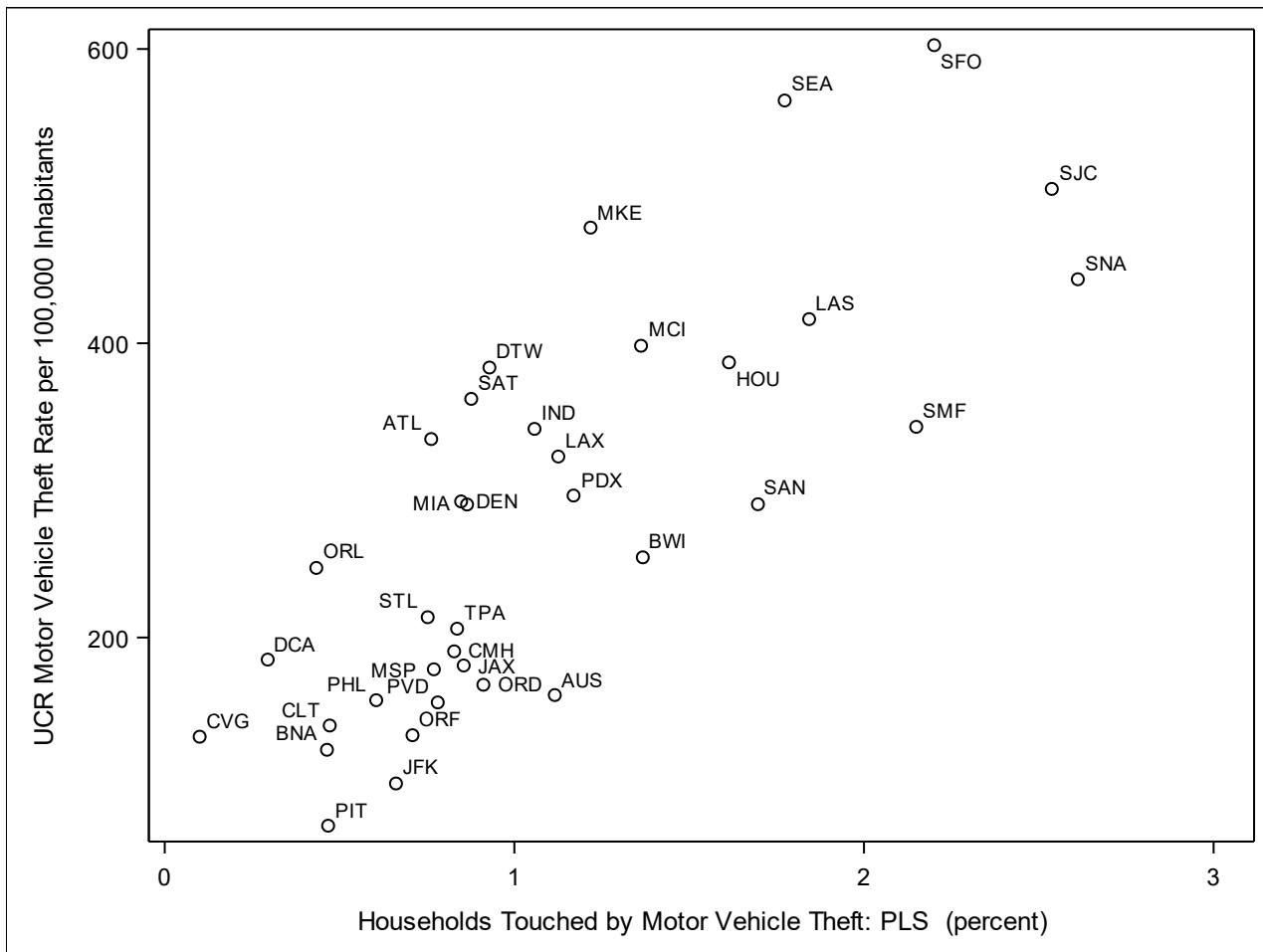


Figure G-41. Motor vehicle theft: UCR rate and PLS Form A household TBC percentage

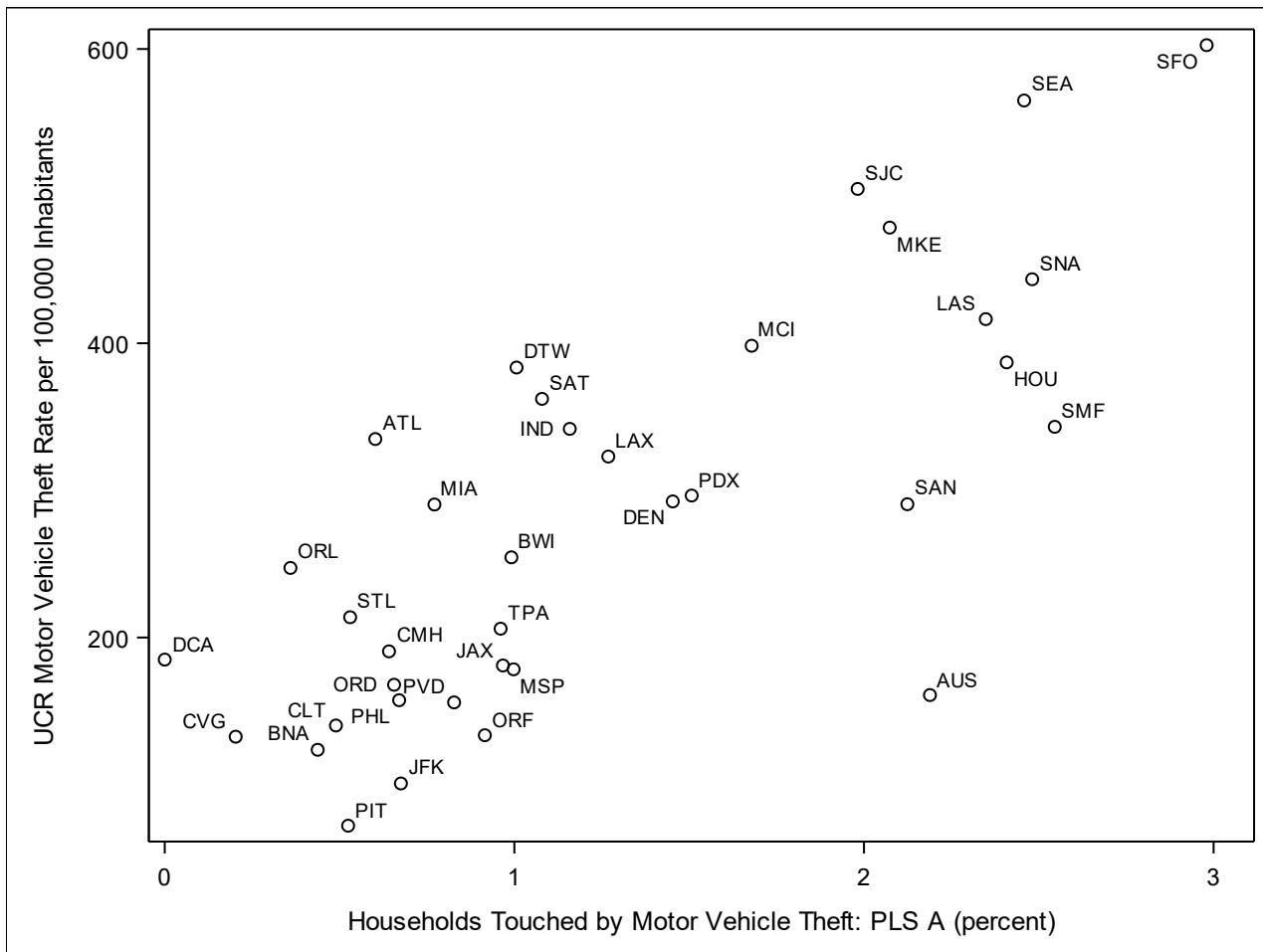
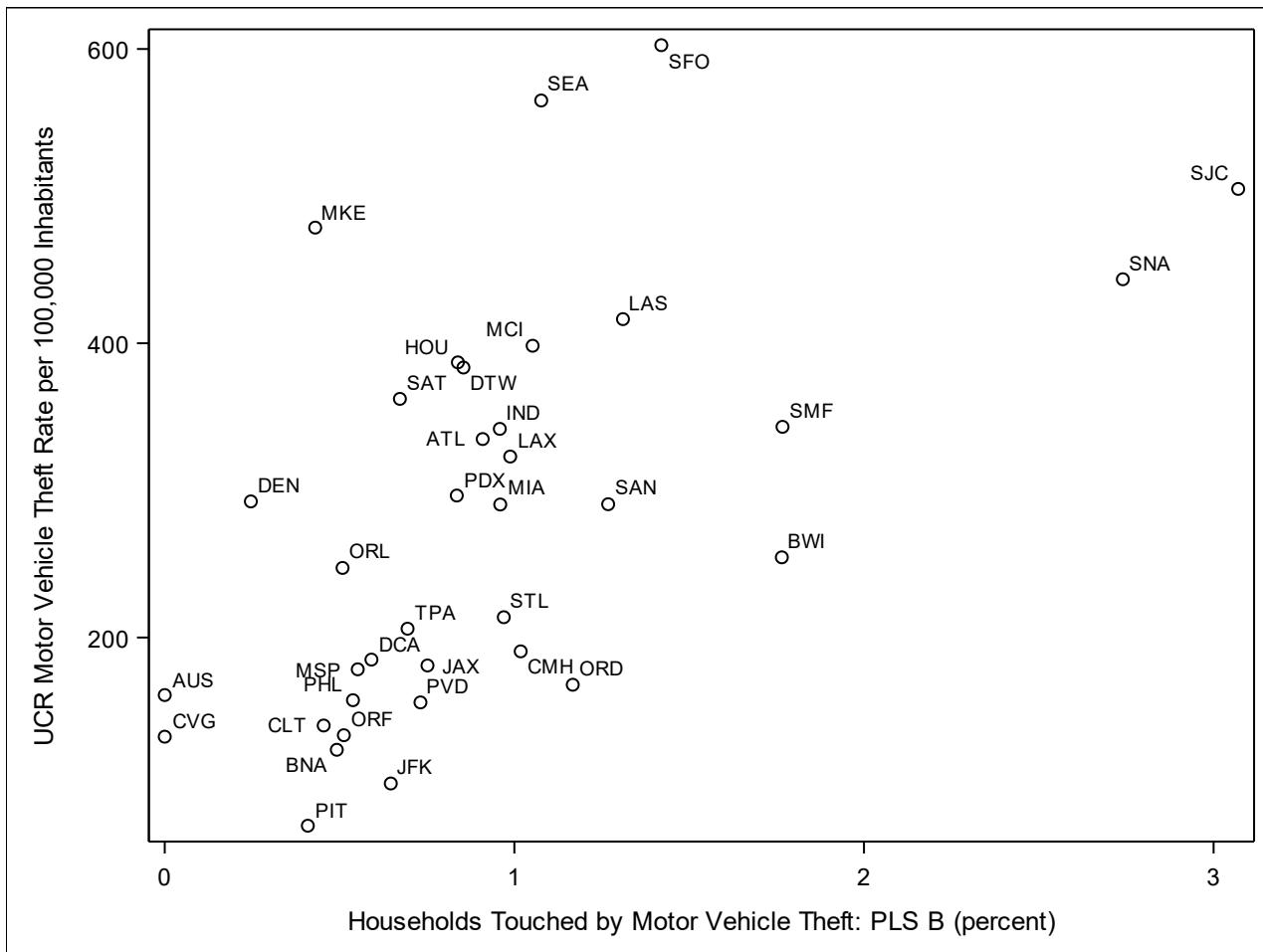


Figure G-42. Motor vehicle theft: UCR rate and PLS Form B household TBC percentage



Appendix H

Year 1 Instrument Performance

While the instruments used in the LACS Field Test were cognitively tested and deployed in a national pretest, the Field Test uncovered previously undetected issues. This appendix describes the performance of the instruments in Year 1, including issues specific to the ILS and PLS. This assessment informed several decisions:

- whether to continue testing both instruments in Year 2 or to choose one
- what kinds of changes to make to improve data quality in Year 2
- what kinds of changes to recommend for future implementation of the LACS.

Like the core NCVS, both LACS instruments include closed-ended questions that identify in-scope crimes and classify them into personal or property crimes and further into types of crime under those headings. The latter classification is less detailed than the core NCVS and for the PLS supports only person- and household-level estimates.

Also like the core NCVS, both the ILS and PLS include open-ended or narrative questions to help classify crimes where the closed-ended responses seem misleading. The PLS obtains narratives of only the most recent crime of a given type and, for property crime, only break-ins. Unlike the core NCVS, both LACS instruments separate property and personal crime in the questionnaire. That is, while the probes are similar between the core NCVS and LACS, the core NCVS does not use responses to the probes in classification. Each incident report that is generated by the probes begins anew, as if there were no prior information about the crime (other than a brief description so the interviewer and respondent will know which crime is being discussed).

Review of the narrative responses and adjustments to the closed-ended responses based on the narratives is a key component of producing core NCVS estimates. For Year 1 of the Field Test, Westat employed a similar review process. However, it is unlikely that jurisdictions or their vendors would be able to implement such a process reliably or would want to spend the time and money needed to do so. Therefore, it was important to understand how well the closed-ended items “stand alone,” or whether some kind of limited post-processing exercise could affect the most important

benefits of the narrative review. The estimates of TBC from the LACS given in the report were based on data that underwent automated editing only. Changes due to edits from the review of the narratives were not included in these estimates, to more closely parallel the type of editing that will likely be done for a low-cost local-area survey. In Appendix H, the effects of the more extensive editing for the Field Test are analyzed.

This appendix focuses on three areas of instrument performance:

1. how respondents answered the narrative questions
2. how well the closed-ended responses, including the instruments' separation of violent and property crime sections, were able to classify victimizations
3. how respondents navigated the instruments.

This assessment was based on the fully raw data and on a special edited file that included edits from a review of the respondent narratives and open-ended items. This means that numbers cited in this appendix will not match numbers cited elsewhere in the report, which were based on the final dataset, which included only systematic edits.

1 Response to the Narrative Questions

Each instrument asks the respondent to describe a given crime incident. In the ILS, respondents are asked to describe up to two violent crimes (a “most recent” and a “next most recent”) and up to four household-level property crimes that occurred in the previous 12 months. In the PLS, respondents are asked to report on victimizations for the previous 12 months and to provide a written summary of “the most recent” crime of a given type. For violent crimes, PLS respondents are asked to describe the most recent “attack,” “threat of violence,” “unwanted sexual contact,” or “attempt/threat of unwanted sexual contact” for each of up to four adults in the household. PLS respondents are also asked to describe the most recent illegal entry and the most recent household property theft.

A commonly used metric for examining open-ended responses is the average word count per respondent who entered responses. This metric is used below.

1.1 Average Word Counts

Violent Crimes. In the ILS, 1,095 respondents in Year 1 reported a violent crime in the past 12 months and provided a narrative description about the crime. Only 69 respondents who reported at least one violent crime in the prior 12 months failed to provide a narrative. Those who wrote a description provided an average of approximately 22 words (1,092 descriptions from the “violent crime 1” section and another 109 descriptions from the “violent crime 2” section). In the PLS, 2,125 respondents reported at least one violent crime and provided a narrative describing it, while 234 respondents did not provide a description. In the PLS, those who provided a narrative wrote an average of 15 words in the space provided, and this includes 2,744 different descriptions across the four adult-level sections of the PLS.

The ILS has more room to write, which may encourage respondents to provide more details. The ILS item also includes a more detailed probe, which may have suggested to respondents that a more detailed response was warranted. Another difference between the instruments is that incidents may overlap in the PLS. For example, a respondent can interpret a single incident as a threat of violence and also as a successful attack. It is possible that some respondents wrote a narrative in the “attack” section of the survey but did not repeat it in the “threat of violence” section. Further analysis would be needed to assess this.

Another possibility is that because the PLS respondent was asked to provide narratives for every type of crime (up to four) for every victim (up to four) in the household, those with multiple incidents may have become fatigued. However, if the issue were fatigue, then more detail in the responses for Adult 1 than for Adults 2-4 might be expected. But there was little difference by adult (15.5 words on average for Adult 1 responses compared to 13 words for Adults 2-4). Based on review of the narratives, PLS respondents were more likely than ILS respondents to use the narrative items to indicate only where the crime had occurred. This observation suggested that the difference in probes may have accounted for at least some of the difference in length of narrative.

The difference in word count for the violent crime descriptions is meaningful if the goal is to use the narratives to edit the closed-ended responses. However, the effort required to edit the narratives may not be appealing to local areas doing their own survey. Editing also introduces some ambiguity to the process, which could lead to differences between local areas. A goal of the LACS is developing an instrument that can perform without this level of intervention.

Property Crimes. In the ILS, 4,827 respondents in Year 1 reported a property crime in the past 12 months and provided some sort of narrative description. Another 35 respondents reported a property crime in the prior 12 months but provided no narrative. Those who wrote at least a

Example of ILS crime description question:

What happened?

Provide as many details as you can recall, such as: where it happened, who was attacked, what injuries occurred, and what (if anything) was stolen.

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Example of PLS crime description question:

Please describe **the most recent attack** on Adult 2: **what happened and where it happened.**

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one-word description provided an average of about 17 words (across the 4,857 descriptions¹ of property crime in the ILS). In the PLS, 3,242 respondents in Year 1 entered something in the narrative description, while 113 respondents reported at least one property crime but provided no narrative. Those who wrote a description wrote an average of 14 words for break-ins and 5 words describing what was stolen ($n = 1,958$).

1.2 “Bundling” Crimes

The design of the ILS instrument intends for a respondent to describe a single incident in each section of the survey. However, many respondents “bundled” their narratives, describing multiple incidents that occurred on different dates. Where feasible, the editing team “parsed out” crimes (if the respondent had not reported the crime elsewhere). Otherwise, the survey was flagged as containing at least one “bundled” incident. The editing team identified 120 surveys that had “bundled” multiple incidents in a single narrative. In some cases these were series crimes (e.g., multiple attempted break-ins), but often the responses mixed types of crimes (e.g., attempted break-in and a separate theft). Given the relatively small number of cases with bundled narratives, it was unlikely this problem would have a meaningful impact on incidence estimates.

The PLS asks about any victimization of a given type in the previous 12 months, meaning that narrative responses may cover more than one victimization. But this should not have had an impact on the TBC estimates. PLS respondents were most likely to “bundle” crimes in the initial narrative about break-ins, often writing about multiple property crimes in this section whether associated with a break-in or not.

2 Incorrect Reporting

Respondents were asked to report personal crimes and property crimes in the relevant sections of the survey. In addition, they were asked to report only crimes that had occurred in the previous 12 months to the listed adult household members. In Year 1, many respondents reported victimizations outside of the 12-month recall period, in the wrong section, or that had happened to someone other than the listed adults or the household itself. The discrepancies were discovered by reviewing the

¹ Some ILS respondents described more than one property crime (which is why the number of descriptions is greater than the number of respondents).

narrative comments included in the various “open-ended” survey items. In many sections, respondents were asked to provide a narrative summary of the incident. During review, the narrative summary was considered the “correct” version of events, and the quantitative responses were compared with this incident description. In cases where the quantitative survey data did not align with the narrative, it was assumed that the survey data were reported inaccurately. Table H-1 summarizes the number of incorrect reports for violent crimes and for property crimes, and descriptions of each kind of error follow.

Table H-1. Summary of issues in reporting, by instrument

| | ILS | PLS |
|---|------------|------------|
| Total household property crimes (unedited)¹ | 6,811 | 4,513 |
| Outside reference period | 924 | 729 |
| No date reported | 359 | 213 |
| Property crime with good date | 5,528 | 3,571 |
| Property crime did not happen to household member | 154 | N/A |
| Break-in did not happen at sampled household | 58 | 47 |
| False negative (would be a property crime based on narrative) | 549 | 68 |
| Net household property crimes ¹ | 5,762 | 3,126 |
| Total personal crimes (unedited)² | 2,003 | 3,640 |
| Outside reference period | 381 | 334 |
| No date reported | 107 | 290 |
| Victim was child | 28 | 11 |
| Victim not household member | 88 | 10 |
| Could not link crime to person | 97 | n/a |
| Reported in wrong section (property crime) | 95 | N/A |
| Other out-of scope | 28 | 55 |
| False negative (would be a violent crime based on narrative) | 115 | 24 |
| Net personal crimes ² | 1,375 | 2,913 |

Note: Categories are not mutually exclusive, e.g., a crime could be out-of-scope and the victim could be a child.

¹ Household property crimes only. Personal theft is excluded from this count and therefore does not match total property crime cited elsewhere.

² Violent personal crimes only. Personal theft is excluded from this count.

2.1 Out-of-Scope Dates

Table H-1 shows the number of reported incidents that had out-of-scope dates in both instruments in Year 1. Out of 2,003 unedited violent crime incidents in the ILS, 19 percent were outside the 12-month period and an additional 5 percent had missing dates. There were fewer out-of-scope dates in the PLS: out of 3,640 unedited victimizations reported, 9 percent were outside the 12-month period and an additional 8 percent were missing. Out-of-range dates were thus considerably more of a problem for the ILS than for the PLS, while missing dates were somewhat more of a problem for the PLS.

Out of 6,811 unedited property crime incidents reported in the ILS, 14 percent of the dates were outside the 12-month period and 5 percent were missing. The PLS proportions looked similar. Out of 4,513 unedited property crime incidents reported in the PLS, 16 percent of the dates were outside the 12-month period and 5 percent were missing.

Missing dates are more problematic than out-of-scope dates in some respects because incidents with a missing date cannot be determined to be within scope. For both the ILS and the PLS incidents with out-of-scope dates can be excluded, but the issue is more complex for the PLS. If an out-of-scope date in the PLS was truly the most recent, then the household or person did not experience that crime type in the reference period. However, this requires two assumptions: the date is correct and the crime reported is the most recent. The same decision process was used to address missing dates in the ILS and PLS to that for the ILS.

2.2 Victims Were Out-of-Scope

Table H-1 also gives counts of personal crimes that edits identified as being out-of-scope for reasons other than the date. These counts are based on who the reported victims were as judged from both the attribution in the ILS (linking to the rostered adults) and the narratives in both instruments. Because of the different instrument structures, attribution for violent crimes (if reported in the right section) must be made explicitly by the respondent in the ILS, while in the PLS it is implicit, being reported in a particular adult's section.

Victims were children. Both the ILS and PLS had some respondents reporting victimizations of children. In some cases, such incidents could be identified from the roster data (a rostered person younger than age 18). Other cases were identified from reviewing the narratives. In the ILS, 28 violent crime incidents were found to be assigned to victims younger than age 18. In the PLS, there were 11 victimizations assigned to children. The number of reported victims younger than age 18 was thus small.

Victims were not household members. There were 88 ILS violent crime victimizations reported that could be identified as happening to a person who was not a rostered household member, or about 6 percent of violent crime victimizations with good dates. These 88 cases were identified by reading the narrative or by reading the names written in the victim-assignment matrix in the ILS. Rather than writing the name of a household member, the respondent might have written “neighbor,” for example. The ILS estimation strategy was to include only “linked” violent victimizations, so those apparently happening to non-household members or children were not included in estimates. However, the strategy for the household-level analysis considered all victimizations, including those where the crime could not be linked to a specific household member and those that would be deleted because of narrative responses, including the “first name” field.

Example of ILS victim-assignment:

6. Who did this happen to? Write in the adult number of the person(s) this happened to from pages 3 and 4. Then write in that person's first name.

Later questions will refer to this person or these persons as the "victim."

Adult # First Name (Refer to Adults listed on pages 3 and 4.)

| Adult # | First Name |
|---------|------------|
| | |
| | |
| | |
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Due to the structure of the PLS, where violent victimization was implicitly linked with a household adult, there were only 10 instances of violent crime victims who were not household members.

Out of 5,528 reported ILS property crimes with good dates, 154 did not happen to the sampled household. Most of these victims were described as neighbors or businesses; these cases were all identified by reviewing the narratives. This review accounted for 3 percent of the total reported incidents. Out of 1,581 unedited PLS reports of property break-ins² within the prior 12 months, 47 did not happen to the sampled household, or about 3 percent of all incidents.

Victims were not identified. As noted above, ILS respondents are asked to list the victims for each violent crime. This links the incident to the adult and allows attribution to the relevant demographics and was deemed necessary to generate person-level weights. Out of 1,515 violent crime incidents that were within the 12-month period, about 6 percent did not identify a victim. This means the respondent did not provide either a person number or name that could be linked back to the roster. None of the adults in households without links were included as adult respondents for weighting.

² Note that most of the reports that did happen to the household were other types of break-ins (including break-ins of motor vehicles and break-ins of yards).

2.3 Out-of-Scope Incidents

Crimes were reported in the wrong section. Some respondents reported a crime in the wrong section. In the ILS, the violent crime sections are covered first, with property crime asked about later. Some respondents used the first opportunity to report a crime, which in the case of the ILS was the violent crime section. There were 95 reports of a theft in the ILS violent crime sections where all violent crime attribute questions (e.g., attacked, weapon present) were equal to “no.” In some cases, the respondents also reported in the property crime section. The responses to the property crime section could be shifted by reviewing the narratives. Without this editing procedure, property crime might have been slightly underestimated. In the ILS property crime sections, there were only 5 reports of violent crime (one of which referred to a child).

In the PLS, some respondents answered “yes” to the break-in question when a motor vehicle was broken into (not a home or other building on the property). Based on a cursory review, there were at least 88 respondents who answered “yes” to question 10 but wrote in the narrative that a motor vehicle was broken into or stolen. Another 52 respondents described something being stolen from a yard or unenclosed structure such as a porch, while more than a dozen respondents described thefts from apartment common areas such as lobbies or garages. Finally, there were 32 respondents who answered “yes” to question 10 but gave narrative text indicating the break-in was an attempted break-in rather than a completed one. Altogether, there are 299 respondents who answered “yes” to question 10 and provided an in-scope date but whose “break-in” data were removed during the narrative review process. (This represented 19 percent of the households who reported a break-in during the prior 12 months.) Some changes in the PLS may help reduce the measurement error for this item. One option is to expand the item to allow respondents to mention other types of break-ins and then follow up on only those where a home (or structure) was broken into.

In the PLS “violent crime” sections, respondents sometimes recorded a single incident in multiple areas. For example, a sexual attack with injury might be listed in all four sections: attack, threat of violence, unwanted sexual contact, and a threat of unwanted sexual contact. The PLS does not ask

PLS question 10:

10. In the last 12 months, did anyone break into your home or get in without permission? *Include garages and storage units on your property.*

- Yes ➔ GO TO 11
 No ➔ GO TO 19

the respondent to describe an incident, but to report on types of victimization experienced in the prior year. The result is possible overlap across the four main violent crime categories.

Another challenge is that respondents may have different interpretations of the questions based on the perceived severity of the crime. For example, some respondents considered a push or shove as an attack, while others considered it a threat of violence. The same was true in the different interpretations of unwanted sexual contact versus a threat or attempt of unwanted sexual contact. In the narrative review process, the editing team modified 59 responses based on their interpretation of the descriptions. About half of the changes were due to respondents describing something as a threat but where contact was evident in the narrative. Key words included, for example, “shoved,” “punched,” “beat up,” “assaulted,” and “raped.” The other half of the changes were in the other direction, with respondents describing a threat but reporting it as an attack. Most of these involved attempted or successful robberies where there was a threat of violence but not a successful attack. These are difficult concepts to present to respondents in an unambiguous fashion.

Described crimes were out-of-scope. There were also some crimes that were described in the narrative sections of the ILS that were not in scope. In the vast majority of these cases, the closed-ended responses were accurate and would lead to correct conclusions about victimization. Closed-ended responses in the violent crime section of the ILS were misleading in 28 incidents (out of 1,515 incidents that were within the 12-month period). Examples include vandalism, murder, and road rage. Only 20 ILS property crime descriptions suggested that the incident was not in scope (out of 4,892 incidents that were within the 12-month period). Examples of descriptions that were out-of-scope include trespassing and vandalism.

The PLS also had a small percentage of reports that were beyond the scope of the LACS. Out of 2,883 violent crime reports (across all four adults), 55 responses included written descriptions that were beyond scope. Examples include vandalism, threats of property damage or theft, and fear of a “suspicious” character (with no verbal or physical threat).

Across the two instruments, the one serious issue was the PLS “break-ins” section. The PLS asks specifically about break-ins and then about “other” household theft. Out of 1,581 reports of break-ins in the prior 12 months, almost 19 percent did not actually qualify as a household break-in. The majority of this error (about 85 percent) was due to respondents reporting other types of

break-ins, including break-ins of vehicles, trespassing in yards or common areas or an apartment, as well as attempted (rather than completed) break-ins. The remainder of the error was due to reports of victimization of neighbors or businesses. One solution to this misreporting may be to restructure the lead-in item to allow respondents to report these other types of break-ins first, then follow up on those reporting a household break-in.

2.4 In-Scope Descriptions with Negative or Missing Data

In the ILS in Year 1, there were 115 incidents that would not have been coded as a violent crime without the narrative review process. These apparent reporting errors were due to certain questions that should have been answered “yes” (based on the narratives) but were answered “no” or were missing. More than half of these 115 incidents were attributed to how respondents viewed a “threat of violence.” In the reviews of the narratives, physical threats of harm were identified, but the respondents did not mark these in the closed-ended items. Since the respondents completed the incident despite not marking the closed-ended item, they appear to have thought that the event warranted reporting. The concepts of “threat” and “attempts” may be a challenge to reliably collect data on since there is substantial room for interpretation.

In the ILS, 549 incidents would not have been coded as a property crime without the narrative review process. The majority of these were household larcenies. In the first property crime section of the survey, 436 respondents answered question 75 (theft) as “no” ($n = 267$) or left it unanswered ($n = 169$), but the narrative review process coded these incidents as “yes” based on the incident description. The additional 549 incidents represent a 12 percent increase in property crime.

In the PLS, there were very few cases where the description of a violent crime affected the edited data. Across all four adult sections of the PLS survey, there were 24 adults who would not have been coded with a violent crime without the narrative review process. If the PLS survey instructions are followed correctly, the respondent reaches the relevant narrative item only if the lead-in question is answered “yes.” This structure is different from that of the ILS, which asks the narrative item first, then follows with the closed-ended questions. In the PLS, the narrative review process identified 68 cases with property crimes that would otherwise not have been coded as such. Given that there were more than 7,500 household property crimes reported in the PLS, this was a relatively small number.

2.5 Overall Edits Made in Narrative Review Process

In the ILS, about 10 percent of all surveys were edited during the narrative review process, with at least one item changed in the fully edited data due to the review. Only the variables driving the coding of crimes were included in the editing process. Among those surveys that were edited, 6.3 variables on average were recoded based on the review. As indicated earlier, edits were made in both directions, with some “yes” responses set to “no” or missing and with some “no” or missing responses edited to “yes.” In the aggregate, these changes had a modest impact on the distribution of violent crimes, as shown in Figure H-1. The largest relative differences were in the following five categories:

- “sexual assault with injury”—increased by 38 percent, from 5 cases³ in the raw data to 8 cases in the edited data
- “attempted assault with a weapon”—decreased by 32 percent, from 66 cases in the raw data to 50 cases in the edited data
- “sexual assault without injury”—decreased by 28 percent, from 32 cases in the raw data to 25 cases in the edited data
- “assault with injury”—decreased by 19 percent, from 292 cases in the raw data to 245 cases in the edited data
- “robbery without injury”—increased by 17 percent, from 117 cases in the raw data to 141 cases in the edited data.

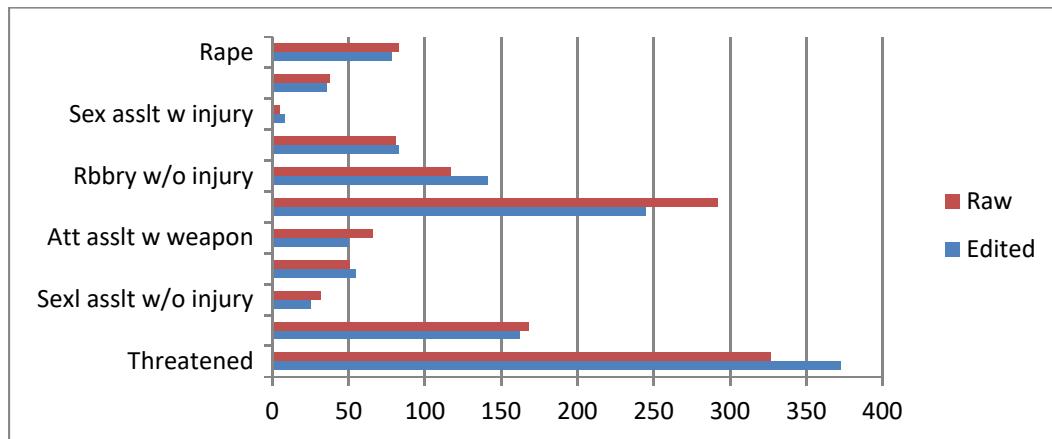
While some of the relative differences were large, the number of incidents in such cases was small. The editing process appeared to not have a dramatic impact on assessments about victimization overall. More analysis of the effects are presented in Appendix I.

The distribution of ILS property crimes, shown in Figure H-2, was affected by the review less than ILS estimates of violent crimes were. Categories with the greatest relative changes from the review were completed household larceny category (increased by 15 percent) and completed vehicle theft

³ The “raw” data exclude incidents that were outside the 12-month recall period (or where the date was missing).

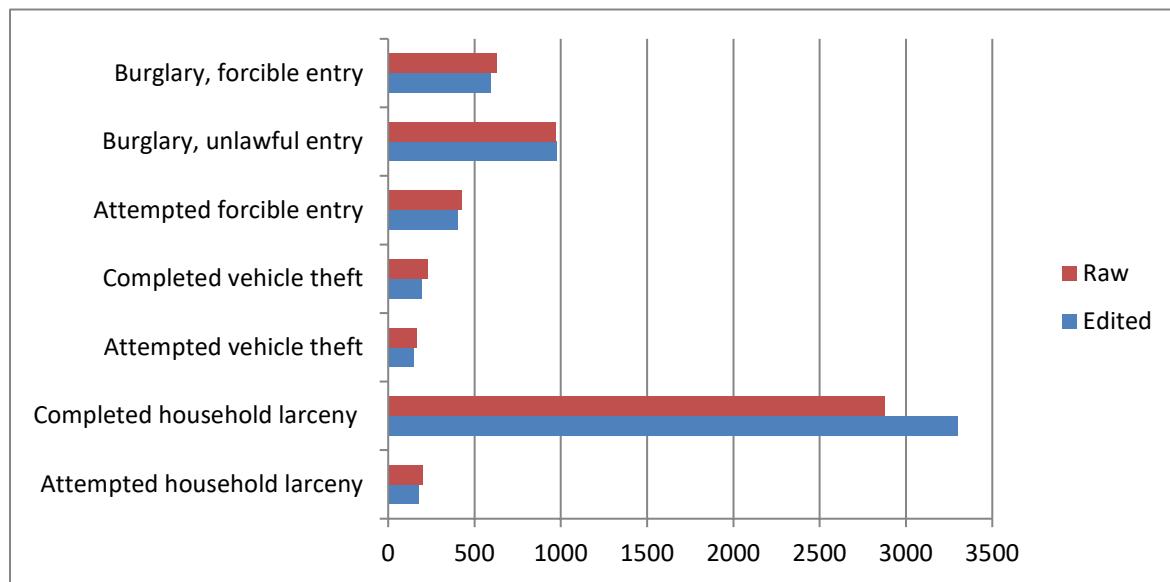
(decreased by 15 percent). The household larceny change was due to about 450 households that reported something being stolen in the narrative comments for incident 1 but that answered the theft question as “no” or left it blank.

Figure H-1. ILS reports of violent crime, by crime type and data type (raw or edited)



Note: The most serious crime type was coded for incidents that met more than one definition.

Figure H-2. ILS reports of property crime, by crime type and data type (raw or edited)



Note: The most serious crime was coded for the incident.

In the PLS, about 15 percent of surveys were edited during the narrative review. Only the variables driving the PLS crime statistics were edited. Among those surveys that were edited, an average of 1.9 variables was recoded. As with the ILS, edits were made in both directions, with some “yes” responses set to “no” or missing and with some “no” or missing responses edited to “yes.”

In the aggregate, the edits had little impact on the distribution of violent crimes for the PLS, as shown in Figure H-3. The largest relative difference was a 6 percent decrease for “assault without a weapon and without injury.”

Figure H-4 shows the PLS distribution of property crimes before and after the review. For the review process, a constructed variable was created identifying the most serious property crime for each household. The largest relative change in this constructed variable was in the completed burglary category, with an 18 percent decrease in households reporting this as the most serious property crime after the narrative review process. As mentioned, this difference was due to households that answered “yes” to question 10 (break-in) but that suggested in narratives it was actually a vehicle break-in or trespassing in a yard.

Figure H-3. PLS most serious violent crime reported by households, by crime type and data type (raw or edited)

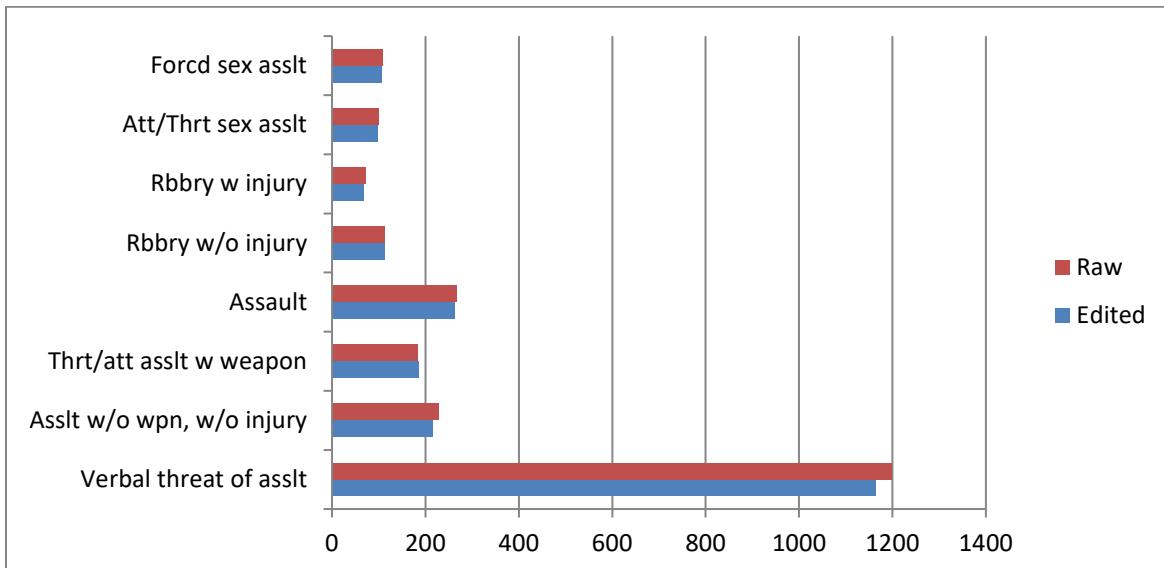
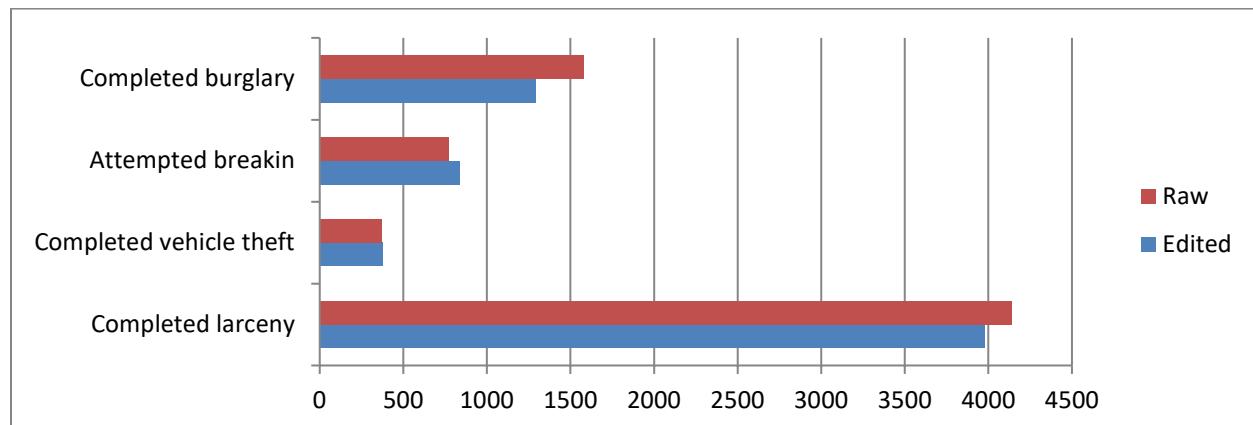


Figure H-4. PLS most serious property crime reported by households, by crime type and data type (raw or edited)



Note: Completed larceny includes personal theft that excluded an attack or a threat. See Question 68 in PLS Form A for an example.

2.6 Differences in Reporting

One substantial difference between ILS and PLS reporting is that more PLS respondents reported a “threat of violence.” As mentioned in section 6 of this report, two violent crime indicators had been constructed for the instruments: one including any violent crime without threats or attempts and one with threats and attempts. Including threats and attempts had a differential effect on the

estimates for the ILS and PLS. Table H-2 shows this effect, using unweighted overall proportions for both instruments.

Table H-2. Unweighted proportion of households reporting a violent crime

| | ILS | PLS |
|---|------------|------------|
| Violent crime excluding threats/attempts | 0.018 | 0.018 |
| Violent crime including threats/attempts | 0.027 | 0.046 |

This difference is likely due to the different structures of the ILS and PLS. The ILS first asks screener questions about attacks and threats. If the respondent answers “yes” to any of the screener items, the person is directed to the incident section. In 653 ILS surveys, a screening question was answered “yes,” but the respondent did not report an attack, attempt, or threat in an incident section, so no crime was coded. The PLS does not have an incident section, so if the respondent reported a threat or attempt, it was coded as a crime.

Although the instruments’ difference in threat reporting had not been anticipated, potential differences in reporting by households with more than one adult had. The PLS format was hypothesized to yield more crime than the ILS for the second, third, and fourth adults in the household because the PLS directly asks about crimes for these adults. But, as shown in Table H-3, the data showed no support for that hypothesis. Again the biggest difference between the instruments was due to the reporting of threats. Table H-3 gives the unweighted proportion of crimes reported for each adult and instrument.

Table H-3. Unweighted proportion of adults reporting a violent crime

| | Adult 1 | | Adult 2 | | Adult 3 | | Adult 4 | |
|-------------------------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|
| | ILS | PLS | ILS | PLS | ILS | PLS | ILS | PLS |
| Serious violent | 0.009 | 0.007 | 0.006 | 0.005 | 0.010 | 0.005 | 0.008 | 0.008 |
| Any violent excluding threats | 0.012 | 0.012 | 0.007 | 0.008 | 0.012 | 0.010 | 0.010 | 0.012 |
| Any violent including threats | 0.018 | 0.034 | 0.010 | 0.028 | 0.014 | 0.031 | 0.012 | 0.032 |

Tables H-4 for the ILS and H-5 for the PLS summarize the effects of editing on the crime counts. The tables show the raw counts, counts after removing out-of-scope dates, counts after removing missing dates, and counts after narrative review. Clearly, removing missing and out-of-scope dates had the greatest impact on counts. These types of edits can be done programmatically, without extensive labor costs.

Table H-4. Effect of editing the ILS on counts of households touched by crime

| | Raw counts | Removing out-of-scope | Removing missing dates | After narrative review |
|---|------------|-----------------------|------------------------|------------------------|
| Serious violent crime | 997 | 792 | 735 | 677 |
| Any violent crime | 1,214 | 998 | 919 | 848 |
| Any violent crime or threat of violence | 1,634 | 1,386 | 1,290 | 1,250 |
| Any property crime | 5,654 | 4,979 | 4,648 | 4,955 |
| Any property crime or attempt | 5,707 | 5,313 | 4,956 | 5,052 |

Table H-5. Effect of editing the PLS on counts of households touched by crime

| | Raw counts | Removing out-of-scope | Removing missing dates | After narrative review |
|---|------------|-----------------------|------------------------|------------------------|
| Serious violent crime | 913 | 886 | 701 | 690 |
| Any violent crime | 1,326 | 1,291 | 1,022 | 991 |
| Any violent crime or threat of violence | 2,693 | 2,638 | 2,240 | 2,179 |
| Any property crime | 8,164 | 7,734 | 7,302 | 7,169 |
| Any property crime or attempt | N/A | N/A | N/A | N/A |

3 Usability of the Forms

One issue identified in reporting was the difference between the number of adults in the household question and the number of adults “rostered” in the ILS and PLS demographics sections.

Differences went in both directions, with some respondents listing fewer adults than the closed-ended question about household size, while other respondents listed more adults. Another issue was that some respondents skipped entire sections of the survey and then began again in a later section. A third issue was that some respondents wrote explanatory information in the survey margins.

These comments were typically not picked up by the processing software.

3.1 Number of Adults

One problem for both instruments was that the number of rostered adults did not match the response to the question about “number of adults.” It is possible that some of these discrepancies were due to the respondent not including himself or herself. Another possible explanation is that the respondent reported the count of all household members including children rather than only adults. In a few cases, it appeared that respondents were enumerating the entire multi-unit dwelling, and in a few other cases the respondents seemed to have reported their age.

In the ILS, 9 percent of completed surveys had some discrepancy with the number of adults. In 6 percent, the number of rostered adults did not equal the number reported in the closed-ended question. The other 3 percent included surveys where either the closed-ended question was missing or where the respondent failed to provide demographics for any of the adults.

The PLS had the same problems. About 11 percent of the PLS questionnaires gave a number of adults for the closed-ended question that differed from the number in the roster. (“PLS roster”

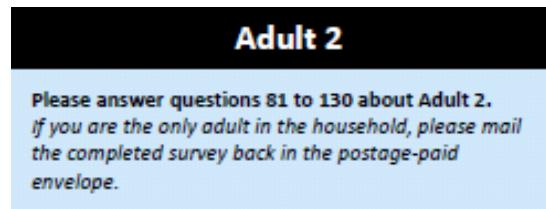
refers to the four adult sections where respondents are asked to provide demographic details.) Half of those respondents provided demographics for more adults than indicated by the closed-ended question, and the other half provided fewer. The response was missing for about 3 percent of the PLS closed-ended items.

This type of problem is common in self-administered surveys, so the task was to decide whether the roster or the response to the closed-ended item was correct. For the PLS, the rostered information was assumed to be accurate, and a variable was constructed for the number of adults in the household based on this count. If no adults were rostered, then the case was not considered a household with responding adults.

3.2 Miscellaneous

One issue unique to the PLS was that some respondents did not complete the adult sections consecutively. For example, the respondent may have answered questions in the Adult 2 section but left the Adult 1 section blank. In addition, some respondents mistakenly repeated data across multiple adult sections. A review of some of the physical surveys revealed that some respondents wrote in the margins “no adult 2” but proceeded to answer questions in the Adult 2 section (either duplicating prior answers or answering all items as “no”). All told, 6.6 percent of surveys had data for at least one of the adult sections removed due to this discrepancy.

Some PLS respondents likely misunderstood that they needed to complete an adult section only if there was another adult to enumerate. While the survey instructions indicate that respondents do not need to continue with a section if there is not an additional adult, some respondents may not have attended to the instructions. Revisions to the PLS may reduce this problem (e.g., adding an item “Is there another adult in the household?” so that respondents are more likely to follow skip instructions).



A final issue pertinent to the instrument comparison was inconsistencies between the ILS and PLS questions. Some inconsistencies could have been responsible for differences in reporting in Year 1. For Year 2, the instruments’ wording and content are planned to be further aligned where feasible.

Appendix I

Gross Flow Charts: Year 1 to Year 2

This appendix presents victimization status and community/policing measures as reported in Year 1 compared with Year 2. The data is based on a combination of the ILS and PLS instruments and includes those addresses that were selected for the overlap sample experiment.

Table I-1. Estimated number of households reporting any victimization, by year

| Year 1 victimization | Victim in Year 2 | Non-victim in Year 2 | Missing ¹ | Total |
|-------------------------|---------------------|-------------------------|----------------------|--------|
| Non-victim in Year 1 | 9,275 | 993 | 8,081 | 18,349 |
| Victim in Year 1 | 1,319 | 650 | 2,068 | 4,037 |
| Missing ¹ | 3,147 | 687 | 0 | 3,834 |
| Total | 13,741 | 2,330 | 10,149 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-2. Estimated number of households reporting completed property crime victimization, by year

| Year 1 completed property crime | Victim in Year 2 | Non-victim in Year 2 | Missing ¹ | Total |
|------------------------------------|---------------------|-------------------------|----------------------|--------|
| Non-victim in Year 1 | 9,989 | 779 | 8,616 | 19,384 |
| Victim in Year 1 | 1,068 | 401 | 1,533 | 3,002 |
| Missing ¹ | 3,340 | 494 | 0 | 3,834 |
| Total | 14,397 | 1,674 | 10,149 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-3. Estimated number of households reporting completed or attempted property crime victimization, by year

| Year 1 completed or attempted property crime | Victim in Year 2 | Non-victim in Year 2 | Missing ¹ | Total |
|--|---------------------|-------------------------|----------------------|--------|
| Non-victim in Year 1 | 9,610 | 871 | 8,314 | 18,795 |
| Victim in Year 1 | 1,206 | 550 | 1,835 | 3,591 |
| Missing ¹ | 3,262 | 572 | 0 | 3,834 |
| Total | 14,078 | 1,993 | 10,149 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-4. Estimated number of households reporting completed motor vehicle theft victimization, by year

| Year 1 completed motor vehicle theft | Victim in Year 2 | Non-victim in Year 2 | Missing¹ | Total |
|---|-------------------------|-----------------------------|----------------------------|---------------|
| Non-victim in Year 1 | 9,610 | 871 | 8,314 | 18,795 |
| Victim in Year 1 | 1,206 | 550 | 1,835 | 3,591 |
| Missing ¹ | 3,262 | 572 | 0 | 3,834 |
| Total | 14,078 | 1,993 | 10,149 | 26,220 |

Note: The Year 1 PLS instrument did not have a DATE associated with the motor vehicle theft question, so out-of-date responses could not be excluded. Some respondents may have answered "yes" even though the crime was outside the 12-month recall period. The Year 2 PLS included the DATE question.

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-5. Estimated number of households reporting completed violent crime victimization, by year

| Year 1 completed violent crime | Victim in Year 2 | Non-victim in Year 2 | Missing¹ | Total |
|---------------------------------------|-------------------------|-----------------------------|----------------------------|---------------|
| Non-victim in Year 1 | 11,860 | 180 | 9,846 | 21,886 |
| Victim in Year 1 | 167 | 30 | 303 | 500 |
| Missing ¹ | 3,701 | 133 | 0 | 3,834 |
| Total | 15,728 | 343 | 10,149 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-6. Estimated number of households reporting completed or attempted violent crime victimization, by year

| Year 1 completed or attempted violent crime | Victim in Year 2 | Non-victim in Year 2 | Missing¹ | Total |
|--|-------------------------|-----------------------------|----------------------------|---------------|
| Non-victim in Year 1 | 11,550 | 314 | 9,627 | 21,491 |
| Victim in Year 1 | 295 | 78 | 522 | 895 |
| Missing ¹ | 3,609 | 225 | 0 | 3,834 |
| Total | 15,454 | 617 | 10,149 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-7. Estimated number of households reporting completed serious violent crime victimization, by year

| Year 1 completed serious violent crime | Victim in Year 2 | Non-victim in Year 2 | Missing¹ | Total |
|---|-----------------------------|---------------------------------|----------------------------|---------------|
| Non-victim in Year 1 | 11,969 | 121 | 9,905 | 21,995 |
| Victim in Year 1 | 126 | 21 | 244 | 391 |
| Missing ¹ | 3,742 | 92 | 0 | 3,834 |
| Total | 15,837 | 234 | 10,149 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-8. Estimated number of households reporting their communities were safe, by year

| Year 1 | Year 2: sometimes, rarely, or never | Year 2: always or mostly | Missing¹ | Total |
|-----------------------------|--|-------------------------------------|----------------------------|---------------|
| Sometimes, rarely, or never | 641 | 541 | 1,405 | 2,587 |
| Always or mostly | 530 | 10,305 | 8,625 | 19,460 |
| Missing ¹ | 557 | 3,414 | 202 | 4,173 |
| Total | 1,728 | 14,260 | 10,232 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-9. Estimated number of households reporting being afraid to walk alone at night within a mile of home, by year

| Year 1 | Year 2: afraid | Year 2: not afraid | Missing¹ | Total |
|----------------------|---------------------------|-------------------------------|----------------------------|---------------|
| Afraid | 4,411 | 1,307 | 5,190 | 10,908 |
| Not afraid | 1,335 | 4,893 | 4,867 | 11,095 |
| Missing ¹ | 1,999 | 1,985 | 233 | 4,217 |
| Total | 7,745 | 8,185 | 10,290 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-10. Estimated number of households reporting fear of crime inhibited respondents from activities, by year

| Year 1 | Year 2: very or somewhat often | Year 2: rarely or never | Missing¹ | Total |
|------------------------|---------------------------------------|--------------------------------|----------------------------|---------------|
| Very or somewhat often | 1,482 | 1,033 | 2,356 | 4,871 |
| Rarely or never | 1,097 | 8,411 | 7,704 | 17,212 |
| Missing ¹ | 979 | 2,977 | 181 | 4,137 |
| Total | 3,558 | 12,421 | 10,241 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-11. Estimated number of households reporting amount of time they think about home being broken into or vandalized, by year

| Year 1 | Year 2: very or somewhat often | Year 2: rarely or never | Missing¹ | Total |
|------------------------|---------------------------------------|--------------------------------|----------------------------|---------------|
| Very or somewhat often | 2,396 | 1,386 | 3,403 | 7,185 |
| Rarely or never | 1,238 | 7,045 | 6,647 | 14,930 |
| Missing ¹ | 1,273 | 2,667 | 165 | 4,105 |
| Total | 4,907 | 11,098 | 10,215 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-12. Estimated number of households reporting if the community has become safer in past 3 years, by year

| Year 1 | Year 2: less safe or not sure | Year 2: safer or stayed the same | Missing¹ | Total |
|--------------------------|--------------------------------------|---|----------------------------|---------------|
| Less safe or not sure | 1,391 | 1,093 | 2,469 | 4,953 |
| Safer or stayed the same | 1,033 | 6,649 | 6,842 | 14,524 |
| Missing ¹ | 933 | 3,207 | 2,603 | 6,743 |
| Total | 3,357 | 10,949 | 11,914 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Table I-13. Estimated number of households reporting whether their workplaces were safe, by year

| Year 1 | Year 2: sometimes, rarely, or never | Year 2: always or mostly | Missing¹ | Total |
|-----------------------------|--|-------------------------------------|----------------------------|---------------|
| Sometimes, rarely, or never | 298 | 417 | 1,100 | 1,815 |
| Always or mostly | 428 | 6,115 | 7,375 | 13,918 |
| Missing ¹ | 499 | 3,385 | 6,603 | 10,487 |
| Total | 1,225 | 9,917 | 15,078 | 26,220 |

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis. The Missing category for this survey item also includes responses of "not applicable."

Table I-14. Estimated number of households reporting their rating of local police, by year

| Year 1 | Year 2: somewhat or very bad job, or neither good nor bad | Year 2: very or somewhat good | Missing² | Total |
|----------------------|--|--|----------------------------|---------------|
| Fair or poor | 629 | 1068 | 1917 | 3,614 |
| Excellent or good | 623 | 8189 | 7259 | 16,071 |
| Missing ² | 928 | 3940 | 1667 | 6,535 |
| Total | 2,180 | 13,197 | 10,843 | 26,220 |

Note: The police rating item was slightly different in the two years. The response scale changed from a 4-point scale in Year 1 to a 5-point scale with a neutral category in Year 2.

¹ Missing data includes both unit- and item-level nonresponse. Sample addresses that did not return the Year 1 survey or the Year 2 survey were excluded from this analysis.

Appendix J

Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

This first section of this appendix presents estimates of the Year 1 TBC rates, along with Wilson confidence intervals,¹ for the subareas in the Philadelphia, Chicago, and Los Angeles CBSAs. The last column of each table presents the estimated crime rate for the area from the local law enforcement agency statistics, where the rate is given as the number of crimes per 1,000 population.

The 95 percent confidence interval is given below each estimate. The local jurisdiction estimate is the property crime rate for property crimes, the violent crime rate for responses ANYVIOLENT1 and ANYVIOLENT2, and the serious violent crime rate for response SERIOUSVIOLENT.

The second section of this appendix includes Year 1 to Year 2 change estimates for subareas in Philadelphia and Chicago. Los Angeles was not oversampled in Year 2.

¹ See Dean, N., & Pagano, M. (2015). Evaluating confidence interval methods for binomial proportions in clustered surveys. *Journal of Survey Statistics and Methodology*, 3(4), 484–503 <https://doi.org/10.1080/jssam.smv.024>. Wilson confidence intervals have better coverage properties than the usual Wald confidence intervals when the estimated proportion is low.

Year 1

Table J-1. Local area estimates for Philadelphia – Year 1

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local jurisdiction estimate |
|-----------|-----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------|
| HHTBPROP1 | Central | 14.17 [11.06, 17.98] | 12.69 [8.89, 17.8] | 15.92 [10.90, 22.66] | 17.57 [13.87, 22.01] | 14.49 [9.88, 20.76] | 20.43 [15.05, 27.12] | 72.14 |
| | East | 16.90 [13.69, 20.68] | 17.68 [13.10, 23.43] | 16.07 [11.76, 21.56] | 28.79 [24.73, 33.24] | 29.85 [24.16, 36.25] | 27.82 [22.24, 34.19] | 51.04 |
| | South | 18.79 [15.77, 22.24] | 18.37 [14.42, 23.12] | 19.29 [14.92, 24.58] | 24.80 [21.01, 29.02] | 27.29 [21.96, 33.36] | 22.15 [17.33, 27.85] | 36.49 |
| | Southwest | 12.71 [9.68, 16.52] | 12.75 [8.88, 17.99] | 12.66 [8.36, 18.72] | 21.10 [17.26, 25.54] | 20.54 [15.15, 27.24] | 21.66 [16.39, 28.05] | 37.70 |
| | Northwest | 14.23 [11.36, 17.68] | 15.37 [11.20, 20.72] | 13.07 [9.25, 18.13] | 21.75 [18.24, 25.71] | 24.45 [19.33, 30.42] | 19.03 [14.28, 24.91] | 29.61 |
| | Northeast | 12.88 [10.38, 15.87] | 12.40 [9, 16.85] | 13.40 [9.70, 18.23] | 21.42 [18.20, 25.03] | 22.63 [17.96, 28.1] | 20.16 [15.84, 25.31] | 28.78 |
| | Remainder | 8.59 [6.57, 11.17] | 7.14 [4.76, 10.59] | 10.14 [7.07, 14.36] | 10.29 [8, 13.15] | 12.54 [9.20, 16.86] | 8.00 [5.41, 11.69] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-1. Local area estimates for Philadelphia – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction estimate |
|-------------|-----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------|
| HHTBPROP2 | Central | 14.55 [11.37, 18.43] | 12.94 [9.10, 18.08] | 16.44 [11.37, 23.18] | 21.65 [17.73, 26.17] | 19.33 [14.13, 25.87] | 23.80 [18.33, 30.31] | 72.14 |
| | East | 17.14 [13.91, 20.93] | 17.68 [13.10, 23.43] | 16.55 [12.18, 22.10] | 36.33 [31.81, 41.11] | 36.94 [30.80, 43.54] | 35.76 [29.52, 42.53] | 51.04 |
| | South | 19.76 [16.67, 23.26] | 19.39 [15.33, 24.22] | 20.19 [15.72, 25.54] | 30.55 [26.64, 34.76] | 36.04 [30.38, 42.11] | 24.71 [19.49, 30.79] | 36.49 |
| | Southwest | 13.76 [10.61, 17.67] | 14.18 [10.08, 19.58] | 13.24 [8.83, 19.38] | 26.90 [22.64, 31.63] | 26.43 [20.54, 33.29] | 27.37 [21.53, 34.11] | 37.70 |
| | Northwest | 15.38 [12.34, 19.01] | 16.36 [12.03, 21.87] | 14.38 [10.25, 19.80] | 29.37 [25.1, 34.04] | 34.69 [27.99, 42.05] | 24.03 [18.74, 30.26] | 29.61 |
| | Northeast | 14.04 [11.41, 17.16] | 13.22 [9.73, 17.71] | 14.95 [10.91, 20.15] | 27.55 [23.98, 31.42] | 29.40 [24.10, 35.32] | 25.62 [20.81, 31.10] | 28.78 |
| | Remainder | 8.88 [6.81, 11.50] | 7.51 [5.06, 11] | 10.34 [7.22, 14.60] | 14.41 [11.83, 17.44] | 17.61 [13.88, 22.09] | 11.14 [8.10, 15.14] | N/A |
| HHTBMVTHEFT | Central | N/A | N/A | N/A | 1.36 [0.55, 3.32] | 2.24 [0.82, 5.98] | 0.55 [0.10, 3.05] | 72.14 |
| | East | 1.31 [0.59, 2.90] | 1.37 [0.46, 3.99] | 1.25 [0.40, 3.81] | 3.94 [2.39, 6.43] | 3.92 [1.99, 7.56] | 3.96 [1.95, 7.87] | 51.04 |
| | South | 0.72 [0.28, 1.87] | 0.34 [0.06, 1.88] | 1.18 [0.40, 3.44] | 0.55 [0.13, 2.26] | 0.29 [0.05, 1.85] | 0.82 [0.14, 4.64] | 36.49 |
| | Southwest | 0.82 [0.28, 2.41] | 1.04 [0.28, 3.76] | 0.54 [0.09, 3.34] | 1.11 [0.43, 2.83] | 1.63 [0.55, 4.76] | 0.59 [0.11, 3.11] | 37.70 |
| | Northwest | 1.22 [0.47, 3.17] | 1.39 [0.41, 4.60] | 1.06 [0.26, 4.25] | 1.15 [0.48, 2.74] | 1.50 [0.49, 4.45] | 0.80 [0.21, 3.01] | 29.61 |
| | Northeast | 0.42 [0.13, 1.37] | 0.20 [0.02, 1.63] | 0.67 [0.18, 2.52] | 1.10 [0.51, 2.36] | 1.54 [0.49, 4.70] | 0.64 [0.16, 2.48] | 28.78 |
| | Remainder | 1.05 [0.49, 2.22] | 1.69 [0.75, 3.76] | 0.36 [0.06, 2.02] | 0.30 [0.08, 1.07] | 0.26 [0.05, 1.47] | 0.33 [0.06, 1.81] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-1. Local area estimates for Philadelphia – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction estimate |
|-----------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|-----------------------------------|
| HHTBVIOL1 | Central | 4.04 [2.54, 6.37] | 5.97 [3.46, 10.12] | 1.77 [0.57, 5.34] | 5.23 [3.23, 8.34] | 6.03 [3.23, 10.96] | 4.48 [2.11, 9.29] | 39.15 |
| | East | 6.34 [4.24, 9.37] | 6.24 [3.40, 11.18] | 6.44 [3.84, 10.61] | 3.47 [1.96, 6.08] | 2.80 [1.17, 6.56] | 4.09 [2.09, 7.84] | 36.89 |
| | South | 3.92 [2.55, 5.97] | 5.14 [2.96, 8.76] | 2.48 [1.12, 5.38] | 3.35 [2.04, 5.44] | 4.95 [2.82, 8.55] | 1.64 [0.67, 3.94] | 22.54 |
| | Southwest | 4.64 [2.81, 7.57] | 3.22 [1.28, 7.90] | 6.41 [3.54, 11.33] | 4.07 [2.41, 6.78] | 5.18 [2.72, 9.64] | 2.95 [1.25, 6.79] | 28.52 |
| | Northwest | 4.89 [2.96, 7.98] | 3.87 [1.72, 8.48] | 5.93 [3.22, 10.66] | 5.28 [3.39, 8.14] | 5.54 [3.12, 9.66] | 5.03 [2.63, 9.41] | 25.00 |
| | Northeast | 1.92 [1.05, 3.48] | 1.76 [0.72, 4.24] | 2.09 [0.93, 4.60] | 3.39 [2.1, 5.43] | 4.49 [2.47, 8.03] | 2.24 [1.02, 4.84] | 18.09 |
| | Remainder | 2.87 [1.72, 4.76] | 2.45 [1.18, 5.03] | 3.32 [1.63, 6.64] | 1.73 [0.93, 3.21] | 2.46 [1.16, 5.12] | 0.99 [0.33, 2.92] | N/A |
| HHTBVIOL2 | Central | 5.27 [3.58, 7.71] | 7.46 [4.72, 11.61] | 2.69 [1.11, 6.35] | 9.24 [6.41, 13.13] | 11.95 [7.55, 18.38] | 6.72 [3.72, 11.85] | 39.15 |
| | East | 7.38 [5.16, 10.44] | 7.67 [4.53, 12.69] | 7.07 [4.35, 11.30] | 9.73 [7.23, 12.96] | 11.29 [7.53, 16.59] | 8.29 [5.28, 12.78] | 36.89 |
| | South | 5.22 [3.60, 7.51] | 6.21 [3.76, 10.09] | 4.05 [2.19, 7.37] | 8.89 [6.23, 12.53] | 11.82 [7.87, 17.38] | 5.76 [3.36, 9.72] | 22.54 |
| | Southwest | 5.50 [3.56, 8.42] | 4.20 [1.92, 8.95] | 7.13 [4.06, 12.22] | 8.52 [6, 11.97] | 10.01 [6.43, 15.24] | 7.03 [4.05, 11.92] | 28.52 |
| | Northwest | 6.85 [4.54, 10.22] | 7.51 [4.38, 12.57] | 6.18 [3.42, 10.90] | 8.94 [6.37, 12.40] | 9.72 [6.36, 14.59] | 8.15 [4.99, 13.06] | 25.00 |
| | Northeast | 3.17 [1.88, 5.30] | 3.94 [2.06, 7.41] | 2.33 [1.10, 4.87] | 6.46 [4.71, 8.81] | 8.75 [5.86, 12.88] | 4.08 [2.28, 7.21] | 18.09 |
| | Remainder | 3.19 [1.98, 5.12] | 2.72 [1.37, 5.33] | 3.70 [1.91, 7.05] | 3.89 [2.59, 5.80] | 5.07 [3.10, 8.21] | 2.68 [1.29, 5.47] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-1. Local area estimates for Philadelphia – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local jurisdiction estimate |
|-------------|-----------|-------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|
| HHTBSERVIOL | Central | 3.47 [2.07, 5.76] | 4.90 [2.63, 8.98] | 1.77 [0.57, 5.34] | 3.65 [1.97, 6.64] | 4.50 [2.2, 9.00] | 2.85 [1.02, 7.71] | 15.91 |
| | East | 5.92 [3.89, 8.91] | 5.78 [3.07, 10.64] | 6.06 [3.55, 10.18] | 2.47 [1.22, 4.94] | 2.14 [0.80, 5.59] | 2.78 [1.19, 6.36] | 16.98 |
| | South | 3.11 [1.93, 4.98] | 4.01 [2.19, 7.24] | 2.06 [0.87, 4.78] | 2.13 [1.15, 3.91] | 3.08 [1.50, 6.22] | 1.12 [0.36, 3.38] | 8.54 |
| | Southwest | 3.92 [2.17, 6.97] | 3.22 [1.28, 7.90] | 4.78 [2.27, 9.78] | 2.54 [1.35, 4.72] | 4.00 [1.97, 7.94] | 1.07 [0.29, 3.89] | 12.06 |
| | Northwest | 4.44 [2.66, 7.35] | 3.87 [1.72, 8.48] | 5.03 [2.69, 9.22] | 4.34 [2.71, 6.88] | 3.66 [1.92, 6.88] | 5.03 [2.63, 9.41] | 9.87 |
| | Northeast | 1.72 [0.91, 3.23] | 1.39 [0.51, 3.72] | 2.09 [0.93, 4.60] | 2.30 [1.27, 4.15] | 3.50 [1.75, 6.89] | 1.06 [0.35, 3.11] | 6.40 |
| | Remainder | 2.40 [1.37, 4.18] | 2.12 [0.96, 4.62] | 2.70 [1.21, 5.95] | 1.25 [0.59, 2.61] | 1.88 [0.77, 4.48] | 0.61 [0.17, 2.18] | N/A |
| PTBVIOL1 | Central | 2.74 [1.62, 4.61] | 4.07 [2.19, 7.42] | 1.32 [0.37, 4.65] | 3.76 [2.26, 6.20] | 4.14 [2.14, 7.86] | 3.35 [1.53, 7.19] | 39.15 |
| | East | 3.79 [2.40, 5.96] | 4.14 [2.07, 8.08] | 3.47 [1.92, 6.18] | 2.22 [1.17, 4.16] | 2.19 [0.81, 5.76] | 2.25 [1.08, 4.60] | 36.89 |
| | South | 2.02 [1.23, 3.31] | 2.70 [1.46, 4.94] | 1.21 [0.53, 2.71] | 1.90 [1.06, 3.38] | 2.16 [1.21, 3.82] | 1.63 [0.56, 4.65] | 22.54 |
| | Southwest | 2.12 [1.18, 3.80] | 1.52 [0.53, 4.27] | 2.86 [1.46, 5.55] | 2.52 [1.44, 4.37] | 3.45 [1.77, 6.62] | 1.50 [0.59, 3.74] | 28.52 |
| | Northwest | 2.44 [1.38, 4.29] | 1.79 [0.69, 4.56] | 3.18 [1.64, 6.07] | 3.35 [2.06, 5.42] | 3.57 [1.83, 6.87] | 3.12 [1.56, 6.14] | 25.00 |
| | Northeast | 0.85 [0.41, 1.75] | 0.90 [0.31, 2.61] | 0.79 [0.31, 1.97] | 2.40 [1.31, 4.36] | 3.33 [1.56, 6.96] | 1.41 [0.61, 3.22] | 18.09 |
| | Remainder | 1.44 [0.83, 2.48] | 1.39 [0.62, 3.10] | 1.49 [0.73, 3.03] | 0.94 [0.51, 1.72] | 1.37 [0.66, 2.82] | 0.48 [0.15, 1.48] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-1. Local area estimates for Philadelphia – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction estimate |
|------------|-----------|-------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-----------------------------------|
| PTBVIOL2 | Central | 3.44 [2.20, 5.36] | 4.82 [2.83, 8.07] | 1.97 [0.71, 5.36] | 6.79 [4.47, 10.19] | 8.18 [4.81, 13.55] | 5.27 [2.80, 9.0] | 39.15 |
| | East | 4.65 [3.09, 6.93] | 5.61 [3.11, 9.91] | 3.74 [2.15, 6.44] | 6.20 [4.40, 8.67] | 7.89 [5.02, 12.19] | 4.55 [2.68, 7.61] | 36.89 |
| | South | 2.75 [1.82, 4.12] | 3.26 [1.89, 5.58] | 2.13 [1.14, 3.95] | 4.89 [3.23, 7.36] | 5.60 [3.61, 8.59] | 4.18 [2.10, 8.16] | 22.54 |
| | Southwest | 2.89 [1.81, 4.58] | 2.35 [1.01, 5.36] | 3.55 [1.83, 6.79] | 5.28 [3.58, 7.73] | 6.29 [3.98, 9.82] | 4.17 [2.22, 7.71] | 28.52 |
| | Northwest | 3.57 [2.19, 5.75] | 3.68 [1.90, 7.02] | 3.43 [1.82, 6.38] | 5.83 [4.06, 8.29] | 6.60 [4.08, 10.5] | 4.99 [2.94, 8.34] | 25.00 |
| | Northeast | 1.36 [0.75, 2.45] | 1.79 [0.85, 3.71] | 0.88 [0.37, 2.10] | 4.12 [2.71, 6.23] | 5.70 [3.33, 9.57] | 2.44 [1.32, 4.47] | 18.09 |
| | Remainder | 1.56 [0.93, 2.62] | 1.50 [0.70, 3.2] | 1.64 [0.84, 3.17] | 2.23 [1.45, 3.42] | 2.68 [1.65, 4.32] | 1.77 [0.79, 3.93] | N/A |
| PTBSERVIOL | Central | 2.47 [1.38, 4.37] | 3.55 [1.78, 6.92] | 1.32 [0.37, 4.65] | 2.73 [1.43, 5.16] | 3.22 [1.50, 6.80] | 2.20 [0.76, 6.23] | 15.91 |
| | East | 3.42 [2.10, 5.54] | 3.83 [1.86, 7.73] | 3.04 [1.63, 5.60] | 1.45 [0.70, 2.94] | 1.24 [0.45, 3.37] | 1.65 [0.66, 4.03] | 16.98 |
| | South | 1.57 [0.90, 2.72] | 2.08 [1.04, 4.10] | 0.95 [0.39, 2.31] | 1.25 [0.58, 2.67] | 1.35 [0.65, 2.78] | 1.16 [0.29, 4.43] | 8.54 |
| | Southwest | 1.87 [0.96, 3.65] | 1.52 [0.53, 4.27] | 2.31 [0.99, 5.28] | 1.56 [0.77, 3.13] | 2.63 [1.24, 5.51] | 0.39 [0.08, 1.89] | 12.06 |
| | Northwest | 2.34 [1.32, 4.10] | 1.79 [0.69, 4.56] | 2.96 [1.54, 5.59] | 2.83 [1.65, 4.80] | 2.56 [1.12, 5.71] | 3.12 [1.56, 6.14] | 9.87 |
| | Northeast | 0.70 [0.32, 1.53] | 0.63 [0.17, 2.22] | 0.79 [0.31, 1.97] | 1.45 [0.74, 2.80] | 2.08 [0.95, 4.47] | 0.77 [0.25, 2.33] | 6.40 |
| | Remainder | 1.18 [0.64, 2.16] | 1.17 [0.48, 2.83] | 1.19 [0.53, 2.67] | 0.67 [0.32, 1.40] | 1.04 [0.43, 2.46] | 0.28 [0.07, 1.10] | N/A |

Note: Local-Area Crime Survey (LACS), Year 1 TBC estimates, 2015 and Uniform Crime Reports (UCR), 2015. LACS estimates are per 1,000 persons age 18 or older and UCR estimates are per 1,000 population.

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-2. Local area estimates for Chicago – Year 1

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction Estimate |
|-----------|-----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------|
| HHTBPROP1 | South | 15.78 [12.92, 19.13] | 19.76 [15.60, 24.71] | 11.14 [7.72, 15.81] | 21.62 [18.08, 25.64] | 25.57 [20.68, 31.17] | 17.26 [12.80, 22.88] | 34.38 |
| | Central | 13.33 [10.99, 16.09] | 14.28 [11.10, 18.19] | 12.27 [9.22, 16.16] | 20.80 [17.63, 24.38] | 20.70 [16.49, 25.66] | 20.91 [16.54, 26.08] | 39.05 |
| | North | 12.72 [10.50, 15.34] | 14.19 [10.78, 18.45] | 11.34 [8.65, 14.73] | 20.68 [17.99, 23.65] | 20.18 [16.42, 24.54] | 21.15 [17.63, 25.17] | 22.01 |
| | Remainder | 5.52 [4.03, 7.52] | 5.89 [3.86, 8.88] | 5.16 [3.27, 8.06] | 11.91 [9.66, 14.62] | 13.84 [10.51, 18.00] | 10.02 [7.03, 14.09] | N/A |
| | South | 16.99 [14.02, 20.44] | 20.15 [15.95, 25.13] | 13.30 [9.35, 18.58] | 26.02 [22.27, 30.16] | 30.31 [25.07, 36.12] | 21.29 [16.58, 26.89] | 34.38 |
| | Central | 14.40 [12.0, 17.2] | 14.82 [11.58, 18.77] | 13.95 [10.69, 18.00] | 27.10 [23.58, 30.94] | 28.93 [24.05, 34.34] | 25.09 [20.45, 30.37] | 39.05 |
| | North | 13.62 [11.30, 16.33] | 15.03 [11.51, 19.39] | 12.29 [9.43, 15.88] | 26.25 [23.23, 29.51] | 26.11 [21.75, 31.00] | 26.38 [22.52, 30.65] | 22.01 |
| | Remainder | 6.31 [4.66, 8.48] | 6.31 [4.21, 9.35] | 6.30 [4.14, 9.48] | 13.79 [11.37, 16.63] | 15.79 [12.25, 20.11] | 11.83 [8.62, 16.02] | N/A |
| | South | 1.18 [0.47, 2.91] | 1.49 [0.48, 4.52] | 0.82 [0.22, 3.00] | 2.29 [1.20, 4.33] | 2.45 [1.08, 5.45] | 2.11 [0.87, 5.06] | 34.38 |
| | Central | 1.38 [0.74, 2.58] | 1.66 [0.74, 3.69] | 1.07 [0.40, 2.82] | 1.30 [0.69, 2.42] | 2.30 [1.20, 4.37] | 0.19 [0.02, 1.45] | 39.05 |
| | North | 0.60 [0.24, 1.44] | 0.13 [0.01, 1.12] | 1.04 [0.40, 2.68] | 1.40 [0.81, 2.42] | 1.73 [0.78, 3.78] | 1.08 [0.46, 2.54] | 22.01 |
| | Remainder | 0.15 [0.03, 0.86] | 0.30 [0.05, 1.72] | N/A | 0.66 [0.25, 1.73] | N/A | 1.31 [0.50, 3.40] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-2. Local area estimates for Chicago – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction Estimate |
|-------------|-----------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-----------------------------------|
| HHTBVIOL1 | South | 6.44 [4.55, 9.05] | 7.32 [4.65, 11.33] | 5.43 [3.21, 9.04] | 4.56 [2.98, 6.91] | 5.15 [2.99, 8.75] | 3.90 [2.01, 7.43] | 46.44 |
| | Central | 3.26 [2.13, 4.96] | 3.82 [2.23, 6.48] | 2.63 [1.32, 5.20] | 2.83 [1.80, 4.41] | 2.03 [0.89, 4.56] | 3.71 [2.16, 6.30] | 31.24 |
| | North | 3.13 [2.00, 4.86] | 3.65 [1.99, 6.60] | 2.64 [1.45, 4.76] | 2.38 [1.47, 3.83] | 2.57 [1.29, 5.06] | 2.19 [1.19, 4.01] | 21.30 |
| | Remainder | 1.41 [0.75, 2.63] | 1.19 [0.46, 3.1] | 1.61 [0.72, 3.57] | 1.13 [0.55, 2.29] | 0.90 [0.28, 2.80] | 1.36 [0.57, 3.21] | N/A |
| HHTBVIOL2 | South | 7.78 [5.64, 10.66] | 9.04 [5.96, 13.48] | 6.32 [3.90, 10.1] | 7.79 [5.80, 10.38] | 9.22 [6.37, 13.16] | 6.21 [3.94, 9.64] | 46.44 |
| | Central | 4.60 [3.22, 6.53] | 5.38 [3.42, 8.38] | 3.72 [2.10, 6.51] | 6.78 [5.04, 9.06] | 7.08 [4.89, 10.14] | 6.46 [4.12, 9.98] | 31.24 |
| | North | 3.91 [2.63, 5.77] | 3.97 [2.25, 6.92] | 3.84 [2.32, 6.30] | 6.93 [5.19, 9.20] | 6.89 [4.45, 10.53] | 6.97 [4.85, 9.92] | 21.30 |
| | Remainder | 2.45 [1.49, 4.00] | 2.52 [1.22, 5.16] | 2.37 [1.24, 4.50] | 2.67 [1.70, 4.16] | 1.78 [0.83, 3.78] | 3.55 [2.05, 6.08] | N/A |
| HHTBSERVIOL | South | 4.66 [3.08, 6.99] | 5.21 [3.08, 8.71] | 4.01 [2.08, 7.62] | 3.34 [2.03, 5.43] | 2.83 [1.39, 5.69] | 3.90 [2.01, 7.43] | 13.94 |
| | Central | 3.26 [2.13, 4.96] | 3.82 [2.23, 6.48] | 2.63 [1.32, 5.20] | 1.89 [1.06, 3.35] | 1.16 [0.38, 3.51] | 2.69 [1.41, 5.06] | 9.72 |
| | North | 2.81 [1.74, 4.51] | 3.15 [1.60, 6.11] | 2.48 [1.33, 4.59] | 1.43 [0.79, 2.57] | 1.34 [0.50, 3.58] | 1.51 [0.72, 3.12] | 6.28 |
| | Remainder | 1.09 [0.53, 2.19] | 0.93 [0.30, 2.80] | 1.24 [0.52, 2.95] | 0.88 [0.39, 1.95] | 0.76 [0.21, 2.75] | 0.99 [0.38, 2.57] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-2. Local area estimates for Chicago – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction Estimate |
|------------|-----------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|
| PTBVIOL1 | South | 3.36 [2.29, 4.91] | 3.16 [1.93, 5.15] | 3.59 [2.04, 6.25] | 2.26 [1.41, 3.61] | 2.34 [1.32, 4.09] | 2.16 [0.98, 4.68] | 46.44 |
| | Central | 1.84 [1.08, 3.10] | 1.99 [1.02, 3.84] | 1.67 [0.72, 3.82] | 1.63 [1.03, 2.58] | 1.25 [0.54, 2.84] | 2.07 [1.17, 3.64] | 31.24 |
| | North | 1.42 [0.85, 2.39] | 1.54 [0.71, 3.29] | 1.31 [0.68, 2.51] | 1.39 [0.71, 2.72] | 1.58 [0.55, 4.44] | 1.22 [0.61, 2.41] | 21.30 |
| | Remainder | 0.59 [0.29, 1.21] | 0.34 [0.11, 1.09] | 0.83 [0.35, 1.94] | 0.50 [0.23, 1.04] | 0.31 [0.09, 1.03] | 0.69 [0.27, 1.74] | N/A |
| PTBVIOL2 | South | 3.92 [2.74, 5.58] | 3.88 [2.44, 6.13] | 3.96 [2.34, 6.61] | 3.96 [2.85, 5.49] | 4.25 [2.82, 6.37] | 3.58 [2.12, 6.00] | 46.44 |
| | Central | 2.45 [1.60, 3.75] | 2.79 [1.64, 4.72] | 2.09 [1.03, 4.17] | 4.05 [2.98, 5.48] | 4.27 [2.84, 6.37] | 3.79 [2.34, 6.08] | 31.24 |
| | North | 1.97 [1.26, 3.06] | 1.80 [0.90, 3.57] | 2.14 [1.24, 3.67] | 3.96 [2.81, 5.55] | 4.10 [2.36, 7.04] | 3.83 [2.60, 5.61] | 21.30 |
| | Remainder | 0.96 [0.56, 1.64] | 0.82 [0.37, 1.79] | 1.10 [0.54, 2.22] | 1.38 [0.84, 2.24] | 0.72 [0.33, 1.56] | 2.07 [1.13, 3.74] | N/A |
| PTBSERVIOL | South | 2.34 [1.44, 3.77] | 2.25 [1.24, 4.06] | 2.44 [1.16, 5.07] | 1.69 [0.96, 2.97] | 1.34 [0.61, 2.89] | 2.16 [0.98, 4.68] | 13.94 |
| | Central | 1.84 [1.08, 3.10] | 1.99 [1.02, 3.84] | 1.67 [0.72, 3.82] | 0.97 [0.52, 1.80] | 0.69 [0.22, 2.09] | 1.30 [0.65, 2.61] | 9.72 |
| | North | 1.13 [0.64, 1.98] | 1.03 [0.42, 2.49] | 1.24 [0.62, 2.44] | 0.97 [0.40, 2.35] | 1.02 [0.23, 4.40] | 0.93 [0.41, 2.10] | 6.28 |
| | Remainder | 0.50 [0.22, 1.11] | 0.23 [0.05, 0.98] | 0.75 [0.30, 1.86] | 0.36 [0.16, 0.83] | 0.28 [0.08, 1.03] | 0.45 [0.16, 1.27] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-3. Local area estimates for Los Angeles – Year 1

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction Estimate |
|-------------|-----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------|
| HHTBPROP1 | South | 13.90 [10.93, 17.52] | 13.65 [9.25, 19.69] | 14.14 [10.32, 19.07] | 23.04 [19.57, 26.92] | 27.50 [22.42, 33.25] | 18.61 [14.37, 23.76] | 30.73 |
| | Central | 14.17 [11.22, 17.74] | 15.47 [11.42, 20.63] | 12.92 [9.17, 17.89] | 23.10 [19.79, 26.78] | 24.05 [19.33, 29.49] | 22.21 [17.78, 27.37] | 20.76 |
| | West | 15.97 [12.92, 19.58] | 18.16 [13.63, 23.78] | 13.47 [10.01, 17.88] | 21.83 [18.54, 25.53] | 23.20 [18.71, 28.38] | 20.48 [16.00, 25.83] | 26.35 |
| | Valley | 13.34 [10.88, 16.25] | 12.13 [8.97, 16.22] | 14.62 [10.98, 19.20] | 20.48 [17.58, 23.73] | 24.99 [20.58, 29.99] | 16.19 [12.38, 20.88] | 23.56 |
| | Remainder | 11.03 [8.92, 13.56] | 12.68 [9.78, 16.29] | 9.04 [6.04, 13.32] | 17.77 [14.74, 21.26] | 18.29 [14.48, 22.83] | 17.27 [13.19, 22.28] | N/A |
| | South | 14.38 [11.38, 18.02] | 14.23 [9.78, 20.26] | 14.53 [10.66, 19.51] | 31.29 [27.42, 35.44] | 37.66 [32.01, 43.66] | 24.97 [20.18, 30.46] | 30.73 |
| | Central | 15.36 [12.30, 19.02] | 16.29 [12.10, 21.58] | 14.46 [10.44, 19.69] | 27.47 [23.94, 31.30] | 29.88 [24.65, 35.69] | 25.21 [20.52, 30.54] | 20.76 |
| | West | 16.42 [13.35, 20.03] | 18.40 [13.83, 24.04] | 14.17 [10.62, 18.65] | 25.59 [22.04, 29.49] | 26.99 [22.05, 32.56] | 24.20 [19.27, 29.93] | 26.35 |
| | Valley | 13.71 [11.21, 16.68] | 12.67 [9.44, 16.79] | 14.83 [11.13, 19.49] | 25.15 [21.71, 28.94] | 30.15 [25.14, 35.67] | 20.40 [16.07, 25.55] | 23.56 |
| | Remainder | 11.45 [9.30, 14.01] | 12.68 [9.78, 16.29] | 9.96 [6.68, 14.59] | 21.84 [18.59, 25.48] | 23.20 [18.82, 28.24] | 20.54 [16.36, 25.45] | N/A |
| HHTBMVTHEFT | South | 1.19 [0.51, 2.77] | 2.42 [1.04, 5.53] | N/A N/A | 2.82 [1.61, 4.89] | 3.35 [1.49, 7.37] | 2.29 [1.08, 4.82] | 30.73 |
| | Central | 1.19 [0.57, 2.44] | 0.81 [0.24, 2.68] | 1.55 [0.62, 3.79] | 2.05 [1.10, 3.79] | 2.56 [1.22, 5.28] | 1.57 [0.55, 4.36] | 20.76 |
| | West | 1.82 [0.96, 3.39] | 1.96 [0.84, 4.51] | 1.65 [0.69, 3.92] | 1.06 [0.48, 2.33] | 0.72 [0.20, 2.61] | 1.39 [0.52, 3.65] | 26.35 |
| | Valley | 1.63 [0.88, 3.02] | 1.23 [0.47, 3.18] | 2.07 [0.94, 4.48] | 1.28 [0.58, 2.81] | 1.06 [0.33, 3.35] | 1.50 [0.55, 4.04] | 23.56 |
| | Remainder | 0.76 [0.28, 2.02] | 0.68 [0.18, 2.61] | 0.86 [0.23, 3.18] | 0.90 [0.40, 2.02] | 1.11 [0.42, 2.91] | 0.71 [0.19, 2.54] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-3. Local area estimates for Los Angeles – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction Estimate |
|-------------|-----------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------|--------------------------|-----------------------------------|
| HHTBVIOL1 | South | 5.94 [4.15, 8.43] | 5.59 [3.29, 9.33] | 6.28 [3.86, 10.05] | 5.91 [4.04, 8.57] | 5.39 [3.29, 8.73] | 6.42 [3.84, 10.55] | 12.46 |
| | Central | 3.57 [2.34, 5.42] | 3.19 [1.55, 6.44] | 3.94 [2.25, 6.82] | 3.49 [2.24, 5.38] | 5.04 [2.94, 8.50] | 2.03 [0.85, 4.75] | 7.06 |
| | West | 2.49 [1.52, 4.06] | 2.01 [0.95, 4.19] | 3.04 [1.58, 5.78] | 3.60 [2.26, 5.71] | 3.65 [1.95, 6.72] | 3.56 [1.86, 6.73] | 4.79 |
| | Valley | 1.24 [0.60, 2.54] | 0.64 [0.17, 2.38] | 1.87 [0.81, 4.26] | 2.60 [1.55, 4.34] | 3.19 [1.63, 6.17] | 2.04 [0.95, 4.31] | 3.93 |
| | Remainder | 1.69 [0.89, 3.19] | 1.90 [0.88, 4.08] | 1.44 [0.49, 4.14] | 2.35 [1.38, 3.97] | 1.78 [0.73, 4.26] | 2.89 [1.52, 5.45] | N/A |
| | South | 6.56 [4.67, 9.15] | 5.92 [3.55, 9.74] | 7.18 [4.56, 11.13] | 9.05 [6.65, 12.19] | 9.49 [6.30, 14.05] | 8.61 [5.65, 12.9] | 12.46 |
| | Central | 4.77 [3.26, 6.94] | 4.82 [2.71, 8.44] | 4.73 [2.84, 7.80] | 7.17 [5.22, 9.77] | 10.19 [6.98, 14.63] | 4.34 [2.46, 7.57] | 7.06 |
| | West | 3.76 [2.49, 5.65] | 3.73 [2.15, 6.39] | 3.81 [2.11, 6.77] | 5.98 [4.22, 8.42] | 5.50 [3.33, 8.94] | 6.47 [4.08, 10.11] | 4.79 |
| | Valley | 2.42 [1.43, 4.06] | 2.37 [1.13, 4.93] | 2.46 [1.20, 4.98] | 5.34 [3.66, 7.73] | 5.33 [2.99, 9.33] | 5.35 [3.36, 8.43] | 3.93 |
| | Remainder | 2.31 [1.35, 3.95] | 2.82 [1.49, 5.27] | 1.70 [0.65, 4.39] | 4.09 [2.74, 6.06] | 3.19 [1.70, 5.90] | 4.96 [3.01, 8.06] | N/A |
| HHTBSERVIOL | South | 4.92 [3.31, 7.25] | 4.16 [2.10, 8.10] | 5.66 [3.39, 9.30] | 4.28 [2.69, 6.73] | 3.57 [1.88, 6.68] | 4.98 [2.81, 8.68] | 12.46 |
| | Central | 2.70 [1.61, 4.49] | 1.80 [0.66, 4.78] | 3.56 [1.96, 6.38] | 2.21 [1.20, 4.03] | 3.23 [1.57, 6.55] | 1.25 [0.41, 3.75] | 7.06 |
| | West | 1.94 [1.09, 3.41] | 1.57 [0.68, 3.59] | 2.36 [1.11, 4.93] | 1.93 [0.99, 3.74] | 2.09 [0.94, 4.60] | 1.78 [0.66, 4.67] | 4.79 |
| | Valley | 0.69 [0.28, 1.64] | 0.38 [0.07, 2.15] | 1.01 [0.36, 2.80] | 1.97 [1.08, 3.58] | 2.48 [1.15, 5.27] | 1.49 [0.60, 3.64] | 3.93 |
| | Remainder | 1.49 [0.76, 2.90] | 1.90 [0.88, 4.08] | 0.99 [0.27, 3.51] | 1.84 [1.02, 3.31] | 1.01 [0.33, 3.05] | 2.64 [1.34, 5.15] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-3. Local area estimates for Los Angeles – Year 1 (continued)

| Variable | Area | ILS, both | ILS A | ILS B | PLS, both | PLS A | PLS B | Local Jurisdiction Estimate |
|------------|-----------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-----------------------------------|
| PTBVIOL1 | South | 2.80 [1.86, 4.17] | 2.23 [0.94, 5.20] | 3.27 [2.00, 5.33] | 3.15 [1.96, 5.03] | 2.17 [1.14, 4.11] | 4.15 [2.33, 7.30] | 12.46 |
| | Central | 2.57 [1.55, 4.24] | 1.66 [0.68, 3.97] | 3.34 [1.81, 6.10] | 1.94 [1.16, 3.23] | 3.18 [1.72, 5.83] | 0.77 [0.32, 1.86] | 7.06 |
| | West | 1.78 [0.94, 3.33] | 0.98 [0.42, 2.25] | 2.71 [1.20, 5.97] | 2.05 [1.20, 3.47] | 2.20 [1.07, 4.50] | 1.92 [0.94, 3.88] | 4.79 |
| | Valley | 0.81 [0.36, 1.83] | 0.18 [0.04, 0.83] | 1.53 [0.62, 3.74] | 1.51 [0.74, 3.05] | 2.13 [0.85, 5.20] | 0.94 [0.38, 2.30] | 3.93 |
| | Remainder | 0.97 [0.48, 1.94] | 0.95 [0.39, 2.28] | 0.98 [0.33, 2.90] | 1.37 [0.74, 2.53] | 1.15 [0.42, 3.13] | 1.57 [0.74, 3.29] | N/A |
| | South | 3.24 [2.21, 4.74] | 2.75 [1.25, 5.93] | 3.65 [2.28, 5.81] | 4.61 [3.12, 6.76] | 4.17 [2.45, 7.03] | 5.07 [3.08, 8.23] | 12.46 |
| | Central | 3.45 [2.25, 5.27] | 2.67 [1.37, 5.14] | 4.12 [2.35, 7.15] | 4.78 [3.32, 6.85] | 7.62 [4.95, 11.54] | 2.11 [1.14, 3.86] | 7.06 |
| | West | 2.80 [1.72, 4.53] | 2.42 [1.28, 4.52] | 3.25 [1.60, 6.46] | 3.84 [2.46, 5.93] | 3.44 [1.97, 5.97] | 4.18 [2.25, 7.63] | 4.79 |
| | Valley | 1.41 [0.79, 2.52] | 0.93 [0.42, 2.07] | 1.96 [0.91, 4.20] | 2.80 [1.55, 4.99] | 3.61 [1.55, 8.21] | 2.05 [1.19, 3.52] | 3.93 |
| | Remainder | 1.26 [0.70, 2.26] | 1.40 [0.69, 2.82] | 1.09 [0.40, 2.97] | 2.29 [1.45, 3.62] | 2.01 [0.96, 4.16] | 2.56 [1.45, 4.47] | N/A |
| PTBSERVIOL | South | 2.32 [1.45, 3.69] | 1.70 [0.70, 4.11] | 2.83 [1.61, 4.94] | 2.08 [1.16, 3.69] | 1.25 [0.58, 2.66] | 2.93 [1.47, 5.73] | 12.46 |
| | Central | 2.12 [1.18, 3.79] | 1.19 [0.39, 3.62] | 2.92 [1.48, 5.65] | 1.40 [0.72, 2.71] | 2.36 [1.07, 5.12] | 0.49 [0.16, 1.50] | 7.06 |
| | West | 1.34 [0.67, 2.67] | 0.75 [0.28, 2.01] | 2.02 [0.85, 4.75] | 1.23 [0.59, 2.56] | 1.42 [0.55, 3.63] | 1.06 [0.38, 2.93] | 4.79 |
| | Valley | 0.40 [0.15, 1.02] | 0.13 [0.02, 0.74] | 0.70 [0.24, 2.05] | 1.27 [0.57, 2.80] | 1.79 [0.65, 4.84] | 0.80 [0.29, 2.21] | 3.93 |
| | Remainder | 0.78 [0.37, 1.61] | 0.95 [0.39, 2.28] | 0.57 [0.16, 2.01] | 0.88 [0.43, 1.80] | 0.27 [0.07, 1.04] | 1.45 [0.65, 3.17] | N/A |

The last column in the preceding table gives the ratio of the estimated crime rate from the *Los Angeles Times* statistics for the subarea to the estimated crime rate for the Valley subarea.

Year 1 to Year 2 Change

Table J-4. Local area change estimates for Philadelphia

| Variable | Area | ILS change, percent (%) | ILS, 95% confidence Interval | PLS change, percent (%) | PLS, 95% confidence Interval | Local jurisdiction, percent change (%) |
|-------------|-----------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|---|
| HHTBPROP1 | Central | 2.74 | [-130.1, 135.6] | 2.04 | [-97, 101] | -0.29 |
| | East | -1.60 | [-79.6, 76.4] | -1.76 | [-87.0, 83.5] | 3.24 |
| | South | -2.80 | [-138.1, 132.5] | -7.05 | [-348.1, 334.0] | -2.97 |
| | Southwest | 1.39 | [-66.8, 69.5] | -5.07 | [-250.1, 240.0] | -0.86 |
| | Northwest | -2.92 | [-144.2, 138.4] | -5.33 | [-262.5, 251.9] | 1.15 |
| | Northeast | 3.11 | [-147.4, 153.6] | -2.99 | [-148.5, 142.5] | 0.23 |
| | Remainder | 0.46 | [-21.6, 22.6] | -0.99 | [-48.8, 46.8] | N/A |
| HHTBPROP2 | Central | 3.82 | [-181.3, 188.9] | 2.76 | [-131.4, 137.0] | -0.29 |
| | East | -1.29 | [-63.8, 61.2] | -1.54 | [-76.7, 73.6] | 3.24 |
| | South | -3.05 | [-150.5, 144.4] | -9.70 | [-479.4, 460] | -2.97 |
| | Southwest | 0.83 | [-40.1, 41.8] | -6.25 | [-308.9, 296.4] | -0.86 |
| | Northwest | -3.36 | [-165.6, 158.9] | -8.07 | [-397.4, 381.3] | 1.15 |
| | Northeast | 2.92 | [-138.7, 144.6] | -5.44 | [-269.1, 258.2] | 0.23 |
| | Remainder | 0.31 | [-14.8, 15.4] | -3.97 | [-195.7, 187.8] | N/A |
| HHTBMVTHEFT | Central | 0.71 | [-33.7, 35.2] | -1.08 | [-53.2, 51.0] | -0.29 |
| | East | 0.68 | [-32.2, 33.6] | -0.84 | [-41.3, 39.6] | 3.24 |
| | South | 0.54 | [-25.6, 26.7] | 0.43 | [-20.5, 21.4] | -2.97 |
| | Southwest | -0.33 | [-16.3, 15.6] | -0.77 | [-38, 36.5] | -0.86 |
| | Northwest | -0.43 | [-21.5, 20.7] | -0.93 | [-45.9, 44.0] | 1.15 |
| | Northeast | 1.02 | [-48.4, 50.4] | -1.12 | [-55.6, 53.4] | 0.23 |
| | Remainder | -1.16 | [-57.4, 55.0] | 0.11 | [-5.3, 5.6] | N/A |

Table J-4. Local area change estimates for Philadelphia (continued)

| Variable | Area | ILS change, percent (%) | ILS, 95% confidence interval | PLS change, percent (%) | PLS, 95% confidence interval | Local jurisdiction change, percent (%) |
|-------------|-----------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|--|
| HHTBVIOL1 | Central | 0.95 | [−44.7, 46.6] | 0.82 | [−39.3, 40.9] | −0.33 |
| | East | 2.46 | [−117.0, 121.9] | 3.66 | [−173.0, 180.3] | −1.47 |
| | South | −2.15 | [−106.4, 102.1] | −0.50 | [−24.5, 23.5] | −1.33 |
| | Southwest | 3.70 | [−175.6, 183.0] | 2.39 | [−113.3, 118.1] | 0.50 |
| | Northwest | −0.24 | [−12.2, 11.7] | −2.28 | [−112.4, 107.8] | −0.54 |
| | Northeast | 4.44 | [−210.3, 219.2] | 1.64 | [−77.7, 81.0] | −0.52 |
| | Remainder | −1.16 | [−57.3, 55.0] | −0.21 | [−10.4, 10.0] | N/A |
| | Central | 0.32 | [−15.3, 15.9] | 0.31 | [−16.8, 17.4] | −0.33 |
| | East | 2.99 | [−142.3, 148.3] | 1.73 | [−82.2, 85.6] | −1.47 |
| | South | −0.20 | [−10.5, 10.1] | 1.45 | [−69.3, 72.2] | −1.33 |
| HHTBVIOL2 | Southwest | 4.60 | [−218.1, 227.3] | −0.24 | [−13.3, 12.8] | 0.50 |
| | Northwest | −2.35 | [−115.6, 110.9] | −2.24 | [−110.9, 106.4] | −0.54 |
| | Northeast | 5.00 | [−237.5, 247.5] | −0.14 | [−8.4, 8.1] | −0.52 |
| | Remainder | −0.70 | [−34.9, 33.5] | −0.84 | [−41.8, 40.2] | N/A |
| | Central | 0.50 | [−23.9, 24.9] | −0.83 | [−41.0, 39.4] | −0.71 |
| | East | 2.11 | [−100.2, 104.4] | 3.68 | [−173.8, 181.2] | −1.59 |
| | South | −1.56 | [−77.3, 74.2] | −1.69 | [−83.4, 80.0] | 0.20 |
| | Southwest | 2.96 | [−140.9, 146.8] | 0.86 | [−41.1, 42.8] | −0.40 |
| | Northwest | −0.24 | [−12.2, 11.7] | −1.85 | [−91.2, 87.5] | −1.01 |
| | Northeast | 4.29 | [−203.3, 211.9] | 0.33 | [−15.3, 16.0] | −0.28 |
| HHTBSERVIOL | Remainder | −1.17 | [−58.1, 55.8] | −0.11 | [−5.9, 5.6] | N/A |

Table J-4. Local area change estimates for Philadelphia (continued)

| Variable | Area | ILS change, percent (%) | ILS, 95% confidence interval | PLS change, percent (%) | PLS, 95% confidence interval | Local jurisdiction change, percent (%) |
|------------|-----------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|--|
| PTBVIOL1 | Central | 0.32 | [-15.1, 15.7] | 1.38 | [-65.9, 68.6] | -0.33 |
| | East | 0.23 | [-11.7, 12.1] | 1.46 | [-69.1, 72.0] | -1.47 |
| | South | -1.29 | [-64.0, 61.4] | 0.13 | [-6.8, 7.1] | -1.33 |
| | Southwest | 1.70 | [-81.1, 84.5] | 1.13 | [-53.6, 55.9] | 0.50 |
| | Northwest | 0.87 | [-41.6, 43.3] | -1.73 | [-85.2, 81.7] | -0.54 |
| | Northeast | 2.89 | [-137.0, 142.8] | -0.06 | [-4.2, 4.1] | -0.52 |
| | Remainder | -0.96 | [-47.4, 45.5] | -0.17 | [-8.7, 8.4] | N/A |
| PTBVIOL2 | Central | -0.09 | [-5.9, 5.7] | 1.93 | [-92.1, 96.0] | -0.33 |
| | East | 0.38 | [-19.1, 19.8] | 0.54 | [-25.6, 26.7] | -1.47 |
| | South | -0.52 | [-25.9, 24.8] | 2.02 | [-96.3, 100.4] | -1.33 |
| | Southwest | 2.12 | [-100.8, 105.1] | -0.16 | [-8.6, 8.3] | 0.50 |
| | Northwest | -0.51 | [-25.1, 24.1] | -1.40 | [-69.3, 66.5] | -0.54 |
| | Northeast | 2.96 | [-140.2, 146.1] | -1.41 | [-69.8, 67.0] | -0.52 |
| | Remainder | -0.63 | [-31.3, 30.1] | -0.47 | [-23.3, 22.3] | N/A |
| PTBSERVIOL | Central | 0.03 | [-3.3, 3.4] | 0.30 | [-15.1, 15.7] | -0.71 |
| | East | -0.25 | [-12.7, 12.2] | 1.74 | [-82.3, 85.8] | -1.59 |
| | South | -0.90 | [-44.4, 42.6] | -0.79 | [-38.8, 37.2] | 0.20 |
| | Southwest | 1.39 | [-66.0, 68.8] | 0.29 | [-14.1, 14.6] | -0.40 |
| | Northwest | 0.87 | [-41.6, 43.3] | -1.36 | [-67.1, 64.3] | -1.01 |
| | Northeast | 2.87 | [-136.0, 141.8] | -0.04 | [-3.4, 3.3] | -0.28 |
| | Remainder | -0.87 | [-43.1, 41.4] | -0.24 | [-11.8, 11.3] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-5. Local area change estimates for Chicago

| Variable | Area | ILS change, percent (%) | ILS, 95% confidence interval | PLS change, percent (%) | PLS, 95% confidence interval | Local jurisdiction change, percent (%) |
|-------------|-----------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|--|
| HHTBPROP1 | South | -4.51 | [-222.3, 213.3] | -3.63 | [-179.7, 172.4] | 0.01 |
| | Central | 3.67 | [-174.4, 181.7] | 0.60 | [-29.0, 30.2] | 4.38 |
| | North | 2.14 | [-101.6, 105.9] | 0.33 | [-17.2, 17.8] | 1.73 |
| | Remainder | 1.57 | [-74.5, 77.6] | -6.58 | [-324.6, 311.5] | N/A |
| HHTBPROP2 | South | -2.41 | [-119.1, 114.3] | -1.69 | [-83.7, 80.3] | 0.01 |
| | Central | 5.20 | [-246.6, 257] | -2.21 | [-109.1, 104.7] | 4.38 |
| | North | 2.65 | [-125.7, 131.0] | -0.21 | [-11.6, 11.2] | 1.73 |
| | Remainder | 2.01 | [-95.6, 99.6] | -6.86 | [-338.7, 325.0] | N/A |
| HHTBMVTHEFT | South | 0.67 | [-31.9, 33.2] | 0.53 | [-25.4, 26.5] | 0.01 |
| | Central | -0.82 | [-40.4, 38.8] | -1.26 | [-62.3, 59.8] | 4.38 |
| | North | 1.04 | [-49.1, 51.2] | -0.34 | [-16.9, 16.2] | 1.73 |
| | Remainder | 0.20 | [-9.8, 10.2] | 0.14 | [-6.6, 6.9] | N/A |
| HHTBVIOL1 | South | 1.20 | [-57.6, 60.0] | 0.60 | [-28.4, 29.6] | 2.08 |
| | Central | 3.15 | [-149.7, 156.0] | 4.79 | [-227.1, 236.7] | 3.05 |
| | North | 1.89 | [-89.5, 93.3] | 5.08 | [-240.9, 251.1] | 1.26 |
| | Remainder | 0.20 | [-9.6, 10.0] | 2.02 | [-95.6, 99.6] | N/A |
| HHTBVIOL2 | South | 0.95 | [-46.2, 48.1] | 0.57 | [-27.2, 28.4] | 2.08 |
| | Central | 4.86 | [-230.7, 240.4] | 4.19 | [-198.7, 207.1] | 3.05 |
| | North | 3.17 | [-150.4, 156.7] | 5.08 | [-241.0, 251.2] | 1.26 |
| | Remainder | -0.86 | [-42.1, 40.4] | 2.72 | [-128.9, 134.4] | N/A |
| HHTBSERVIOL | South | 2.62 | [-124.7, 129.9] | 2.67 | [-126.4, 131.7] | 2.21 |
| | Central | 2.26 | [-107.3, 111.8] | 2.70 | [-128.3, 133.7] | 2.35 |
| | North | 1.31 | [-62.0, 64.6] | 2.43 | [-115.2, 120.1] | 1.18 |
| | Remainder | 0.47 | [-22.3, 23.2] | 1.08 | [-50.9, 53.0] | N/A |
| PTBVIOL1 | South | 1.66 | [-78.9, 82.2] | 0.70 | [-33.3, 34.7] | 2.08 |
| | Central | 2.19 | [-104.2, 108.6] | 3.18 | [-150.8, 157.2] | 3.05 |
| | North | 1.84 | [-87.3, 91.0] | 3.37 | [-160.2, 167.0] | 1.26 |
| | Remainder | 0.45 | [-21.3, 22.2] | 1.13 | [-53.6, 55.8] | N/A |

Appendix J
Estimates from Subareas of Philadelphia, Chicago, and Los Angeles

Table J-5. Local area change estimates for Chicago (continued)

| Variable | Area | ILS change, percent (%) | ILS, 95% confidence interval | PLS change, percent (%) | PLS, 95% confidence interval | Local jurisdiction change, percent (%) |
|------------|-----------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|--|
| PTBVIOL2 | South | 1.68 | [−80.3, 83.7] | 1.22 | [−57.9, 60.4] | 2.08 |
| | Central | 3.34 | [−158.6, 165.3] | 3.62 | [−171.9, 179.1] | 3.05 |
| | North | 2.48 | [−117.5, 122.5] | 3.32 | [−157.4, 164.1] | 1.26 |
| | Remainder | 0.05 | [−2.6, 2.7] | 2.02 | [−95.6, 99.7] | N/A |
| PTBSERVIOL | South | 2.43 | [−115.6, 120.4] | 1.57 | [−74.3, 77.4] | 2.21 |
| | Central | 1.91 | [−90.8, 94.6] | 1.52 | [−72.1, 75.1] | 2.35 |
| | North | 1.93 | [−91.7, 95.5] | 1.83 | [−87.3, 90.9] | 1.18 |
| | Remainder | 0.56 | [−26.7, 27.8] | 0.70 | [−33.2, 34.6] | N/A |