



Update on the NCVS Instrument Redesign: Operational Pilot Test and Split Sample

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The Bureau of Justice Statistics (BJS) is conducting a multiyear effort to improve the efficiency, reliability, and utility of the National Crime Victimization Survey (NCVS). Through this effort, BJS has redesigned the entire survey instrument, which includes a household roster, a victimization screener, and a detailed crime incident report.¹

This summary provides an update on the next steps in the instrument redesign timeline and describes operational plans to test and phase in the new survey instrument. In coordination with the U.S. Census Bureau, BJS will—

- conduct an operational pilot test in 2023
- implement a split-sample design with the new and current instruments in 2024
- fully phase in the new NCVS instrument by 2025.

For more information on the NCVS instrument redesign, see <https://bjs.ojp.gov/programs/ncvs/instrument-redesign>.

2023 NCVS instrument redesign operational pilot test

BJS, in coordination with the Census Bureau, will conduct an operational pilot test from July through September 2023.² The purpose of this pilot test is twofold: (1) to

¹See *Update on the NCVS Instrument Redesign* (NCJ 304055, BJS, March 2022) for more information on the new instrument.

²On behalf of BJS, Westat conducted the NCVS Instrument Redesign Field Test of the new instrument, using Westat field interviewers. See *National Crime Victimization Survey Redesign Field Test Topline Report: Comparing Condition 1 and Condition 2 by Interleaving Treatment* (NCJ 303980, BJS, March 2022) for more information.

The National Crime Victimization Survey

The National Crime Victimization Survey (NCVS) is the nation's primary source of information on criminal victimization. Each year, data are obtained from a nationally representative sample of about 240,000 persons in about 150,000 U.S. households. Persons age 12 or older are interviewed on the frequency, characteristics, and consequences of criminal victimization in the United States.

The NCVS collects information on nonfatal personal crimes and household property crimes, both reported and not reported to police. For more information, see the NCVS data collection page at <https://bjs.ojp.gov/data-collection/ncvs>.

assess the new survey instrument and protocols (i.e., how the interviews are conducted) in the Census Bureau data collection environment and (2) to test all systems and operational procedures within the Census Bureau data collection environment. The pilot test will inform field protocols and interviewer training needs for the larger split-sample administration in 2024 and full-scale implementation of the new NCVS instrument in 2025.

Pilot test sample selection

The pilot test will include approximately 3,500 housing units, with 45% from the existing sample and 55% from the reserve sample.³ Given the panel design of the survey, some respondents will be interviewed using both instruments over the course of the panel. The inclusion of the existing sample in the pilot will test interview procedures that transmit information collected from a previous interview, using the current instrument, into the new instrument during the pilot interview. It will also create records from interviews using the new instrument for households entering the sample.

In consultation with sample design and field staff at the Census Bureau, BJS examined several factors to determine the geographic areas in which to conduct the pilot study. These factors included the number of available field staff, hiring and turnover projections, and current workloads. The 3,500 pilot sample housing units will be distributed to the primary sampling units (PSUs) in proportion to the size of the PSUs in the pilot study. These sample households will be excluded from official estimates published by BJS, and weights for production estimates will be adjusted accordingly.

³The NCVS sample selection process is designed to select more sample than needed to produce the NCVS estimates. The sample not used for production is referred to as reserve. This reserve sample is not used for interviews unless special situations, such as testing multiple instruments, require an additional sample. See *National Crime Victimization Survey, 2016: Technical Documentation* (NCJ 251442, BJS, December 2017) for more information.

Pilot test goals and limitations

The Census Bureau will monitor quality indicators (e.g., paradata indicators, timing, nonresponse rates, item missingness rates) and track issues in the computer-assisted personal interviewing instrumentation and case management systems during pilot data collection. Pilot test data from these systems will be used only to identify and diagnose operational challenges with field protocols and interview procedures. Pilot test estimates will not be released. During this period, BJS and the Census Bureau will assess whether any changes to field procedures or training must be implemented before moving to the split-sample administration.

There are two main limitations related to the size and scale of the operational pilot test:

1. The pilot test sample is neither representative of the United States nor designed to test for differences between the new and current NCVS instrument. BJS conducted a large-scale national field test from October 2019 to March 2020 to compare the performance of the current instrument to that of the new instrument.⁴
2. It will not be feasible to test all possible combinations of questions in the new instrument during the pilot study. BJS and the Census Bureau plan to conduct additional internal testing to ensure the instrument is adequately tested in the Census environment prior to the split sample.

⁴For more information, see *National Crime Victimization Survey Redesign Field Test Topline Report: Comparing Condition 1 and Condition 2 by Interleaving Treatment* (NCJ 303980, BJS, March 2022).

2024 NCVS instrument redesign split sample

BJS will coordinate with the Census Bureau to concurrently administer the new and current NCVS instruments in 2024 through a split-sample design (figure 1). The sample will be divided so that approximately half of households will be interviewed using the new instrument and half will be interviewed using the current instrument. This design will allow BJS and the Census Bureau to produce two sets of victimization estimates for 2024 and measure statistically significant differences in victimization both over time and between instruments.

Split-sample design

In a typical year, a nationally representative sample of about 240,000 persons in about 150,000 households is interviewed for the NCVS. The NCVS sample design has two stages.⁵

- The first stage of sampling involves the definition, stratification, and selection of PSUs, which are defined as large metropolitan areas, counties, or groups of counties. First-stage sampling occurs once every 10 years to account for shifts in the population identified through the most recent decennial census.
- The second stage of sampling occurs every year for housing units and every 3 years for group quarters. Within the PSUs selected, the sampling process

⁵For more information about the NCVS sample design, see <https://bjs.ojp.gov/ncvs-sample-design>.

identifies addresses to be included in the sample, and interviews are conducted with persons and households at those addresses.

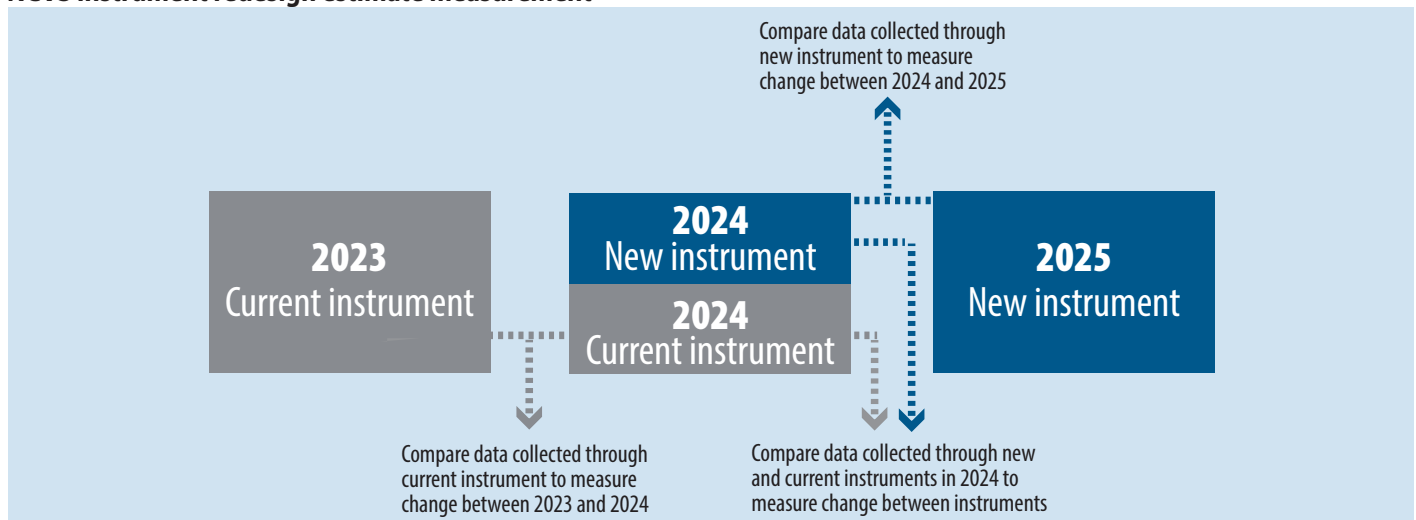
The 2024 split sample will be applied to the second-stage sample selection such that instrument assignment is designated at the housing unit level.⁶ The sample will be randomly split within PSUs, meaning that about half of the NCVS sample cases in each PSU will receive the current instrument and half will receive the new instrument. The design does not restrict which version of the instrument a field representative (FR) or interviewer can administer, meaning FRs will be assigned cases using both the current and new instruments. The aggregate 2024 sample will remain steady at about 240,000 persons in about 150,000 households.

Several alternative designs were considered throughout the planning process and in consultation with members of the NCVS Redesign Technical Review Panel, a group of subject matter and methodological experts who have provided input on the instrument redesign. For more information about the Technical Review Panel, see Appendix 10 in *NCVS Instrument Redesign Field Test Methodology* (NCJ 306155, BJS, May 2023). This report does not discuss the alternative designs but does describe three critical operational factors that impacted the final design.⁷

⁶In this context, housing units include group quarters.

⁷A fourth factor, cost, was also examined throughout the planning process to ensure a balance between research priorities and judicious financial management.

FIGURE 1
NCVS instrument redesign estimate measurement



1. Estimate precision

Decreasing sample size results in a decrease in estimate precision. Because the sample will effectively be split in half, estimate precision in 2024 will be lower during the transition period, when both instruments are in the field. BJS considered increasing the sample temporarily during this transition to (theoretically) increase precision. Operationally, however, this approach would introduce complexities and risk. For example, a sample increase would—

- a. require an influx of time in sample (TIS) 1 cases in the first half of 2024. Even with bounding adjustments, this could artificially increase victimization estimates due to telescoping because respondents on their first interview tend to recall incidents outside of the reference period.⁸ Additionally, TIS 1 interviews have historically been conducted in person, so this approach would prompt either a change in procedures or an incremental burden on field staff to complete more interviews in person instead of by phone.
- b. require an increase in field staff. Past research has shown that new FRs typically collect more victimization incidents during the interview than tenured staff do, which could also artificially increase victimization estimates.⁹

Although estimate precision will be reduced during the transition due to the split-sample design, BJS and the Census Bureau determined that the stability gained from maintaining the current sample size over the long term outweighs the loss of precision.

2. Field operations structure and logistics

Field operations at the Census Bureau are organized across six regional offices. Regional offices are further divided into smaller geographic areas used by all Census Bureau household surveys to staff supervisors and FRs based on workload demands

across all surveys. This organizational structure impedes a sample design that designates instrument assignment at the FR level without structural reorganization or a substantial increase in FR staff. Instead, instrument assignment is made at the housing unit level.

This design allows field operations to maintain the current procedure for making FR case assignments within the PSU so that the FR who lives physically closest to the household begins work on the case. It also allows the flexibility to reassign cases during the interview month to maximize contact attempts for each household. Finally, this keeps workloads consistent and preserves the rapport that FRs establish for longitudinal cases.

3. Training procedures

Currently, FRs receive training on the core NCVS instrument when they are hired. There is no refresher or annual training on the NCVS for existing FRs. Previous research has shown that training for new and existing staff can affect victimization estimates.¹⁰

All FRs will be trained on the new instrument prior to the split-sample field test in 2024, with explicit instructions to continue conducting interviews using the current instrument as they have always done. However, training on the new instrument could affect how staff conduct interviews with the current instrument. Field staff hired during 2024 will be trained on the current instrument first and on the new instrument later. A variety of quality indicators will be closely monitored throughout the transition to track performance and employ training interventions as needed.

An overarching concern with this design is the potential for contamination between the instruments. Contamination occurs when interviewers apply information from training on the new instrument to interviews with the current instrument, changing the way the latter interviews are conducted. This change in interviewer behavior could result in respondents reporting more or fewer victimizations. To monitor the presence of contamination, BJS and the Census Bureau are identifying paradata indicators and other data comparisons that can be tracked over time.

⁸In the NCVS, a bounding weighting adjustment is applied to compensate for the use of the first interview and the potential inclusion of victimizations that are out of the reference period.

⁹See Gfroerer, J., Eyerman, J., & Chromy, J. (Eds.). (2002). *Redesigning an ongoing national household survey: Methodological issues*. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. <https://permanent.fdlp.gov/lps33529/redesigningNHSDA.pdf>; Killion, R.A. (2010). *National crime and victimization 2006 estimate problems research: Determining the effect of the 2006 methodological changes to the National Crime Victimization Survey on the 2006 crime rate estimates* [Internal memorandum]; and *Criminal Victimization, 2016: Revised* (NCJ 252121, BJS, October 2018).

¹⁰See *Criminal Victimization, 2011* (NCJ 239437, BJS, October 2012); and Schafer, J. L. (2013). *Effects of interviewer refresher training and performance monitoring in the 2011 National Crime Victimization Survey*. U.S. Census Bureau. <https://www.census.gov/library/working-papers/2013/adrm/rrs2013-07.html>.

2025 full implementation of new instrument

Figure 2 presents the timeline for this multiyear redesign project. In 2025, all interviews will be conducted using the new instrument. BJS typically releases annual estimates from the NCVS in the fall of the year following data collection, so victimization estimates from the 2024 NCVS would normally be released in fall of 2025. However, due to the complexities associated with building new data processing systems, analyzing two sets of results, and developing two sets of data products, 2024 estimates may follow a delayed schedule.

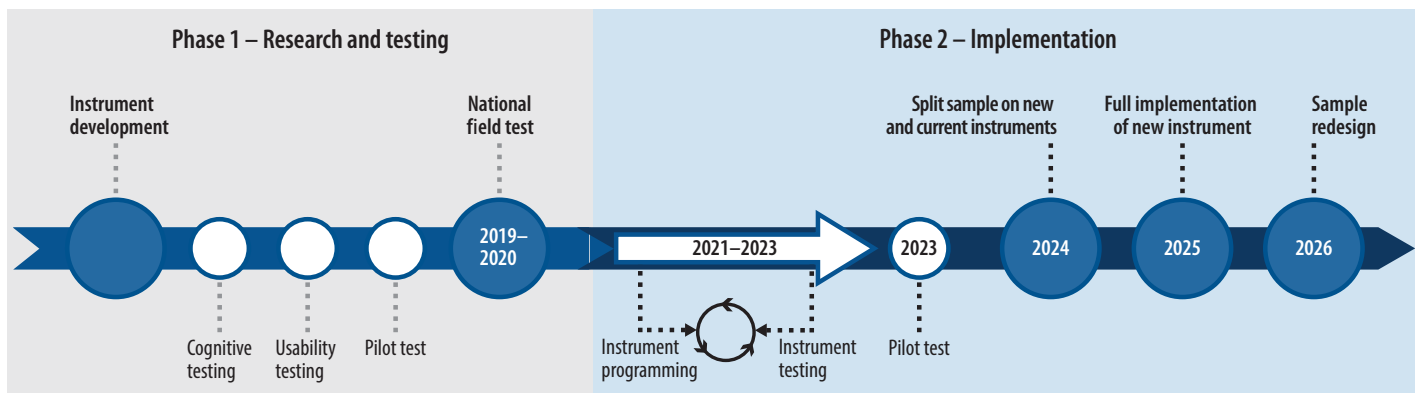
Estimates for both current and new instruments and estimates over time will be examined. This will help provide estimate stability in preparation for the 2026 sample redesign, which will update the first-stage sample

of the NCVS to reflect changes in the U.S. population based on the 2020 decennial census. The phase-in of new PSUs is scheduled to begin in 2025 and continue into 2026.

To focus efforts on the implementation of the new instrument, BJS will not administer any of the NCVS supplements (Identity Theft Supplement, Police-Public Contact Survey, School Crime Supplement, Supplemental Contact Survey, School Crime Supplement, Supplemental Fraud Survey, or Supplemental Victimization Survey) in 2023 or 2024. BJS intends to restart supplement administration in 2025 and is currently evaluating which supplements to schedule.

Additional information and details on the implementation phase of the redesign will be made available as the work progresses.

FIGURE 2
NCVS instrument redesign timeline



Note: The Phase 2 schedule is preliminary and subject to change.
Source: Bureau of Justice Statistics, 2023.

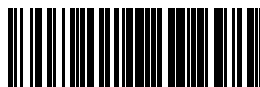


The Bureau of Justice Statistics of the U.S. Department of Justice is the principal federal agency responsible for measuring crime, criminal victimization, criminal offenders, victims of crime, correlates of crime, and the operation of criminal and civil justice systems at the federal, state, tribal, and local levels. BJS collects, analyzes, and disseminates reliable statistics on crime and justice systems in the United States, supports improvements to state and local criminal justice information systems, and participates with national and international organizations to develop and recommend national standards for justice statistics. Alexis R. Piquero, PhD, is the director.

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