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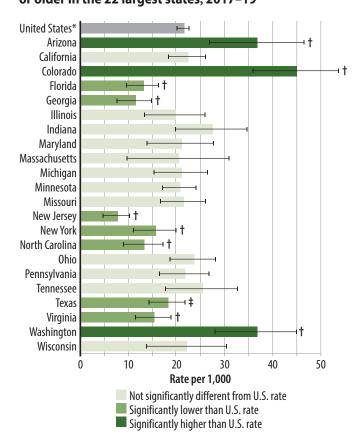
# Criminal Victimization in the 22 Largest U.S. States, 2017–2019

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mong the 22 most populous states, 3 had violent victimization rates that were higher than the rate for the United States (21.6 violent victimizations per 1,000 persons age 12 or older) during the aggregate period of 2017 to 2019 (figure 1). Seven states had rates that were lower. These findings are based on data from the National Crime Victimization Survey (NCVS).¹ The NCVS is the nation's primary source of data on criminal victimization, including crimes reported and not reported to police. Violent victimization in the NCVS includes rape or sexual assault, robbery, and aggravated and simple assault.

This is the Bureau of Justice Statistics' (BJS) first release of subnational nonfatal violent and property victimization data collected directly through the NCVS. To produce direct subnational victimization statistics, BJS redesigned the NCVS sample in 2016 to accommodate precise estimates with data aggregated over a minimum of 3 years.<sup>2</sup> This report presents selected state-level estimates of violent and property victimization for the 3-year aggregate period of 2017–19 in the 22 largest U.S. states: Arizona, California, Colorado, Florida, Georgia, Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Virginia, Washington,

# FIGURE 1 Rate of violent victimization per 1,000 persons age 12 or older in the 22 largest states, 2017–19



Note: Violent victimization includes rape or sexual assault, robbery, aggravated assault, and simple assault. Estimates include 95% confidence intervals. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307). See appendix table 1 for estimates and standard errors. See appendix table 7 for person population estimates.

†Difference with comparison group is significant at the 95% confidence level. ‡Difference with comparison group is significant at the 90% confidence level. Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017–2019.



<sup>&</sup>lt;sup>1</sup>In this report, significance is reported at the 95% and 90% confidence levels. See figures and appendix tables for testing on specific findings. Caution is required when comparing estimates not explicitly discussed in this report.

<sup>&</sup>lt;sup>2</sup>BJS increased the size of the NCVS core sample and reallocated its distribution to enable production of state-level victimization estimates for the 22 states and certain metropolitan areas within those states. See *Criminal Victimization*, 2016: Revised (NCJ 252121, BJS, October 2018).

<sup>\*</sup>Comparison group.

#### HIGHLIGHTS

#### During 2017-19:

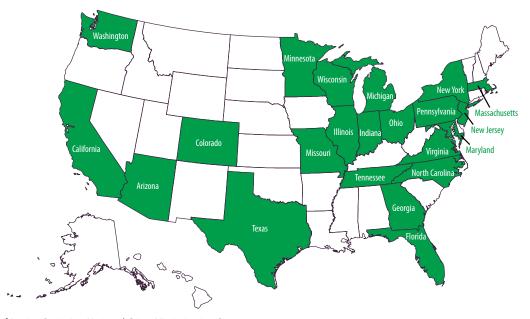
- The 22 most populous states accounted for 79% of the U.S. person population and 75% of the violent victimizations captured by the NCVS.
- Three states had higher rates of violent victimization than the country overall (21.6 victimizations per 1,000 persons age 12 or older), while seven had lower rates.
- Property crime rates were higher than the national rate (105.9 victimizations per 1,000 households) in 6 of the 22 states and were lower in 12.
- Four of the 22 states had rates above the U.S. rate of 19.7 household burglaries per 1,000 households, while 8 states had rates below the U.S. rate.
- Across the 22 states, between 34% and 58% of violent crimes were reported to police.
- For property crimes, the percentage reported to police was between 28% and 44% across the 22 states.

and Wisconsin (map 1). Aggregating 3 years of state-level NCVS victimization estimates increases the reliability and stability of these estimates in each state.<sup>3</sup>

This report offers the first picture of victimization rates across states and how their reported and unreported crime levels vary. Though crime patterns may differ within individual states, state-level data can provide more detailed information than is available from the national NCVS estimates and other NCVS estimates

historically produced for BJS reports, such as regional estimates.<sup>4</sup> Crime estimates, even at the national level, are subject to different types of potential error. The incidence of crime at local levels is also correlated with various factors that may be difficult to capture within a single survey. Readers are cautioned against comparing states based solely on the statistics in this report without considering the fuller context of local conditions and characteristics. See *Methodology* for more information.

MAP 1
22 states in the direct subnational estimation program for the National Crime Victimization Survey, 2017–19



Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2017–19.

<sup>&</sup>lt;sup>3</sup>The report presents estimates that have adequate state-level response rates and sample sizes and adhere to protocols to reduce disclosure risk. Restricted-use data, which include the full set of NCVS variables, are available for use in approved research projects. For more information on applying for access, see https://bjs.ojp.gov/standard-application-process.

<sup>&</sup>lt;sup>4</sup>See National Crime Victimization Survey Local-Area Crime Survey: Field Test Methodology Report (NCJ 254519, BJS third-party report, April 2020).

#### **Victimization estimates**

## Violent victimization rates exceeded the U.S. rate in 3 of the 22 most populous states

Colorado (45.0 violent victimizations per 1,000 persons age 12 or older), Arizona (36.8 per 1,000), and Washington (36.8 per 1,000) had higher violent crime rates than the nation (21.6 per 1,000) during the 3-year period of 2017–19. Seven states had lower rates of violent crime than the U.S. rate: Texas (18.3 per 1,000), New York (15.7 per 1,000), Virginia (15.4 per 1,000), North Carolina (13.3 per 1,000), Florida (13.2 per 1,000), Georgia (11.5 per 1,000), and New Jersey (7.7 per 1,000). The remaining 12 states had violent crime rates that were not statistically different from the national rate.

# Property crime rates were higher than the U.S. rate in 6 of the 22 largest states

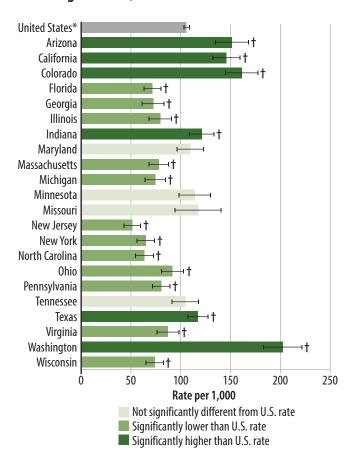
During 2017–19, the overall property crime rate in the United States was 105.9 victimizations per 1,000 households (figure 2). Property crime includes burglary, trespassing, motor vehicle theft, and other household theft. All but 4 of the 22 largest states had property crime rates that were significantly different from the national rate. Six states had higher rates than the nation's. Higher rates were reported in Washington (202.5 per 1,000), Colorado (161.3 per 1,000), Arizona (151.5 per 1,000), California (145.9 per 1,000), Indiana (121.1 per 1,000), and Texas (117.3 per 1,000).

Property crime rates were lower than the U.S. rate in 12 states: Ohio (91.8 per 1,000 households), Virginia (87.0 per 1,000), Pennsylvania (80.5 per 1,000), Illinois (79.4 per 1,000), Massachusetts (78.1 per 1,000), Michigan (74.3 per 1,000), Wisconsin (73.9 per 1,000), Georgia (72.4 per 1,000), Florida (71.7 per 1,000), New York (64.8 per 1,000), North Carolina (63.5 per 1,000), and New Jersey (51.5 per 1,000).

Of the 22 states, Texas was unique in its pattern of significant differences from the national rates of violent and property crime in 2017–19. Texas had a significantly lower violent crime rate (18.3 victimizations per 1,000 persons age 12 or older) and a significantly higher property crime rate (117.3 victimizations per 1,000 households) than the country did overall.

#### FIGURE 2

### Rate of property victimization per 1,000 households in the 22 largest states, 2017–19



Note: Property crime includes burglary or trespassing, motor vehicle theft, and other household theft. Estimates include 95% confidence intervals. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307). See appendix table 2 for estimates and standard errors. See appendix table 8 for household population estimates.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level. Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017–2019.

# BJS redesigned the National Crime Victimization Survey sample to produce subnational crime estimates

The Bureau of Justice Statistics (BJS) has used the National Crime Victimization Survey (NCVS) to produce annual national-level data on nonfatal violent and property crimes since the early 1970s. Following the recommendations of the 1967 President's Commission on Law Enforcement and Administration of Justice, the National Crime Survey (NCS) was developed to complement the FBI's Uniform Crime Reporting Program Summary Reporting System (UCR SRS) by providing data from the perspective of victims and on crimes not reported to police.<sup>5</sup> The survey was first administered in 1973, and the sample was designed to provide reliable estimates for the nation as a whole. To do so, the NCVS has collected information from a sample of U.S. households that represent the United States. Much of the NCVS's value as a national survey has come from its level of detail on victims and offenders in crimes both reported and not reported to police. BJS began exploring ways to restructure the NCVS sample due, in part, to sustained and growing interest in estimates for smaller geographic areas. Direct estimation is one method BJS is using to develop reliable subnational data on victimization.<sup>6</sup>

■ From July 2013 to December 2015, BJS and the U.S. Census Bureau (the agency that carries out the NCVS data collection for BJS) pilot-tested a boost to the NCVS sample in the 11 most populous states: California, Florida, Georgia, Illinois, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Texas. Findings from the pilot test confirmed that the NCVS could also produce estimates at the state level. Based on what was learned, BJS and the Census Bureau planned an increase and reallocation of the NCVS sample in the 22 largest states over a multiyear phase-in period. This new sample design would accommodate precise state-level estimates of personal and property victimization with data aggregated over a minimum of 3 years. The decision to include 22 states, instead of more or fewer, was based on the NCVS sample allocation and on the cost of boosting the sample enough to produce precise, representative estimates of personal and property victimization for individual states. Moreover, the 22 largest states accounted for a majority of both the U.S. person population and the violent victimizations

<sup>5</sup>In 1992, the NCS was renamed the National Crime Victimization Survey, or NCVS. See also *The Nation's Two Crime Measures*, 2011–2020 (NCJ 303385, BJS, February 2022) and *National Crime Victimization Survey*, 2016: Technical Documentation (NCJ 251442, BJS, December 2017).

<sup>6</sup>For more information on BJS's research program on subnational estimation, visit https://bjs.ojp.gov/subnational-estimates-program.

in 2016; during the 3-year aggregate period of 2017-19, they represented 79% of the U.S. person population and 75% of the violent victimizations captured by the national NCVS (calculations not shown). For more information on the pilot test, see *National Crime Victimization Survey Pilot Test to Produce State-Level Estimates* (NCJ 305404, BJS, forthcoming).

- In 2016, BJS and Census implemented the new state-level sample design to coincide with the typical sample design updates that are made every 10 years to reflect changes in the U.S. population based on the most recent decennial census.<sup>7,8</sup>
- In the years that followed, BJS worked with RTI International and the Census Bureau to assess the 2016 sample redesign and ensure the state-level estimates were valid. To identify any potential design flaws, BJS and Census evaluated key aspects of the new sample design, including weighting, geography, and the possible influence of series crimes. (See *Methodology*.) This initial assessment uncovered no major shortcomings with the design.
- Following Census' evaluation, BJS worked with RTI International to independently validate the redesign from both an internal and external perspective. This assessment involved reviewing the following factors in each of the 22 states: how well the sample covered the state, how much survey nonresponse may have biased the estimates, how long respondents had been in the NCVS sample, and how much experience field interviewers had with the NCVS, in addition to weighting and estimate precision. RTI also compared the NCVS state-level estimates to data from external sources, such as the UCR SRS.
- RTI's validation work concluded that no issues were identified that would call into question the validity of state-level victimization estimates produced through the 2016 NCVS sample design. Additionally, the validation results will inform BJS's ongoing subnational estimation work. For more information, see National Criminal Victimization Survey: Validation of State-Level Estimates (NCJ 305403, BJS third-party report, March 2023).

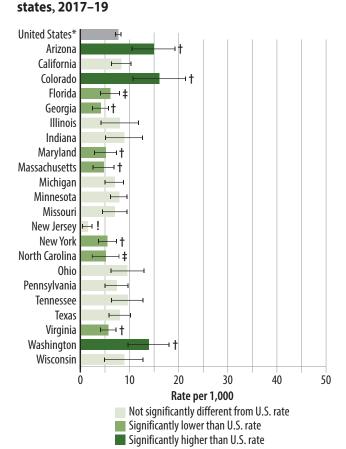
<sup>&</sup>lt;sup>7</sup>For more information on the decennial NCVS sample redesign, see https://bjs.ojp.gov/ncvs-sample-design. As described in *Criminal Victimization*, 2016: Revised (NCJ 252121, BJS, October 2018), several challenges arose while implementing the redesigned sample despite its careful implementation based on the pilot test results and other inputs. BJS determined that these challenges were largely resolved after the first half of 2016, when the bulk of the new sample was phased in.

<sup>&</sup>lt;sup>8</sup>The redesigned NCVS sample was fully phased in by 2018.

# Seven states had a lower rate of violent victimization excluding simple assault than the U.S. rate

The rate of violent victimization excluding simple assault (i.e., rape or sexual assault, robbery, and aggravated assault) varied across the 22 most populous states during 2017–19. The national rate was 7.7 victimizations per 1,000 persons age 12 or older (figure 3). Colorado (16.1 per 1,000), Arizona (15.0 per 1,000), and Washington (13.9 per 1,000) had rates that were higher than the national rate; these states also had higher overall rates of violent victimization than the United States during the 3-year period. The rate of violent victimization excluding simple assault was lower than the U.S. rate in seven states:

# FIGURE 3 Rate of violent victimization excluding simple assault per 1,000 persons age 12 or older in the 22 largest



Note: Violent victimization excluding simple assault includes rape or sexual assault, robbery, and aggravated assault. Estimates include 95% confidence intervals. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY23-POP001-0020). See appendix table 3 for estimates and standard errors. See appendix table 7 for person population estimates.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level. ‡Difference with comparison group is significant at the 90% confidence level. ! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

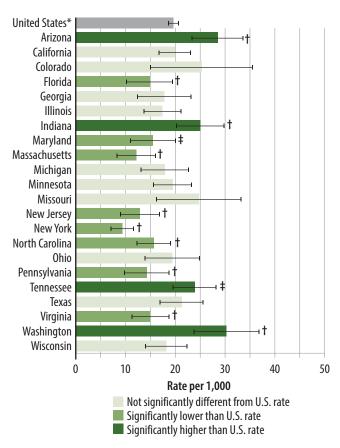
Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017-19.

Florida (6.1 per 1,000), Virginia (5.7 per 1,000), New York (5.5 per 1,000), Maryland (5.2 per 1,000), North Carolina (5.1 per 1,000), Massachusetts (4.8 per 1,000), and Georgia (4.2 per 1,000). Rates in the remaining 12 states were not statistically different from the national rate.

# Eight states had rates of burglary victimization that were lower than the nation's rate

During 2017–19, the rate of burglary victimization ranged from 9.4 to 30.3 victimizations per 1,000 households in the 22 largest states (**figure 4**). Burglary is the unlawful or forcible entry or attempted entry of a place where there was a completed or attempted theft. Burglary

# FIGURE 4 Rate of household burglary victimization per 1,000 households in the 22 largest states, 2017–19



Note: Burglary is the unlawful or forcible entry or attempted entry of places, including a permanent residence, other residence (e.g., a hotel room or vacation residence), or other structure (e.g., a garage or shed) where there was a completed or attempted theft. Estimates include 95% confidence intervals. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307). See appendix table 4 for estimates and standard errors. See appendix table 8 for household population estimates. \*Comparison group.

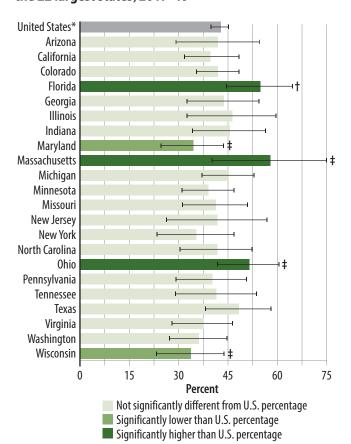
†Difference with comparison group is significant at the 95% confidence level. ‡Difference with comparison group is significant at the 90% confidence level. Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017–19. victimization rates differed from the country's in 12 states. Four had higher rates than the national rate of 19.7 household burglaries per 1,000 households: Washington (30.3 per 1,000), Arizona (28.5 per 1,000), Indiana (25.0 per 1,000), and Tennessee (23.9 per 1,000). Eight had rates that were lower than the nation's: North Carolina (15.8 per 1,000), Maryland (15.5 per 1,000), Virginia (15.0 per 1,000), Florida (14.9 per 1,000), Pennsylvania (14.3 per 1,000), New Jersey (12.9 per 1,000), Massachusetts (12.2 per 1,000), and New York (9.4 per 1,000).

#### Victimization estimates reported to police

# Across the 22 most populous states, 34% to 58% of violent victimizations were reported to police

About 2 in 5 violent victimizations (43%) were reported to police nationwide during 2017–19 (figure 5). Across

FIGURE 5
Percent of violent victimizations reported to police in the 22 largest states, 2017–19



Note: Violent victimization includes rape or sexual assault, robbery, aggravated assault, and simple assault. Estimates include 95% confidence intervals. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307). See appendix table 5 for estimates and standard errors.

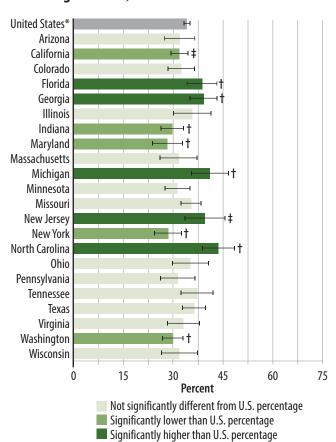
\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level. ‡Difference with comparison group is significant at the 90% confidence level. Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017-19. the 22 largest states, this percentage ranged from 34% in Wisconsin to 58% in Massachusetts. The percentage of violent crimes reported to police was higher than the nation's in three states (58% in Massachusetts, 55% in Florida, and 51% in Ohio) and lower in two (34% in both Maryland and Wisconsin).

## Between 28% and 44% of property crimes were reported to police across the 22 largest states

The share of property victimizations reported to police across the 22 largest states ranged from 28% in Maryland and New York to 44% in North Carolina (figure 6). The percentage of property crimes reported to police exceeded the nation's (34%) in five states: North Carolina (44%), Michigan (41%), New Jersey (39%), Georgia (39%), and Florida (39%). It was below

FIGURE 6
Percent of property victimizations reported to police in the 22 largest states, 2017–19



Note: Property victimization includes burglary or trespassing, motor vehicle theft, and other types of household theft. Estimates include 95% confidence intervals. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307). See appendix table 6 for estimates and standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level. ‡Difference with comparison group is significant at the 90% confidence level. Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017-19. the nation's in five states: California (32%), Indiana (30%), Washington (30%), Maryland (28%), and New York (28%). In the other 12 states, the percentage of

property victimizations reported to police was not statistically different from the country's overall.

#### The nation's two crime measures and subnational estimates

The U.S. Department of Justice administers two statistical programs to measure the magnitude, nature, and impact of crime in the nation: the FBI's Uniform Crime Reporting (UCR) Program and the Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS). The NCVS was established in 1973 to complement the UCR Program and measure crimes not reported to police.

The programs measure a set of criminal offenses that overlap but are not identical, which leads to differences in statistical estimates between the two data sources. The NCVS interviews victims about crimes both reported and not reported to police, while the UCR collects data on crime recorded by law enforcement agencies. In 2021, the FBI UCR Program, in partnership with BJS, implemented new statistical methods using data from the National Incident-Based Reporting System (NIBRS) to generate national estimates of crime. The FBI transitioned to NIBRS as the data collection mechanism for the FBI's annual UCR Program. Compared to the SRS, NIBRS collects more detailed and comprehensive information on offenses, victims,

offenders, and persons arrested. For more information on the similarities and differences between the NCVS and NIBRS, see *The National Crime Victimization*Survey and National Incident-Based Reporting System:

A complementary picture of crime in 2021 (NCJ 305180, BJS, October 2022). For more information on the law enforcement transition to NIBRS reporting, see https://www.fbi.gov/how-we-can-help-you/more-fbi-services-and-information/ucr/nibrs.

State-level victimization estimates from the NCVS provide more detailed information on crimes reported and not reported to police for the 22 most populous states. These data can be coupled with NIBRS data in the same states for a fuller picture of crimes reported by victims and crimes recorded by law enforcement.<sup>9</sup>

<sup>9</sup>For more information on NIBRS, see https://bjs.ojp.gov/national-incident-based-reporting-system-nibrs and https://www.fbi.gov/how-we-can-help-you/need-an-fbi-service-ormore-information/ucr/nibrs. Also, see the BJS Law Enforcement Agency Reported Crime Analysis Tool (LEARCAT) at https://learcat.bjs.ojp.gov and the FBI's Crime Data Explorer at https://cde.ucr.cjis.gov.

#### Methodology

#### Survey coverage

The Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS) is an annual data collection carried out by the U.S. Census Bureau. The NCVS is a self-report survey that is administered annually from January 1 to December 31. Annual NCVS estimates are based on the number and characteristics of crimes that respondents experienced during the prior 6 months, excluding the month of their interview. For example, the 2019 data, one of the three years of data analyzed for this report, reflect a reference period from July 1, 2018 to November 30, 2019, with March 15, 2019, as the midpoint. Crimes are classified by the year of the survey and not by the year of the crime.

The NCVS is administered to persons age 12 or older from a sample of U.S. households that is representative of the nation and of the 22 most populous states. It collects information on nonfatal personal crimes (rape or sexual assault, robbery, aggravated assault, simple assault, and personal larceny (purse snatching and pocket picking)) and household property crimes (burglary or trespassing, motor vehicle theft, and other types of household theft).

The survey collects information on threatened, attempted, and completed crimes. It collects data both on crimes reported and not reported to police. Unless specified otherwise, estimates in this report include threatened, attempted, and completed crimes. In addition to providing annual level and change estimates on criminal victimization, the NCVS is the primary source of information on the nature of criminal victimization incidents in the United States.

Survey respondents provide information about themselves (including age, sex, race, Hispanic origin, marital status, educational level, and income) and whether they experienced a victimization. For each victimization incident, respondents report information about the offender (including age, sex, race, Hispanic origin, and victim-offender relationship), characteristics of the crime (including time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons the crime was or was not reported, and experiences with the criminal justice system. NCVS estimates typically reflect the victim's location of residence, which may differ from where the crime occurred.

Household information, including household-level demographics (e.g., income) and property victimizations committed against the household (e.g., burglary or trespassing), is typically collected from the reference person. The reference person is any responsible adult (age 18 or older) member of the household who is unlikely to permanently leave the household. Because an owner or renter of the sampled housing unit is normally the most responsible and knowledgeable household member, this person is generally designated as the reference person and household respondent. However, a household respondent does not have to be one of the household members who owns or rents the unit.

In the NCVS, a household is defined as a group of persons who all reside at a sampled address. Persons are considered household members when the sampled address is their usual place of residence at the time of the interview and when they have no primary place of residence elsewhere. Once selected, households remain in the sample for 3.5 years, and all eligible persons in these households are interviewed every 6 months, either in person or over the phone, for a total of seven interviews.

First interviews are typically conducted in person, with subsequent interviews conducted either in person or by phone. New households rotate into the sample on an ongoing basis to replace outgoing households that have been in the sample for the full 3.5-year period. The sample includes persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings, and excludes persons living on military bases or in institutional settings, such as correctional or hospital facilities.

The NCVS sample design is currently based on the 2010 decennial census. This sample design supports national estimates using 1 year of data, state-level estimates for the 22 largest states using 3 or more years of data, and potentially subnational estimates at finer geographic levels using 3 or more years of data.<sup>10</sup>

Survey coverage reflects the alignment between the total population that could be selected for a survey sample and the survey's target population. Coverage errors occur when the total population that could be selected for a sample differs from the survey's target population. Coverage ratios are the uncontrolled

<sup>&</sup>lt;sup>10</sup>For more information on the 2010 NCVS sample design, see *National Crime Victimization Survey, 2016: Technical Documentation* (NCJ 251442, BJS, December 2017).

estimated totals divided by independent population totals. Table 1 presents the 2017–19 NCVS household coverage ratios with intermediate and final weights. Intermediate weights are sampling base weights that account for nonresponse but are not adjusted to population totals. Final weights are adjusted to population totals. A coverage ratio of one indicates a perfect match between the survey estimate and the independent total. A coverage ratio lower than one indicates undercoverage, and a coverage ratio greater than one indicates overcoverage.<sup>11</sup>

**TABLE 1**NCVS household coverage ratios, by state, 2017–19

	Coverage ratio				
State	Intermediate weight <sup>a</sup>	Final weight <sup>b</sup>			
United States	0.97	1.01			
Arizona	0.95	1.01			
California	0.98	1.02			
Colorado	0.97	1.04			
Florida	0.94	1.03			
Georgia	0.99	1.03			
Illinois	0.98	1.02			
Indiana	0.98	1.01			
Maryland	0.99	0.96			
Massachusetts	0.98	1.01			
Michigan	0.97	1.01			
Minnesota	0.98	1.01			
Missouri	0.96	1.02			
New Jersey	0.97	0.97			
New York	0.97	1.02			
North Carolina	0.95	1.00			
Ohio	0.98	1.00			
Pennsylvania	0.97	0.96			
Tennessee	0.98	1.03			
Texas	0.99	1.03			
Virginia	0.98	1.01			
Washington	0.97	1.01			
Wisconsin	0.98	0.99			

Note: Coverage ratios were calculated by taking the sum of the intermediate or final weights over the 3-year period from 2017 to 2019. This sum was divided by the total number of occupied housing units from the 2018 American Community Survey 1-year estimates. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

# Measurement of crime in the National Crime Victimization Survey

NCVS data can be used to produce several types of estimates, including victimization, incident, and prevalence rates. Victimization rates measure the extent to which violent and property victimizations occur in a specified population during a specified time. Victimization numbers show the total number of times that people or households are victimized by crime. For crimes affecting persons, NCVS victimization rates are estimated by dividing the number of victimizations that occur during a specified time (T) by the population at risk for those victimizations and multiplying the rate by 1,000. This report focuses on victimization rates. See Methodology in Criminal Victimization, 2021 (NCJ 305101, BJS, September 2022) for more information on other types of statistical estimates that can be produced using NCVS data.

$$Victimization rate_{T} = \begin{cases} Number of victimizations experienced \\ by a specified population_{T} \\ \hline Number of unique persons (or households) in the specified population_{T} \end{cases} \times 1,000$$

Each victimization represents one person (for personal crimes) or one household (for property crimes) affected by a crime. Every victimization experienced by a person or household during the year is counted. For example, if one person experiences two violent crimes during the year, both are counted in the victimization rate. If one household experiences two property crimes, both are counted in the victimization rate.

#### Nonresponse and weighting adjustments

#### **National**

To describe state-level estimates for the 22 most populous states, this report uses aggregate data from 2017–19. National estimates in this report may differ from those in previously published reports where a single year of data was used. The 2017–19 NCVS data file includes 451,639 completed household interviews. Overall, 73% of eligible households completed interviews. Within participating households, interviews with 731,477 persons were completed during 2017–19, representing an 83% response rate among eligible persons from responding households.

<sup>&</sup>lt;sup>11</sup>For more information on NCVS coverage ratios, see the Source and Accuracy Statement for the 2019 National Crime Victimization Survey in the NCVS 2019 Codebook (https://www.icpsr.umich.edu/web/NACJD/studies/37645/datadocumentation).

<sup>&</sup>lt;sup>a</sup>Intermediate weights are sampling base weights adjusted for nonresponse but not adjusted to match independent population totals. <sup>b</sup>Final weights are adjusted to independent population totals. Source: U.S. Census Bureau, National Crime Victimization Survey, Internal data, 2017–19.

<sup>&</sup>lt;sup>12</sup>In the NCVS, personal crimes are personal larceny (purse snatching and pocket picking) and violent victimizations (rape or sexual assault, robbery, aggravated assault, and simple assault). Homicide is not included because the NCVS is based on interviews with victims. Property crimes are burglary, trespassing, motor vehicle theft, and other household theft.

Victimizations that occurred outside of the United States were excluded from this report. During 2017–19, less than 1% of the unweighted victimizations occurred outside of the United States.

NCVS data are weighted to produce annual estimates of victimization for persons age 12 or older living in U.S. households. Because the NCVS relies on a sample rather than a census of the entire U.S. population, weights are designed to adjust to known population totals and to compensate for survey nonresponse and other aspects of the complex sample design.

NCVS data files include person, household, victimization, and incident weights. Person weights provide an estimate of the population represented by each person in the sample. Household weights provide an estimate of the household population represented by each household in the sample. After proper adjustment, both person and household weights are also typically used to form the denominator in calculations of crime rates.

Victimization weights used in this report account for the number of persons victimized during an incident and for high-frequency repeat-victimizations (i.e., series victimizations). Series victimizations are similar in type to one another but occur with such frequency that a victim is unable to recall each individual event or describe each event in detail. Survey procedures allow NCVS interviewers to identify and classify these similar victimizations as series victimizations and to collect detailed information on only the most recent incident in the series.

The weighting counts series victimizations as the actual number of victimizations reported by the victim, up to a maximum of 10. Doing so produces more reliable estimates of crime levels than counting such victimizations only once, while the cap at 10 minimizes the effect of extreme outliers on rates. For more information on outliers in the NCVS, see *National Crime Victimization Survey: Assessment of Outlier Weights* (NCJ 302186, BJS third-party report, October 2021).

According to the 2017–19 data, series victimizations accounted for 1.4% of all victimizations. About 3.3% of all violent victimizations and 0.7% of all property victimizations were series. Additional information on the enumeration of series victimizations is detailed in *Methods for Counting High-Frequency Repeat Victimizations in the National Crime Victimization Survey* (NCJ 237308, BJS, April 2012).

#### State

During 2017–19, there were a total of 649,500 NCVS sample cases in the 22 most populous states. The household-level response rates in these states ranged from 57% (New Jersey) to 81% (North Carolina) (table 2). The total number of eligible households ranged by state from 16,000 in Massachusetts to 41,000 in California. Person-level response rates across the 22 states ranged from 76% (Colorado) to 90% (North Carolina) during this period.

The weighting approach for NCVS state-level estimates generally mirrors the approach for the national estimates. A key difference is the magnitude of the state-level weights. Because all NCVS weights are designed so that 6 months of data produce full population estimates, adjustments are needed whenever less or more than 6 months of data are used to produce an estimate. When calculating state-level estimates using 3 years of data, the sum of the NCVS person and household weights is divided by six to account for the number of 6-month periods in the calculations. See *National Crime Victimization Survey, 2016: Technical Documentation* (NCJ 251442, BJS, December 2017) for more information on NCVS weighting procedures at the state level.

During 2017–19, the percentage of violent victimizations in the 22 largest states that were classified as series crimes ranged from 0.2% (Virginia) to 7.5% (Massachusetts). Across these states, the percentage of property victimizations that were series ranged from 0.1% (Massachusetts) to 1.4% (Indiana).

#### **Standard error computations**

When estimates are derived from a sample, as with the NCVS, caution must be used when comparing one estimate to another or when comparing estimates over time. Although one estimate may be larger than another, estimates based on a sample have some degree of sampling error. The sampling error of an estimate depends on several factors, including the amount of variation in the responses and the size of the sample. When the sampling error around an estimate is taken into account, apparent differences between estimates may not be statistically significant.

One measure of the sampling error associated with an estimate is the standard error. The standard error may vary from one estimate to the next. Generally, an estimate with a smaller standard error provides a more reliable approximation of the true value than an

**TABLE 2**NCVS household and person response rates, by state, 2017–19

		Hous	sehold	Person		
State	Total sample cases	Eligible households	Household response rate	Eligible persons within responding households	Person response rate	Overall person response rate*
Arizona	28,000	22,500	64.4%	28,500	79.0%	50.9%
California	46,000	41,000	76.8	67,500	81.5	62.6
Colorado	27,000	24,000	66.7	31,500	76.2	50.8
Florida	31,000	24,000	77.1	35,500	87.3	67.3
Georgia	33,000	27,500	76.4	40,000	86.3	65.9
Illinois	24,500	21,000	71.4	29,500	79.7	56.9
Indiana	33,000	28,000	71.4	38,500	76.6	54.7
Maryland	25,000	20,500	65.9	26,500	83.0	54.7
Massachusetts	18,500	16,000	65.6	21,000	81.0	53.1
Michigan	29,500	24,000	75.0	34,000	89.7	67.3
Minnesota	28,000	24,000	77.1	36,000	81.9	63.2
Missouri	31,000	24,500	71.4	32,000	82.8	59.2
New Jersey	22,500	18,500	56.8	22,000	81.8	46.4
New York	28,500	23,500	72.3	32,500	80.0	57.9
North Carolina	30,500	23,500	80.9	36,000	90.3	73.0
Ohio	29,000	24,500	71.4	34,000	85.3	60.9
Pennsylvania	30,500	24,000	70.8	33,500	79.1	56.0
Tennessee	30,500	25,000	76.0	36,000	86.1	65.4
Texas	37,000	30,500	73.8	45,000	84.4	62.3
Virginia	27,000	23,000	71.7	33,000	80.3	57.6
Washington	28,500	25,500	74.5	39,500	81.0	60.4
Wisconsin	31,000	26,000	73.1	36,000	84.7	61.9

Note: Unweighted counts are rounded according to the U.S. Census Bureau Disclosure Review Board Special Rounding Rules for unweighted numbers. Unweighted rates and percents are calculated based on rounded values. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

\*Overall person response rates are the product of household response and within-household (person) response. Source: U.S. Census Bureau, National Crime Victimization Survey Internal Data, 2017–2019.

estimate with a larger standard error. Estimates with relatively large standard errors have less precision and reliability and should be interpreted with caution.

For complex sample designs, there are several methods that can be used to generate standard errors around a point estimate (e.g., numbers, percentages, and rates). These include direct variance estimation and generalized variance function (GVF) parameters. This report uses direct variance estimation techniques. See *Methodology* in *Criminal Victimization*, 2021 (NCJ 305101, BJS, September 2022) for more information on GVF parameters.

In this report, the U.S. Census Bureau used a specialized version of Balanced Repeated Replication (BRR) estimation using Fay's method to generate standard errors around the victimization estimates. <sup>13</sup> BRR estimation is a type of direct-replication-variance estimation. Under replicate variance estimation, a

set of replicate weights (e.g., the NCVS typically has a set consisting of 160 replicate weights) is used to capture the sampling variance. Fay's method is used for surveys, such as the NCVS, that have rare outcomes in which the entire sample is necessary to properly estimate the variance. The standard error estimates for figure 1, figure 2, and figures 4 through 6 were estimated using BRR.

For figure 3, RTI International used Taylor Series Linearization (TSL) methods to generate standard errors. The TSL method directly estimates variances through a linearized function by combining variance estimates from the stratum and primary sampling units (PSUs) used to sample households and persons. <sup>14</sup> In the NCVS, the design parameters used for computing TSL variances are PSEUDOSTRATA (stratum) and HALFSAMPLE (PSU).

 $<sup>^{13}</sup>$ Wolter, K. M. (2007). Introduction to variance estimation (2nd ed.). Springer.

 $<sup>^{14}</sup>$ Ibid.

BJS conducted statistical tests to determine whether differences in estimated numbers, percentages, and rates in this report were statistically significant once sampling error was taken into account. Using statistical analysis programs developed specifically for the NCVS, all comparisons in the text of this report were tested for significance. The primary test procedure was the Student's t-statistic, which tests the difference between two sample estimates. Findings described in this report as significantly different passed a test at either the 0.05 level (95% confidence level) or 0.10 level (90% confidence level) of significance. Figures and appendix tables in this report should be referenced for testing on specific findings. Caution is required when comparing estimates not explicitly discussed in this report.

Estimates and standard errors of the estimates provided in this report were used to generate a confidence interval around the estimate as a measure of the margin of error. The following example illustrates how standard errors were used to generate confidence intervals:

According to the NCVS, during the aggregate period of 2017-19, the United States had a rate of 21.6 violent victimizations per 1,000 persons age 12 or older. (See appendix table 1.) Using the BRR method of direct estimation, BJS determined that the estimated victimization rate had a standard error of 0.60. (See appendix table 1.) A confidence interval around the estimate was generated by multiplying the standard error by  $\pm$  1.96 (the t-score of a normal, two-tailed distribution that excludes 2.5% at either end of the distribution). Therefore, the 95% confidence interval around the 21.6 estimate during 2017–19 was 21.6  $\pm$  (0.60 x 1.96) or 20.4 to 22.8. In other words, if BJS used the same sampling method to select different samples and computed an interval estimate for each sample, it would expect the true population parameter (rate of violent victimization) to fall within the interval estimates 95% of the time.

Confidence intervals for flagged estimates should be interpreted with caution, as large standard errors may result in a lower bound estimate of less than zero. For this report, BJS also calculated a coefficient of variation (CV) for all estimates, representing the ratio of the standard error to the estimate. CVs (not shown in tables) provide another measure of reliability and a means for comparing the precision of estimates across measures with differing levels or metrics.

#### NCVS measurement of rape or sexual assault

The NCVS uses a two-stage measurement approach in the screening and classification of criminal victimization, including rape or sexual assault. In the first stage of screening, survey respondents are administered a series of short-cue screening questions designed to help respondents think about different experiences they may have had during the reference period. (See the NCVS-1 questionnaires under NCVS Basic Screen Questionnaire at https://bjs.ojp.gov/data-collection/ncvs#surveys-0.)

This design improves respondents' recall of events, particularly for incidents that may not immediately come to mind as crimes, such as those committed by family members and acquaintances. Respondents who answer affirmatively to any of the short-cue screening items are subsequently administered a crime incident report (CIR) designed to classify incidents into specific crime types. (See the NCVS-2 questionnaires under NCVS Crime Incident Report at https://bjs.ojp.gov/data-collection/ncvs#surveys-0.)

**First stage of measurement**. Two short-cue screening questions are specifically designed to target sexual victimization:

- 1. Other than any incidents already mentioned, has anyone attacked or threatened you in any of these ways—
- a. with any weapon, such as a gun or knife
- b. with anything like a baseball bat, frying pan, scissors, or stick
- c. by something thrown, such as a rock or bottle
- d. by grabbing, punching, or choking
- e. any rape, attempted rape, or other types of sexual attack
- f. any face-to-face threats
- g. any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.
- 2. Incidents involving forced or unwanted sexual acts are often difficult to talk about. Other than any incidents already mentioned, have you been forced or coerced to engage in unwanted sexual activity by—
- a. someone you did not know
- b. a casual acquaintance
- c. someone you know well?

With regard to sexual victimization, respondents may screen into a CIR if they respond affirmatively to other short-cue screening questions. For instance, a separate screening question cues respondents to think of attacks or threats that took place in specific locations, such as at home, work, or school. Respondents who recall a sexual victimization that occurred at home, work, or school and answer affirmatively would be administered a CIR even if they did not respond affirmatively to the screening question targeting sexual victimization.

Second stage of measurement. The CIR is used to collect information on the attributes of each incident. The key attributes of sexual violence that are used to classify a victimization as a rape or sexual assault are the type of attack and physical injury suffered. Victims are asked if "the offender hit you, knock[ed] you down, or actually attack[ed] you in any way"; if "the offender TR[IED] to attack you"; or if "the offender THREATEN[ED] you with harm in any way?" The survey participant is classified as a victim of rape or sexual assault if they respond affirmatively to one of these three questions and then respond that the completed, attempted, or threatened attack was—

- rape
- attempted rape
- sexual assault other than rape or attempted rape
- verbal threat of rape
- verbal threat of sexual assault other than rape
- unwanted sexual contact with force (grabbing, fondling, etc.)
- unwanted sexual contact without force (grabbing, fondling, etc.).

If the victim selects one of the following response options to describe the attack, they are also classified as a victim of rape or sexual assault if the injuries suffered as a result of the incident are described as—

- rape
- attempted rape
- sexual assault other than rape or attempted rape.

Coercion. The CIR does not ask respondents if psychological coercion was used, nor does it make any explicit reference to the victim being unable to provide consent (e.g., in incidents involving drug or alcohol use). One screening question targeted to rape and sexual assault asks respondents if force or coercion was used to initiate unwanted sexual activity.

The final classification of incidents by the CIR results in the following definitions of rape and sexual assault used in the NCVS:

Rape. Coerced or forced sexual intercourse. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s). This category could include incidents where the penetration was from a foreign object such as a bottle. It includes attempted rape, threatened rape, male and female victims, and incidents involving victims and offenders who are the same sex or different sexes.

**Sexual assault**. A wide range of victimizations, separate from rape, attempted rape, or threatened rape. These crimes include attacks or threatened attacks involving unwanted sexual contact between the victim and offender. Sexual assaults may or may not involve force and include such things as grabbing or fondling.

# Current classification of rape and sexual assault in the National Crime Victimization Survey

Measure	Element of sexual violence
Completed rape	Type of attack = rape
	Type of injury = rape
Attempted rape	Type of attack = attempted rape
	Type of injury = attempted rape
Threatened rape	Type of threat = verbal threat of rape with weapon
	Type of attempted attack/threat = verbal threat of rape
Sexual assault	Type of attack = sexual assault other than rape or attempted rape
	Type of injury = sexual assault other than rape or attempted rape
	Type of attempted attack/threat = unwanted sexual contact with force
	Type of attempted attack/threat = unwanted sexual contact without force
	Type of attempted attack/threat = verbal threat of sexual assault other than rape

Note: Victim is determined to be present in all measures of rape and sexual assault.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2021.

**APPENDIX TABLE 1**Estimates and standard errors for figure 1: Rate of violent victimization per 1,000 persons age 12 or older in the 22 largest states, 2017–19

	Rate p	per 1,000	95% confidence interval		Number	
State	Estimate	Standard errora	Lower bound	Upper bound	Estimate	Standard errora
United States*	21.6	0.60	20.42	22.78	5,937,000	165,100
Arizona	36.8 †	4.99	27.03	46.59	220,300	29,870
California	22.4	1.93	18.64	26.18	745,600	63,880
Colorado	45.0 †	4.49	36.21	53.83	215,700	21,250
Florida	13.2 †	1.62	10.01	16.35	240,000	29,460
Georgia	11.5 †	1.80	7.93	14.97	99,880	15,710
Illinois	19.8	3.18	13.53	26.01	211,900	34,060
Indiana	27.5	3.74	20.16	34.82	153,200	20,850
Maryland	21.1	3.49	14.20	27.90	107,400	17,810
Massachusetts	20.5	5.37	9.94	30.98	121,500	31,870
Michigan	21.1	2.81	15.56	26.56	178,700	23,790
Minnesota	20.8	1.75	17.38	24.22	97,660	8,200
Missouri	21.5	2.37	16.87	26.17	110,400	12,170
New Jersey	7.7 †	1.34	5.11	10.35	58,850	10,160
New York	15.7 †	2.24	11.25	20.05	262,500	37,610
North Carolina	13.3 †	2.06	9.28	17.34	116,000	17,980
Ohio	23.6	2.38	18.97	28.31	232,300	23,410
Pennsylvania	21.8	2.57	16.81	26.87	238,000	27,970
Tennessee	25.4	3.79	18.01	32.85	144,500	21,500
Texas	18.3 ‡	1.83	14.69	21.85	426,300	42,650
Virginia	15.4 †	1.83	11.78	18.96	110,200	13,160
Washington	36.8 †	4.30	28.35	45.19	233,500	27,150
Wisconsin	22.1	4.27	13.76	30.48	108,700	20,970

Note: Violent victimization includes rape or sexual assault, robbery, aggravated assault, and simple assault. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

<sup>\*</sup>Comparison group.

<sup>†</sup>Difference with comparison group is significant at the 95% confidence level.

<sup>‡</sup>Difference with comparison group is significant at the 90% confidence level.

<sup>&</sup>lt;sup>a</sup>Standard errors rounded due to disclosure protocols.

**APPENDIX TABLE 2** 

# Estimates and standard errors for figure 2: Rate of property victimization per 1,000 households in the 22 largest states, 2017–19

	Rate	per 1,000	95% confide	ence interval	Ni	umber
State	Estimate	Standard errora	Lower bound	Upper bound	Estimate	Standard errora
United States*	105.9	1.33	103.30	108.50	13,220,000	175,200
Arizona	151.5 †	8.50	134.84	168.16	399,700	22,130
California	145.9 †	6.88	132.41	159.39	1,962,000	100,600
Colorado	161.3 †	8.31	145.01	177.59	370,100	17,850
Florida	71.7 †	4.30	63.32	80.16	581,500	40,120
Georgia	72.4 †	5.65	61.29	83.43	287,900	21,800
Illinois	79.4 †	5.62	68.41	90.43	394,900	27,340
Indiana	121.1 †	6.43	108.49	133.71	325,700	17,600
Maryland	109.8	6.62	96.82	122.78	235,900	26,300
Massachusetts	78.1 †	4.89	68.50	87.66	212,600	13,670
Michigan	74.3 †	5.13	64.28	84.38	300,900	19,350
Minnesota	114.0	8.02	98.29	129.71	259,300	20,540
Missouri	117.6	11.74	94.59	140.61	295,000	29,780
New Jersey	51.5 †	4.14	43.37	59.59	166,400	13,280
New York	64.8 †	4.44	56.13	73.53	496,400	34,550
North Carolina	63.5 †	4.46	54.74	72.24	257,900	19,900
Ohio	91.8†	5.61	80.84	102.84	438,100	24,780
Pennsylvania	80.5 †	4.46	71.72	89.22	397,400	27,300
Tennessee	104.5	6.68	91.41	117.59	283,200	20,000
Texas	117.3 †	5.12	107.26	127.34	1,189,000	56,590
Virginia	87.0 †	5.65	75.96	98.10	286,000	17,230
Washington	202.5 †	9.65	183.59	221.41	598,900	29,160
Wisconsin	73.9 †	4.44	65.21	82.59	179,600	13,020

Note: Property crime includes burglary or trespassing, motor vehicle theft, and other household theft. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

<sup>\*</sup>Comparison group.

<sup>†</sup>Difference with comparison group is significant at the 95% confidence level.

<sup>&</sup>lt;sup>a</sup>Standard errors rounded due to disclosure protocols.

**APPENDIX TABLE 3** 

# Estimates and standard errors for figure 3: Rate of violent victimization excluding simple assault per 1,000 persons age 12 or older in the 22 largest states, 2017–19

	Rate p	er 1,000	95% confidence interval		Number	
State	Estimate	Standard errora	Lower bound	Upper bound	Estimate	Standard errora
United States*	7.7	0.31	7.13	8.35	2,127,000	84,550
Arizona	15.0 †	2.21	10.62	19.28	89,430	12,680
California	8.4	1.00	6.39	10.31	277,800	33,170
Colorado	16.1 †	2.70	10.77	21.35	76,940	12,350
Florida	6.1 ‡	0.95	4.22	7.94	110,600	16,770
Georgia	4.2 †	0.81	2.59	5.77	36,460	7,000
Illinois	8.0	1.93	4.25	11.81	86,040	20,190
Indiana	9.0	1.90	5.23	12.67	49,860	10,650
Maryland	5.2 †	1.10	2.99	7.31	26,280	5,670
Massachusetts	4.8 †	1.04	2.71	6.79	28,230	6,150
Michigan	7.0	0.97	5.06	8.86	59,080	7,950
Minnesota	7.9	0.85	6.24	9.58	37,120	3,980
Missouri	7.0	1.27	4.53	9.51	36,020	6,150
New Jersey	1.5!	0.48	0.57	2.45	11,480	3,620
New York	5.5 †	0.89	3.77	7.25	92,460	15,010
North Carolina	5.1 ‡	1.37	2.45	7.83	44,840	12,120
Ohio	9.6	1.69	6.29	12.91	94,380	17,010
Pennsylvania	7.4	1.18	5.11	9.73	80,830	13,580
Tennessee	9.6	1.59	6.49	12.73	54,610	9,300
Texas	8.0	1.06	5.94	10.10	187,200	24,960
Virginia	5.7 †	0.78	4.18	7.24	40,960	5,590
Washington	13.9 †	2.13	9.75	18.09	88,400	12,260
Wisconsin	8.9	1.98	5.03	12.79	43,780	9,880

Note: Violent victimization excluding simple assault includes rape or sexual assault, robbery, and aggravated assault. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY23-POP001-0020).

<sup>\*</sup>Comparison group.

<sup>†</sup>Difference with comparison group is significant at the 95% confidence level.

<sup>‡</sup>Difference with comparison group is significant at the 90% confidence level.

<sup>!</sup> Interpret data with caution. Estimate is based on 10 or fewer sample cases or coefficient of variation is greater than 50%.

<sup>&</sup>lt;sup>a</sup>Standard errors rounded due to disclosure protocols.

**APPENDIX TABLE 4**Estimates and standard errors for figure 4: Rate of household burglary victimization per 1,000 households in the 22 largest states, 2017–19

	Rate p	er 1,000	95% confidence interval		Number	
State	Estimate	Standard errora	Lower bound	Upper bound	Estimate	Standard errora
United States*	19.7	0.50	18.68	20.62	2,452,000	61,590
Arizona	28.5 †	2.59	23.46	33.60	75,300	6,740
California	19.9	1.59	16.78	23.00	267,400	21,620
Colorado	25.3	5.22	15.11	35.55	58,120	11,770
Florida	14.9 †	2.34	10.28	19.44	120,400	19,000
Georgia	17.8	2.72	12.50	23.16	70,930	10,830
Illinois	17.4	1.88	13.74	21.10	86,630	9,180
Indiana	25.0 †	2.44	20.26	29.80	67,300	6,270
Maryland	15.5 ‡	2.30	11.00	20.02	33,310	6,540
Massachusetts	12.2 †	1.97	8.34	16.06	33,230	5,430
Michigan	17.9	2.43	13.17	22.69	72,580	9,380
Minnesota	19.5	1.93	15.71	23.29	44,350	4,570
Missouri	24.8	4.32	16.32	33.26	62,180	10,810
New Jersey	12.9 †	1.97	9.07	16.79	41,790	6,360
New York	9.4 †	1.16	7.15	11.69	72,130	9,010
North Carolina	15.8 †	1.69	12.43	19.07	63,980	7,050
Ohio	19.4	2.78	13.95	24.85	92,520	12,750
Pennsylvania	14.3 †	2.28	9.85	18.77	70,670	11,970
Tennessee	23.9 ‡	2.19	19.62	28.20	64,800	6,270
Texas	21.3	2.19	16.99	25.59	215,900	22,670
Virginia	15.0 †	1.85	11.40	18.66	49,400	5,970
Washington	30.3 †	3.31	23.81	36.79	89,610	9,860
Wisconsin	18.2	2.10	14.10	22.32	44,250	5,220

Note: Burglary is the unlawful or forcible entry or attempted entry of a place, including a permanent residence, other residence (e.g., a hotel room or vacation residence), or other structure (e.g., a garage or shed) where there was a completed or attempted theft. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

<sup>\*</sup>Comparison group.

<sup>†</sup>Difference with comparison group is significant at the 95% confidence level.

<sup>‡</sup>Difference with comparison group is significant at the 90% confidence level.

<sup>&</sup>lt;sup>a</sup>Standard errors rounded due to disclosure protocols.

#### **APPENDIX TABLE 5**

# Estimates and standard errors for figure 5: Percent of violent victimizations reported to police in the 22 largest states, 2017–19

	Pe	rcent	95% confidence interval		Nu	Number	
State	Estimate	Standard errora	Lower bound	Upper bound	Estimate	Standard errora	
United States*	42.8%	1.34%	40.13%	45.39%	2,539,000	90,680	
Arizona	42.0	6.44	29.33	54.59	92,430	19,380	
California	39.6	3.86	32.03	47.15	295,200	36,850	
Colorado	41.9	3.26	35.54	48.34	90,460	11,750	
Florida	54.8 †	5.15	44.67	64.85	131,400	20,210	
Georgia	43.7	5.55	32.86	54.60	43,680	9,380	
Illinois	46.3	6.89	32.76	59.76	98,040	23,690	
Indiana	45.5	5.65	34.47	56.61	69,760	11,820	
Maryland	34.4 ‡	4.83	24.90	43.84	36,920	8,530	
Massachusetts	57.9 ‡	8.90	40.40	75.30	70,290	25,620	
Michigan	45.2	4.02	37.30	53.04	80,730	12,750	
Minnesota	39.1	4.00	31.22	46.90	38,140	4,750	
Missouri	41.3	5.03	31.42	51.12	45,580	6,540	
New Jersey	41.8	7.71	26.65	56.89	24,580	6,110	
New York	35.3	5.99	23.58	47.06	92,710	21,130	
North Carolina	41.7	5.61	30.69	52.67	48,360	6,810	
Ohio	51.4 ‡	4.77	42.07	60.75	119,400	16,670	
Pennsylvania	40.1	5.48	29.40	50.88	95,520	13,390	
Tennessee	41.4	6.29	29.12	53.76	59,870	13,320	
Texas	48.3	5.11	38.26	58.28	205,800	29,520	
Virginia	37.5	4.68	28.28	46.64	41,290	4,820	
Washington	36.2	4.43	27.47	44.85	84,420	10,590	
Wisconsin	33.8 ‡	5.18	23.59	43.91	36,700	6,050	

Note: Violent victimization includes rape or sexual assault, robbery, aggravated assault, and simple assault. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

<sup>\*</sup>Comparison group.

<sup>†</sup>Difference with comparison group is significant at the 95% confidence level.

<sup>‡</sup>Difference with comparison group is significant at the 90% confidence level.

<sup>&</sup>lt;sup>a</sup>Standard errors rounded due to disclosure protocols.

**APPENDIX TABLE 6**Estimates and standard errors for figure 6: Percent of property victimizations reported to police in the 22 largest states, 2017–19

	Pe	rcent	95% confide	ence interval	Nι	ımber
State	Estimate	Standard errora	Lower bound	Upper bound	Estimate	Standard errora
United States*	34.1%	0.42%	33.31%	34.97%	4,514,000	75,330
Arizona	32.0	2.32	27.47	36.55	127,900	12,680
California	31.8 ‡	1.24	29.39	34.27	624,600	31,300
Colorado	32.4	1.99	28.53	36.33	120,000	10,260
Florida	38.8 †	2.26	34.32	43.18	225,400	22,930
Georgia	39.2 †	2.11	35.03	43.31	112,800	9,300
Illinois	35.8	2.88	30.18	41.46	141,400	11,520
Indiana	29.7 †	1.67	26.46	33.00	96,800	8,260
Maryland	28.3 †	2.29	23.80	32.78	66,720	8,050
Massachusetts	31.7	2.81	26.17	37.19	67,360	7,070
Michigan	41.1 †	2.82	35.53	46.59	123,500	12,450
Minnesota	31.3	1.93	27.49	35.05	81,080	8,300
Missouri	35.5	1.54	32.43	38.47	104,600	10,860
New Jersey	39.5 ‡	3.09	33.44	45.54	65,700	8,070
New York	28.5 †	2.01	24.55	32.43	141,400	13,150
North Carolina	43.6 †	2.44	38.86	48.42	112,600	9,060
Ohio	35.1	2.73	29.74	40.44	153,700	16,810
Pennsylvania	31.4	2.65	26.17	36.57	124,700	15,580
Tennessee	37.3	2.44	32.47	42.05	105,500	7,740
Texas	36.3	1.73	32.94	39.70	431,800	27,210
Virginia	33.0	2.44	28.26	37.80	94,470	8,640
Washington	29.9 †	1.55	26.82	32.88	178,800	11,420
Wisconsin	31.9	2.73	26.54	37.24	57,280	6,410

Note: Property victimization includes burglary or trespassing, motor vehicle theft, and other household theft. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

<sup>\*</sup>Comparison group.

<sup>†</sup>Difference with comparison group is significant at the 95% confidence level.

<sup>‡</sup>Difference with comparison group is significant at the 90% confidence level.

<sup>&</sup>lt;sup>a</sup>Standard errors rounded due to disclosure protocols.

#### **APPENDIX TABLE 7**

### Population of persons age 12 or older in the 22 largest states, 2017–19

State	Population size
United States	274,900,000
Arizona	5,984,000
California	33,270,000
Colorado	4,792,000
Florida	18,210,000
Georgia	8,725,000
Illinois	10,720,000
Indiana	5,572,000
Maryland	5,101,000
Massachusetts	5,940,000
Michigan	8,483,000
Minnesota	4,695,000
Missouri	5,133,000
New Jersey	7,614,000
New York	16,770,000
North Carolina	8,717,000
Ohio	9,827,000
Pennsylvania	10,900,000
Tennessee	5,682,000
Texas	23,330,000
Virginia	7,173,000
Washington	6,349,000
Wisconsin	4,915,000

Note: The National Crime Victimization Survey (NCVS) population represents persons age 12 or older living in non-institutionalized residential settings in the United States. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307).

Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017-19

#### **APPENDIX TABLE 8**

### Population of households in the 22 largest states, 2017–19

State	Number of households
United States	124,800,000
Arizona	2,639,000
California	13,450,000
Colorado	2,295,000
Florida	8,106,000
Georgia	3,979,000
Illinois	4,972,000
Indiana	2,689,000
Maryland	2,148,000
Massachusetts	2,723,000
Michigan	4,048,000
Minnesota	2,275,000
Missouri	2,508,000
New Jersey	3,231,000
New York	7,658,000
North Carolina	4,063,000
Ohio	4,770,000
Pennsylvania	4,938,000
Tennessee	2,710,000
Texas	10,140,000
Virginia	3,286,000
Washington	2,957,000
Wisconsin	2,431,000

Note: The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release (CBDRB-FY20-307). Source: Bureau of Justice Statistics, National Crime Victimization Survey, Restricted-use data, 2017–19



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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