Crime & Safety Surveys (CSS)

Website: https://nces.ed.gov/programs/crime/
Updated: October 2021

The National Center for Education Statistics (NCES) maintains data on school crime and safety. The data stem from two collections: the School Crime Supplement (SCS) to the National Crime Victimization Survey (NCVS), a survey of students ages 12 through 18; and the School Survey on Crime and Safety (SSOCS), a survey of public schools and principals.

School Crime Supplement (SCS)

1. OVERVIEW

The SCS is conducted on a biennial basis as a supplement to the NCVS, which is administered by the Bureau of Justice Statistics (BJS), U.S. Department of Justice, and conducted by the U.S. Census Bureau. The NCVS is an ongoing household survey that gathers information on the criminal victimization of household members age 12 and older. NCES and BJS jointly created the SCS to study the relationship between victimization at school and the school environment.

Purpose

The SCS is designed to assist policymakers—as well as academic researchers and practitioners at the federal, state, and local levels—in making informed decisions concerning crime in schools. The SCS gathers data from nationally representative samples of students who are between the ages of 12 and 18 and who are enrolled in grades 6–12 in U.S. public or private schools. Prior to 2007, eligible sample members were those who had attended school at any time during the 6 months preceding the interview. In 2007, the questionnaire was changed to include students who attend school at any time during the school year.

Components

The SCS asks students a number of questions about their experiences with, and perceptions of, crime and violence occurring inside their school, on school grounds, on the school bus, and from 2001 onward, going to or from school. The SCS contains questions not included in the NCVS, such as those on preventive measures employed by schools; students’ participation in after-school activities; students’ perceptions of school rules and the enforcement of these rules; the presence of weapons, drugs, alcohol, and gangs in school; student bullying; hate-related incidents; and students’ attitudes related to the fear of victimization at school.

Periodicity


Data Availability

Information about the data for the SCS/NCVS, through 2019 can be found at https://nces.ed.gov/programs/crime/student_data.asp.
2. USES OF DATA

Student victimization in schools is a major concern of educators, policymakers, administrators, parents, and students. Understanding the scope of the criminal victimization of students, as well as factors associated with it, is an essential step in developing solutions to address the issues concerning school crime and violence.

The NCVS is the nation’s primary source of information on crime victimization and the victims of crime in the United States. The SCS is a supplement to the NCVS that was created to collect information about student and school characteristics on a national level. The survey is designed to assist policymakers, as well as researchers and practitioners at the federal, state, and local levels, in making informed decisions concerning crime in schools. Some of the topics that are examined include the following:

- Prevalence and type of student victimization at school and selected characteristics of victims, including their demographic characteristics and school type;
- Victim and nonvictim reports of conditions of an unfavorable school climate, such as the presence of gangs and weapons and the availability of drugs and alcohol;
- Victimization and student reports of security measures taken at school to secure school buildings and the use of personnel and enforcement of administrative procedures at school to ensure student safety; and
- Fear and avoidance behaviors of victims and nonvictims, such as skipping class or avoiding specific places at school; and
- The relationship between bullying and cyber-bullying victimization.

3. KEY CONCEPTS

Some key terms related to the SCS are defined below.

Victimization. Each SCS respondent reported at least one incident of victimization in the 6 months prior to the survey, which occurred at school, or on the way to or from school. Violent crimes include serious violent crimes (rape, sexual assault, robbery, and aggravated assault) and simple assault with injury, assault with a weapon and without injury, and verbal threat of assault. Theft includes attempted and completed purse snatching, completed pickpocketing, and all attempted and completed thefts, excluding motor vehicle theft. Theft does not include robbery, in which the threat or use of force in involved.

Bullying. Students were asked if another student has bullied them at school during the school year, including made fun of them, called them names, or insulted them; spread rumors about them; threatened them with harm; pushed, shoved, tripped, or spit on them; tried to make them do something they did not want to do; excluded them from activities on purpose; or destroyed their property on purpose.

4. SURVEY DESIGN

Sample Design

Households are selected into the sample using a stratified, multistage cluster design. In the first stage, the primary sampling units (PSUs), consisting of counties or groups of counties, are selected and smaller areas, called Enumeration Districts (EDs), are selected within each sampled PSU. Large PSUs are included in the sample automatically and are considered to be self-representing strata since all of them are selected. The remaining PSUs (called non-self representing because only a subset of PSU is selected) are combined into strata by grouping PSUs with similar geographic and demographic characteristics, as determined by the decennial census. Within each ED, clusters of four households, called segments, are selected. Across all EDs, sampled households are then divided into discrete groups (rotations), and all age-eligible individuals in the households become part of the panel. Such a design ensures a self-weighting probability sample of housing units and group-quarter dwellings within each of the selected areas. “Self-weighting” means that prior to any weighting adjustments, each sample housing unit had the same overall probability of being selected.

Each month the U.S. Census Bureau selects respondents for the NCVS using a "rotating panel" design. Households are randomly selected and all age-eligible individuals become part of the panel. The sample of households is divided into groups or rotations. Once in the sample, respondents are interviewed every six months for a total of seven interviews over a three-year period. The first interview is considered the incoming rotation. The second through the seventh interview are in the continuing rotations. The first interview is face-to-face; the rest are by telephone unless the circumstances call for an in-person interview. After the seventh interview the household leaves the panel and a new household is rotated into the sample. The rotation scheme is used to reduce respondent burden that may result if they were to remain permanently in the sample.

Once in the panel, NCVS interviews are conducted with all household members age 12 or older. After completion of the NCVS interview, an SCS interview is given to eligible household members. In order to be eligible for the SCS, students must be 12 through 18 years old, have attended school in grades 6 through 12 at some point during the school year, and not have been homeschooled during the school year. Persons who have dropped out of school, have been expelled or suspended from school, or are temporarily
absent from school for any other reason, such as illness or vacation, are eligible as long as they attended school at any time during the school year. For the 1989 and 1995 SCS, 19-year-old household members were considered eligible for the SCS interview. Prior to the 2007 SCS, household members who were enrolled in school sometime during the previous 6 months prior to the interview were eligible.

Data Collection and Processing
In all SCS survey years, the SCS was conducted for a 6-month period from January through June in all households selected for the NCVS. Eligible respondents were asked the supplemental questions in the SCS only after completing their entire NCVS interview.

The 2007 SCS was fully automated; all interviews were conducted through computer-assisted personal interviewing (CAPI), where field representatives used questionnaires loaded into laptop computers to conduct interviews, which could be completed either in person (for the first and subsequent interviews, as circumstances called for) or by telephone. Two modes of data collection were used through the 2005 collection: (1) paper-and-pencil interviewing, which was conducted in person for the first NCVS/SCS interview; and (2) computer-assisted telephone interviewing (CATI), unless circumstances called for an in-person interview. There were approximately 7,146 students who participated in the SCS in 2017; 4,770 in 2015; 5,700 in 2013; 6,550 in 2011; 5,020 in 2009; 6,500 in 2007; 7,110 in 2005; 8,470 in 2003; 9,650 in 2001; 8,400 in 1999; 9,950 in 1995; and 10,450 in 1989.

Interviewers are instructed to conduct interviews in privacy unless respondents specifically agree to permit others to be present. Most interviews are conducted over the telephone, and most questions require “yes” or “no” answers, thereby affording respondents a further measure of privacy. While efforts are made to assure that interviews about student experiences at school are conducted with the students themselves, interviews with proxy respondents are accepted under certain circumstances. These include interviews scheduled with a child between the ages of 12 and 13 where parents refuse to allow an interview with the child; interviews where the subject child is unavailable during the period of data collection; and interviews where the child is physically or emotionally unable to answer for him- or herself.

Estimation Methods
Weighting. The purpose of the SCS is to be able to make inferences about criminal victimization in the 12- to 18-year-old student population in the United States. Before such inferences can be drawn, it is important to adjust, or “weight,” the sample of students to ensure it is similar to the entire population in this age group. The SCS weights are a combination of household-level and person-level adjustment factors. In the NCVS, adjustments are made to account for both household- and person-level non-interviews. Additional factors are then applied to reduce the variance of the estimate by correcting for the differences between the sample distributions of age, race, and sex and the known population distributions of these characteristics. The resulting weights are assigned to all interviewed households and persons in the file.

A special weighting adjustment is then made for the SCS respondents, and non-interview adjustment factors are computed to adjust for SCS interview nonresponse. This non-interview factor is applied to the NCPS person-level weight for each SCS respondent. Through 2005, there was one SCS weight for producing estimates for the NCPS variables and another SCS weight for producing estimates from the SCS variables. Due to the inclusion of the incoming interview variable in the NCPS estimates, the same weight now applies to both.

Imputation. Item response rates are generally high. Most items are answered by over 95 percent of all eligible respondents. No explicit imputation procedure is used to correct for item nonresponse.

Future Plans
Plans for the future of the SCS include a 2022 administration. NCES and Census plan to use findings from the 2019 split-half experiment that tested bullying items to inform the method of collection for the 2022 administration.

5. DATA QUALITY AND COMPARABILITY

Sampling Error
Standard errors of percentage and population counts were calculated with the Taylor series approximation method using PSU and strata variables available from the data set, and by using the generalized variance function (gVF) constant parameters. The gVF represents the curve fitted to the individual standard errors that are calculated using the jackknife repeated replication technique. For more detailed information, see also National Crime Victimization Survey documentation.

Nonsampling Error
The key sources of nonsampling error in the SCS are described below.

Coverage error. Coverage error in the NCVS (and therefore the SCS) would result from coverage error in the census and the supplemental procedures and is addressed at that level. For more detailed information, see National Crime Victimization Survey documentation.
Unit nonresponse. Because interviews with students can only be completed after households have responded to the NCVS, the unit completion rate for the SCS reflects both the household interview completion rate and the student interview completion rate (see table SCS-1). Thus, the overall unweighted SCS response rate is calculated by multiplying the household completion rate by the student completion rate.

NCES Statistical Standard 4-4-1 requires that any survey stage of data collection with a unit or item response less than 85 percent must be evaluated for potential nonresponse bias. The Census Bureau completed a unit nonresponse bias analysis to determine the extent to which there might be bias in the estimates produced using SCS data. The analysis of unit nonresponse bias found evidence of potential bias for both the NCVS and SCS portions of the interview. Respondents on both versions of the survey were included in the analysis. The unit nonresponse bias analysis takes into account nonresponses on both the NCVS and the SCS. For the 2017 SCS interview, Census’ analysis of unit nonresponse bias found race/ethnicity and census region variables showed significant differences in response rates between different race/ethnicity and census region subgroups. Respondent and nonrespondent distributions are significantly different for only the race/ethnicity subgroup. However, after using weights adjusted for person nonresponse, there is no evidence that these response differences introduced nonresponse bias in the final victimization estimates.

For the 2015 NCVS interview, Census found evidence of unit nonresponse bias within Hispanic origin, urbanicity, region and age subgroups. Within the SCS portion of the interview, race, urbanicity, region and age subgroups showed significant unit nonresponse bias. Further analysis indicated that respondents in the age 14 and the rural categories had significantly higher nonresponse bias estimates compared to other age and urbanicity subgroups, while respondents who were Asian and from the Northeast had significantly lower response bias estimates compared to other race and region subgroups. Based on the analysis, Census concluded that there are significant nonresponse biases in the 2015 SCS data. Readers should use caution when comparing responses among subgroups in the SCS.

Due to the low student response rates in in 2005, 2007, and 2009, unit nonresponse bias analyses were commissioned. In 2009, the analysis of unit nonresponse bias found evidence of potential bias for the race/ethnicity and urbanicity variables. White students and students of other race/ethnicities had higher response rates than did Black and Hispanic respondents. Respondents from households located in rural areas had higher response rates than those from households located in urban areas. However, when responding students are compared to the eligible NCVS sample, there were no measurable differences between the responding students and the eligible students, suggesting the nonresponse bias has little impact on the overall estimates.

In 2007, the analysis of unit nonresponse bias found evidence of bias by race, household income, and urbanicity variables. Hispanic respondents had lower response rates than respondents from other races/ethnicities. Respondents from households with an income of $25,000 or more had higher response rates than those from households with incomes of less than $7,500. Respondents who live in urban areas had lower response rates than those who live in rural areas. However, when responding students were compared to the eligible NCVS sample, there were no measurable differences between the responding students and the eligible students, suggesting the nonresponse bias has little impact on the overall estimates.

The analysis of unit nonresponse bias in 2005 also found evidence of bias for the race, household income, and urbanicity variables. White, non-Hispanic and other, non-Hispanic respondents had higher response rates than Black, non-Hispanic and Hispanic respondents.

Respondents from households with incomes of $35,000–49,999 and $50,000 or more had higher response rates than those from households with incomes of less than $7,500, $7,500–14,999, $15,000–24,999, and $25,000–34,999. Respondents who live in urban areas had lower response rates than those who live in rural or suburban areas.

Item nonresponse. Item response rates for the SCS have been high. In all administrations, most items were answered by over 95 percent of all eligible respondents, with a few exceptions. One notable exception was the household income question, which was answered by about 80 percent of all households in 2007; about 74 percent of all households in 2005; and about 78, 80, 86, 90, and 90 percent of all households in 2003, 2001, 1999, 1995, and 1989, respectively. Due to their sensitive nature, income and income-related questions typically have relatively lower response rates than other items.

Beginning with the 2009 SCS, detail on the reasons for nonresponse was collected. Where data were once coded collectively as residue, using 8’s or a combination of 8’s and 9’s, data categories are now available to indicate specific types of missing data. Potential responses to the SCS include: valid values; explicit don’t know; blind don’t know; blind refusals; residue; out of universe/off path. Users should note that this type of detail is only available on the SCS supplement, not for the main NCVS.

Measurement error. Measurement error can result from respondents’ different understandings of what constitutes a crime, memory lapses, and reluctance or refusal to report incidents of victimization. A change in the screener procedure between 1989 and 1995 was designed to result in
the reporting of more incidents of victimization, more detail on the types of crime, and presumably more accurate data in 1995 than in 1989. (See “Data Comparability” below for further explanation.) Differences in the questions asked in the NCVS and SCS, as well as the sequencing of questions (SCS after NCVS), might have also led to better recall in the SCS in 1995.

Data Comparability
The SCS questionnaire has been modified in several ways since its inception, as has the larger NCVS. Users making comparisons of data across years should be aware of the changes detailed below and their impact on data comparability. In 1989 and 1995, respondents to the SCS were asked two separate sets of questions regarding personal victimization. The first set of questions was part of the main NCVS, and the second set was part of the SCS. When examining data from either 1989 or 1995, the following have an impact on the comparability of data on victimization: (1) differences between years in the wording of victimization items in the NCVS as well as the SCS questionnaires; and (2) differences between SCS and NCVS items collecting similar data.

NCVS design changes. The NCVS was redesigned in 1992. Changes to the NCVS screening procedure put in place in 1992 make comparisons to 1989 data difficult. Due to the redesign, the victimization screening procedure used in 1995 and later years was meant to elicit a more complete tally of victimization incidents than the one used in 1989. For instance, it specifically asked whether respondents had been raped or otherwise sexually assaulted, whereas the 1989 screener did not. See Effects of the Redesign on Victimization Estimates (Kindermann, Lynch, and Cantor 1997) for more details.

In 2003, in accordance with changes to the Office of Management and Budget’s standards for the classification of federal data on race and ethnicity, the NCVS item on race/ethnicity was modified. A question on Hispanic origin is now followed by a question on race. The new race question allows the respondent to choose more than one race and delineates Asian as a separate category from Native Hawaiian or Other Pacific Islander. An analysis conducted by the Demographic Surveys Division at the U.S. Census Bureau showed that the new race question had very little impact on the aggregate racial distribution of NCVS respondents, with one exception: there was a 2-percentage-point decrease in the percentage of respondents who reported themselves as White. Due to changes in race/ethnicity categories, comparisons of race/ethnicity across years should be made with caution.

In 2007, three changes were made to the NCVS for budgetary reasons. First, the sample was reduced by 14 percent beginning in July 2007. Second, to offset the impact of sample reduction, first-time interviews, which are not traditionally used in the production of the NCVS estimates, were included. Since respondents tend to report more victimization during first-time interviews than in subsequent interviews (in part, because new respondents tend to recall events having taken place at a time that was more recent than when they actually occurred), weighting adjustments were used to counteract a possible upward bias in the survey estimates. Using first-time interviews helped to ensure that the overall sample size would remain consistent with that in previous years. Lastly, in July 2007, the use of CATI as an interview technique was discontinued, and interviewing was conducted using only CAPI.

SCS design changes. The SCS questionnaire wording has been modified in several ways since its inception. Modifications have included changes in the series of questions pertaining to “fear” and “avoidance” between all survey years, beginning in 1995; changes in the definition of “at school” in 2001; changes in the introduction to, definition of, and placement of the item about “gangs” in 2001; and expansion of the single “bullying” question to include a series of questions in 2005 and including the topic of cyber-bullying in 2007. For more details, see Student Victimization in U.S. Schools: Results From the 2005 School Crime Supplement to the National Crime Victimization Survey (Bauer et al. 2008) and Indicators of School Crime and Safety: 2008 (Dinkes, Kemp, and Baum 2009).

In addition, the reference time period for the 2007 SCS was revised from “the last 6 months” to “this school year.” The change in reference period resulted in a change in eligibility criteria for participation in the 2007 SCS to include household members between ages 12 and 18 who had attended school at any time during the school year instead of during the 6 months preceding the interview, as in earlier surveys.

The non-NCES surveys and studies include the Youth Risk Behavior Surveillance System (YRBSS), a national and state-level epidemiological surveillance system developed by the Centers for Disease Control and Prevention (CDC) to monitor the prevalence of youth behaviors that most influence health; the School Associated Violent Death Study (SAVD), a study developed by the CDC (in conjunction with the U.S. Departments of Education and Justice) to describe the epidemiology of school-associated violent death in the United States and identify potential risk factors for these deaths; the Supplementary Homicide Reports (SHR), a part of the Uniform Crime Reporting (UCR) program conducted by the Federal Bureau of Investigation to provide incident-level information on criminal homicides; and the Web-based Injury Statistics Query and Reporting System Fatal (WISQARS Fatal), which provides data on injury-related mortality collected by the CDC.

Readers should exercise caution when doing cross-survey analyses using these data. While some of the data were collected from universe surveys, most were collected from sample surveys. Also, some questions may appear the same across surveys when, in fact, they were asked of different populations of students, in different years, at different locations, and about experiences that occurred within different periods of time. Because of these variations in collection procedures, timing, phrasing of questions, and so forth, the results from the different sources are not strictly comparable.

### Table SCS-1. Unweighted household, student, and overall unit response rates for the School Crime Survey: 2001–17

<table>
<thead>
<tr>
<th>Year</th>
<th>Household response rate</th>
<th>Student response rate</th>
<th>Overall response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>93.1</td>
<td>77.0</td>
<td>71.7</td>
</tr>
<tr>
<td>2003</td>
<td>91.9</td>
<td>69.6</td>
<td>64.0</td>
</tr>
<tr>
<td>2005</td>
<td>90.6</td>
<td>61.7</td>
<td>56.0</td>
</tr>
<tr>
<td>2007</td>
<td>90.4</td>
<td>58.3</td>
<td>52.7</td>
</tr>
<tr>
<td>2009</td>
<td>91.7</td>
<td>55.9</td>
<td>51.3</td>
</tr>
<tr>
<td>2011</td>
<td>90.7</td>
<td>63.3</td>
<td>57.4</td>
</tr>
<tr>
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<td>85.5</td>
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<td>2017</td>
<td>76.9</td>
<td>52.5</td>
<td>40.3</td>
</tr>
</tbody>
</table>


### 6. CONTACT INFORMATION

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### 7. METHODOLOGY AND EVALUATION REPORTS

The reports listed below were either published by the U.S. Department of Education, National Center for Education Statistics (indicated by an NCES number), by the U.S. Department of Justice, Bureau of Justice Statistics, or were jointly published. See the technical notes in each report for a discussion of methodology.

**General**

[https://nces.ed.gov/pubs92/92007.pdf](https://nces.ed.gov/pubs92/92007.pdf)

[https://nces.ed.gov/pubs92/92008.pdf](https://nces.ed.gov/pubs92/92008.pdf)

NCES Handbook of Survey Methods


Uses of Data


**Survey Design**


Arbor, MI: Inter-university Consortium for Political and Social Research. 
https://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/33081?q=33081

https://www.icpsr.umich.edu/icpsrweb/NACJD/studies/34980/version/1

https://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/36354?q=36354
School Survey on Crime and Safety (SSOCS)

1. OVERVIEW

The School Survey on Crime and Safety (SSOCS) collects extensive crime and safety data from principals and school administrators of public schools. The survey builds on an earlier survey on school crime and safety conducted in 1997 using the Fast Response Survey System (FRSS). SSOCS focuses on incidents of specific crimes and offenses and a variety of specific discipline issues in public schools. It also covers characteristics of school policies, school violence prevention programs and policies, and school characteristics that are associated with school crime. The survey is conducted with nationally representative samples of regular public primary, middle, high, and combined schools in the 50 states and the District of Columbia. The sample does not include special education, alternative, virtual, or vocational schools; schools in the U.S. outlying areas and Puerto Rico; overseas Department of Defense schools; newly closed schools; home schools; Bureau of Indian Education schools; nonregular schools; ungraded schools; or schools with a highest grade of kindergarten or lower.

Purpose

The purposes of SSOCS are to collect detailed information on crime and safety from school administrators, and to provide estimates of school crime, discipline, disorder, programs, and policies. These national estimates assist the U.S. Department of Education in fulfilling goal 3.1 of its Strategic Goals and Objectives: to ensure that our nation’s schools are safe and drug-free and students are free of alcohol, tobacco, and other drugs.

Components

SSOCS consists of a single questionnaire that is completed by principals or the person most knowledgeable about crime and safety issues at the school. There are ten sections of the SSOCS questionnaire, with items pertaining to school practices and programs, parent and community involvement at school, school security, mental health services available to students, staff training, limitations on crime prevention, frequency of crime and violence at school, number of incidents, disciplinary problems and actions, and school characteristics.

While minor, non-substantive changes were made to the questionnaires between SSOCS:2000 and SSOCS:2010, the SSOCS:2016 questionnaire contained more substantive changes, such as the addition of the Mental Health Services section, which asks about particular mental health services being available to students at schools. Minor changes were made to the SSOCS:2018 questionnaire.

Periodicity

SSOCS is administered to public primary, middle, high, and combined school principals in the spring of even-numbered years. SSOCS is administered at the end of the school year to allow principals to report the most complete information possible. SSOCS was administered in the spring of the 1999–2000, 2003–04, 2005–06, 2007–08, 2009–10, 2015–16, 2017–18, and 2019-20 school years.

Data Availability

Public-use data for the SSOCS are available at https://nces.ed.gov/surveys/ssocs/data_products.asp. Information on how to obtain restricted-use SSOCS data can be found at https://nces.ed.gov/pubsearch/licenses.asp.

2. USES OF DATA

SSOCS provides school-level data on crime and safety on the frequency of violence, the nature of the school environment, and the characteristics of school violence prevention programs. Such national data are valuable to policymakers and researchers who need to know what policies and programs are in place, what the level of crime is and how it is changing, and what disciplinary actions schools are taking. Some of the topics that are examined include the following:

- Frequency and types of crimes at schools, including homicide, rape, sexual assault, attacks with or without weapons, robbery, theft, and vandalism;
- Frequency and types of disciplinary actions such as expulsions, transfers, and suspensions for selected offenses;
- Perceptions of other disciplinary problems such as bullying, verbal abuse, and disorder in the classroom;
- School policies and programs concerning crime and safety; and
- Pervasiveness of student and teacher involvement in efforts that were intended to prevent or reduce school violence.

3. KEY CONCEPTS

Some key concepts related to the SSOCS are defined below.

School Practices and Programs. Addresses current school practices and programs relating to crime and discipline. Respondents are asked about numerous procedures through which schools attempt to prevent and reduce violence, including controlling access to school grounds and school
buildings, requiring metal detector checks on students, and requiring students, faculty, or staff to wear badges or picture IDs. This section also asks respondents about various activities and student groups the school may have in place to involve students in restorative practices and to promote acceptance of student diversity. Respondents are also asked whether their school has a written plan describing procedures to be performed in the event of specific crisis scenarios and whether students have been drilled on certain emergency procedures. Additionally, this section asks about the presence of a threat assessment team to identify students who might be a potential risk for violent behavior.

**Parent and Community Involvement at School.** Collects information about efforts to involve parents in maintaining school discipline and responding to students’ problem behaviors. Addresses the level of parent or guardian participation in school-related activities, and the extent to which community groups and related organizations and agencies—including juvenile justice agencies, social service agencies, and religious organizations—are involved in schools’ efforts to promote safe schools.

**School Security Staff.** Asks respondents about the presence of security guards, security personnel, and sworn law enforcement officers at their schools. These questions seek to collect data that can examine the relationship between the presence of these personnel and reports of school crime. This section asks respondents about the presence of security employees during various times throughout the school day and after school hours, the number of full- and part-time security employees, whether they were armed, and their participation in particular school activities, such as mentoring students or training teachers in school safety.

**School Mental Health Services.** Asks respondents about the availability of mental health services conducted by licensed mental health professionals and whether these services are provided to students at school or outside of school. Respondents are also asked about both diagnostic mental health assessments and treatment for mental health disorders and their perception of the factors that might limit their school’s ability to provide these services.

**Staff Training and Practices.** Asks respondents about various types of training provided by the school or district for classroom teachers or aides, including training in safety procedures, intervention strategies for students displaying signs of mental health disorders, and recognizing early warning signs of students likely to exhibit violent behavior. Additionally, this section asked whether any staff (excluding school security staff) legally carried a firearm on school property.

**Limitations on Crime Prevention.** Asks respondents whether their efforts to reduce or prevent crime have been constrained by any factors related to teachers, parents, students, or administrative policies. Such limitations include inadequate teacher training or lack of teacher support for school policies, the likelihood of complaints from parents, fear of student retaliation, and federal, state, or district policies on discipline and safety. The data from this section can be used to determine whether these limitations are indeed correlated with school crime.

**Frequency of Crime and Violence at School.** Asks respondents about the incidence of homicides and shootings that occur at school. Fortunately, incidents of this type are rare; therefore, estimates based on these measures are not always reported in SSOCs publications.

**Incidents.** Asks respondents to report counts of a variety of recorded incidents at their schools, such as rape (or attempted rape), robbery, physical attacks or fights, and possession of a firearm or explosive device. In addition to being asked to report the number of recorded incidents, respondents were asked to report the number of those incidents reported to the police. Separate questions asked about the number of arrests that occurred at school and whether there had been any incidents of sexual misconduct between a staff member and a student. Respondents were also asked to report the number of hate crimes that occurred at school as well as their perception of the biases that may have motivated these crimes.

**Disciplinary Problems and Actions.** Asks about the degree to which schools face various disciplinary problems, such as student racial/ethnic tensions, student bullying, and gang activities, as well as what actions they take in response to certain offenses. School administrators were asked whether the school uses disciplinary actions such as removals from school, transfers, and out-of-school suspensions and whether these actions were used during the school year.

**School Characteristics.** Asks respondents about features of the school and of the student body. Variables for which data are collected include total enrollment; the percentage of students eligible for free or reduced-price lunch; the percentage of English language learners (ELLs); the percentage of students enrolled in special education; the percentage of male students; the number of daily classroom changes; the number of student transfers after the start of the school year; average daily attendance; and type of school (regular public, charter, magnet).

## 4. SURVEY DESIGN

### Sample Design

A stratified sample design is used to select schools for SSOCs. The sampling frame for SSOCs was constructed from the NCES Common Core of Data (CCD) Public Elementary/Secondary School Universe data file. Only “regular” schools (i.e., excluding special education,
alternative, virtual, or vocational schools; schools in other U.S. jurisdictions; and schools that teach only prekindergarten, kindergarten, or adult education) are eligible for SSOCS. A stratified sample of about 3,370 public schools was selected for SSOCS:2000; 3,740 public schools for SSOCS:2004; 3,570 public schools for SSOCS:2006; 3,480 for SSOCS:2008; 3,480 for SSOCS:2010; 3,550 for SSOCS:2016; 4,800 for SSOCS:2018; and 4,800 for SSOCS:2020.

The same general sample design was used for each SSOCS administration. For sample allocation purposes, strata were defined by instructional level, type of locale, and enrollment size. Percent White enrollment, Census region, and state were used as sorting variables in the sample selection process for all administrations. The three explicit stratification variables had been shown to be related to school crime and thus created meaningful strata for this survey. The sample was designed to provide reasonably precise cross-sectional estimates for selected subgroups of interest.

Although the same design was used to allocate the sample across strata for all administrations of SSOCS, the calculation of the total initial sample differed between SSOCS:2000 and later SSOCS administrations. Without the experience of prior administrations, stratum response rates had to be estimated for SSOCS:2000 when determining the number of sample cases within each stratum. In contrast, later administrations took advantage of the lessons learned from the prior data collection and used the prior stratum response rates to determine the proper size of the initial sample.

**Data Collection and Processing**

For the first five administrations of SSOCS, the data collection phase consisted of a mail survey with telephone follow up. For the 2018 administration, a web version was tested with a subset of the overall sample where the group received the web option for the first two mailings followed by a paper questionnaire and telephone follow up. For the 2020 administration, the collection began with a mail survey; however, because of school closures related to the COVID-19 pandemic, the collection shift to web administration.

**Reference dates.** Data for SSOCS are collected at the end of the school year in even-numbered years to allow principals to report the most complete information possible. For example, data collected in February–July of 2018 pertained to the 2017–18 school year.

**Data Collection.** SSOCS data collection begins with an advance letter being sent to sampled schools to inform them that they had been selected for SSOCS and describes the survey. About a week later, SSOCS questionnaires are mailed to administrators with a cover letter describing the importance of the survey and a brochure providing additional information about it. While SSOCS has historically been conducted by mail with telephone and e-mail follow-up, the 2018 survey administration experimented with an online questionnaire. The internet treatment group received a letter inviting the respondent to complete the online questionnaire, as well as the SSOCS:18 brochure. The 2018 survey administration also experimented with offering a $10 cash incentive to approximately half of the sample (2,400 schools).

Three weeks after the initial mailout, a reminder telephone operation begins. The primary objective of the reminder telephone operation is to follow up with the principal or school contact to determine the status of the questionnaire; however, the interviewer can complete the SSOCS interview over the phone at the respondent’s request. The interviewer can also offer the internet option to respondents who are in the paper treatment group and offer the paper option to those who are in the internet treatment group. Throughout the data collection window, nonresponding schools also receive reminder e-mails and replacement packages, as appropriate.

After the data collection ends, returned questionnaires are examined for quality and completeness using both manual and computerized edits. Key items are identified. Depending on the total number of items that had missing or problematic data, and on whether these items had been designated as key items, data quality issues are resolved by recontacting the respondents or by imputation.

**Editing.** The survey questionnaires are reviewed to match survey responses with the appropriate values to be entered. After the data are key-entered, they are run through a series of editing programs: first, to determine whether a returned questionnaire could be considered complete; subsequently, to check data for consistency, valid data value ranges, and skip patterns.

**Weighting.** Data are weighted to compensate for differential probabilities of selection and to adjust for the effects of nonresponse.

Sample weights allow inferences to be made about the population from which the sample units were drawn. Because of the complex nature of the SSOCS sample design, these weights are necessary to obtain population-based estimates, to minimize bias that arises from differences between responding and nonresponding schools, and to calibrate the data to known population characteristics in a way that reduces sampling error.

An initial (base) weight is first determined within each stratum by calculating the ratio of the number of schools available in the sampling frame to the number of schools selected. Because some schools refused to participate, the
responding schools did not necessarily constitute a random sample of the schools in the stratum. In order to reduce the potential of bias from nonresponse, weighting classes are determined by using a statistical algorithm similar to CHAID (i.e., chi-square automatic interaction detector) to partition the sample such that schools within a weighting class are homogeneous with respect to their probability of responding. The CHAID analysis identified the following variables as being predictive of response: school locale; number of full-time-equivalent (FTE) teachers; percent White, non-Hispanic enrollment; school enrollment size; student-to-FTE teacher ratio; and percentage of students eligible for free or reduced-price lunch. When the number of responding schools in a class is small, the weighting class is combined with another to avoid the possibility of large weights. After combining the necessary classes, the base weights are adjusted to produce nonresponse-adjusted weights, so that the weighted distribution of the responding schools resembles the initial distribution of the total sample.

The nonresponse-adjusted weights are then poststratified to calibrate the sample to known population totals in order to reduce bias in the estimates due to undercoverage. Two-dimension margins are set up for the poststratification: (1) instructional level and school enrollment size; and (2) instructional level and locale. An iterative process, known as the raking ratio adjustment, bring the weights into agreement with the known control totals. To be effective, the variables that define the poststrata must be correlated with the outcome of interest (school crime, for example). All three variables—instructional level, school enrollment size, and locale—are shown to be correlated with school crime.

Imputation. Completed SSOCS surveys contain some level of item nonresponse after the conclusion of the data collection phase. Imputation procedures were used to impute missing values of key items in SSOCS:2000 and missing values of all items in each subsequent SSOCS. All imputed values are flagged as such.

In SSOCS:2000, only the key data items with missing data in the file were imputed. Depending on the type of data to be imputed and the extent of missing values, a number of techniques—including hot-deck imputation, hot-deck imputation with collapsed imputation cell, logical imputation, and mean imputation—were employed.

In subsequent collections, imputation procedures were used to create values for all questionnaire items with missing data. This procedural change from SSOCS:2000 was implemented because the analysis of incomplete datasets may cause different users to arrive at different conclusions, depending on how the missing data are treated. The imputation methods used in SSOCS:2004 and later surveys were tailored to the nature of each survey item. Four methods were used: aggregate proportions, logical, best match, and clerical.

Future Plans
NCES conducts SSOCS every 2 years in order to provide continued updates on crime and safety in U.S. public schools. The last data collection was for school year 2019-20. There are plans for a future data collection to occur during the 2021-22 school year. As part of SSOCS:2022 development, cognitive testing on new COVID-19 pandemic items was conducted during the winter and spring of 2021, completed in late-spring 2021. Currently, NCES does not plan to administer the SSOCS survey beyond the 2022 collection.

5. DATA QUALITY AND COMPARABILITY

Sampling Error
The estimators of sampling variances for SSOCS statistics take the SSOCS complex sample design into account. Both replication and Taylor Series methods are used to estimate sampling errors in SSOCS.

SSOCS utilizes the jackknife replication method, which involves partitioning the entire sample into a set of groups (replicates) based on the actual sample design of the survey. Survey estimates can then be produced for each of the replicates by utilizing replicate weights that mimic the actual weighting procedures used in the full sample. The variation in the estimates computed for the replicates can then be used to estimate the sampling errors of the estimates for the full sample. A total of 50 replicate weights are defined for each SSOCS.

Another approach to the valid estimation of sampling errors for complex sample designs is to use a Taylor series approximation. To produce standard errors using a Taylor series program, two variables are required (to identify the stratum and the primary sampling unit [PSU]). The stratum-level variable is the indicator of the variance estimation stratum from which the unit is selected. The PSU is an arbitrary numeric identification number for the unit within the stratum.

Nonsampling Error
The key sources of nonsampling error in the SSOCS are described below.

Unit nonresponse. A response rate is the ratio of the number of completed questionnaires to the number of cases sampled and eligible to complete the survey. All of the response rates are weighted to account for different probabilities of selection. Schools that are determined to be ineligible to participate in the survey (e.g., special education, alternative, or vocational schools; schools in other U.S. jurisdictions;
and schools that teach only prekindergarten, kindergarten, or adult education) are not included in the calculation of response rates. For SSOCS:2018, the weighted response rate was about 62 percent and about 2,760 public schools responded. (See table SSOCS-1 for respondent size, overall unweighted and weighted unit response rates.)

Comparisons of the sample and target population, respondents and nonrespondents, and relative response probability across frame variable categories were examined to identify potential sources of bias. The variables used in the unit nonresponse bias analysis were school locale, number of full-time-equivalent teachers, school level, region, percent White, non-Hispanic enrollment, enrollment size, student-to-teacher ratio, and percent of students eligible for free or reduced-price lunch. These variables are available for all U.S. public schools from the CCD, and thus were known for all schools sampled for SSOCS:2018 regardless of whether they responded. For such characteristics, bias can be measured directly. The analysis found that, based on these characteristics, there were significant differences between responding and nonresponding schools. For example, schools with an enrollment of 1,000 students or more, urban schools, and schools in which less than 50 percent of students are White, non-Hispanic were significantly underrepresented among respondents, relative to their share of the target population.

To provide a fuller picture of the risk of bias in key estimates, correlations between these frame characteristics and survey variables were analyzed, and key estimates were compared between the lowest propensity respondents (i.e., schools with characteristics resembling those of nonrespondents) and other respondents. The frame characteristics (which are known for both respondents and nonrespondents) were found to be correlated with a number of survey variables (which are known only for respondents). This implies that the observed bias in frame characteristics, if not adjusted for, would likely lead to bias in key SSOCS:2018 estimates.

A CHAID analysis was conducted to inform the selection of weighting classes to be used to produce nonresponse-adjusted weights. Based on the CHAID analysis, the base weights were adjusted for potential nonresponse bias in school level, locale, enrollment size, percent White, non-Hispanic enrollment, region, percent of students eligible for free lunch, pupil-teacher ratio, and the number of FTE teaching staff. When the nonresponse-adjusted weights were applied, no significant bias remained in any of these characteristics.

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**Item nonresponse.** The magnitude of item nonresponse bias for a particular item is determined by factors including the level of item response, the differences between item respondents and item nonrespondents in the characteristic being measured by the item, and the distribution of item response across categories of auxiliary variables. No specific items were analyzed for potential nonresponse bias in 2018 because all SSOCS:2018 items met the threshold of 85 percent response (per NCES Statistical Standard 4-4).

<table>
<thead>
<tr>
<th>Year</th>
<th>Respondent size</th>
<th>Unweighted response rate</th>
<th>Weighted response rate</th>
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<tbody>
<tr>
<td>2000</td>
<td>2,270</td>
<td>68.5</td>
<td>70.0</td>
</tr>
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<td>2004</td>
<td>2,270</td>
<td>74.7</td>
<td>77.2</td>
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<tr>
<td>2006</td>
<td>2,270</td>
<td>77.5</td>
<td>81.3</td>
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<tr>
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<td>2,560</td>
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<td>77.2</td>
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<tr>
<td>2010</td>
<td>2,650</td>
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<tr>
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<td>2,090</td>
<td>59.2</td>
<td>62.9</td>
</tr>
<tr>
<td>2018</td>
<td>2,760</td>
<td>58.3</td>
<td>61.7</td>
</tr>
</tbody>
</table>


### 6. CONTACT INFORMATION

For content information on SSOCS, contact:

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7. METHODOLOGY AND EVALUATION REPORTS

General


Uses of Data


