Crime Data Explorer
Uniform Crime Reporting Data with a Focus on NIBRS

In modern times, people expect information to be quickly accessible, interactive, and useful. With these goals in mind, the Federal Bureau of Investigation (FBI) developed the Crime Data Explorer (CDE), an interactive tool for law enforcement and the public to more easily and quickly use and understand the FBI’s Uniform Crime Reporting (UCR) data.

Historically, FBI publications of crime data have been in the form of many static tables, so crime data were not available in a timely fashion nor easily searched and viewed. Each autumn, the FBI publishes crime data from the previous calendar year. This means if a particular crime occurs in January of one year, it could be unreferenced in the FBI’s published crime statistics until the autumn of the following year—about 21 months after the crime occurred. This may be too late for law enforcement agencies and community leaders to use the information strategically. This concept of annual publication has been the traditional standard for many decades, but modern technological advancements now make it possible for the FBI to do better.

Released publicly in June 2017, CDE is a web-based platform for users to query, sort, filter, view, and download crime data. Deployment of CDE is a bold step toward enhancing the utility, accessibility, and transparency of crime data. CDE provides read-only access; it is not a portal for submitting or modifying data. For crime data to become part of the UCR dataset, agencies must submit the data through the UCR Program and adhere to the UCR Program’s standards of quality and accountability.

**CDE’s Current Capabilities**

Currently, users can access data through CDE’s interactive portal for the FBI UCR Program’s two major collections of crime data: the Summary Reporting System (SRS) and the National Incident-Based Reporting System (NIBRS). For jurisdictions where NIBRS data are available, inquiries in CDE will produce NIBRS results; for jurisdictions with only SRS data, CDE will produce SRS results. CDE also offers a clickable map that shows different states’ participation in SRS and NIBRS, so users can easily see the type of data provided by each state. Users can also download datasets for several other data collections.

**SRS.** This is the traditional crime data collection of the FBI UCR Program. The FBI has collected these data and published them in the annual *Crime in the United States* report since the early 1930s. SRS collects data on the major offenses of murder, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson; includes a “Hierarchy Rule” that simplifies tallies of crimes by counting only the most serious offense within a criminal incident; tracks several hundred “most-in-population” agencies and publishes the data in a preliminary report for the first half of each reporting year; and provides some supplemental details for selected offenses, such as weapon usage in murders.

The FBI plans to retire SRS on January 1, 2021.

**NIBRS.** This is the FBI UCR Program’s more detailed, comprehensive system of crime data collection. NIBRS collects a large amount of incident-related detail on 52 “Group A” offenses and arrest data on 10 “Group B” offenses; collects up to 58 data elements per offense, such as victim-offender relationships and weapon types, which can be sorted and filtered to answer a virtually incalculable number of possible questions about crime, such as, “What types of drugs are involved in crimes committed against children by their parents?” or “Are offenders in rural areas more likely to use guns than offenders in urban areas?”; has the ability to collect data on up to 10 offenses per incident; collects data on Crimes Against Persons (e.g., homicide), Crimes Against Property (e.g., burglary), and Crimes Against Society (e.g., animal cruelty); and has mechanisms for agencies to update incident reports after they are initially submitted, which means agencies can correct or complete the data for an incident as new information becomes available, including case clearance information.

**Downloadable datasets.** CDE users can access the raw datasets of crime data through the Documents and Downloads portal in CDE. This function allows users of crime data to perform their own analyses of the data any way they wish. The following datasets are currently available for download through CDE:

- **Summary (SRS) Data with Estimates**
- **Assaults on Law Enforcement Officers**
- **Police Employee Data**
- **Hate Crime**
- **Human Trafficking**
**STATE UCR REPORTING DATASET CATEGORIES**

- **Incident data only**: The state submits only NIBRS data—but the FBI converts the NIBRS data into SRS statistics for purposes of publishing the statistics in *Crime in the United States*.
- **Incident and summary data**: The state submits both NIBRS and SRS data.
- **Summary data only**: The state submits only SRS data.
- **No state program**: The state does not currently have a UCR Program—but the state is actively working to develop a UCR Program, and many agencies within the state have already been submitting SRS or NIBRS data directly to the FBI.

**HOW THE CDE INTERFACE WORKS**

CDE is designed to be versatile and easy to use. From the home page, users of CDE can easily find data about crime statistics or police employment for a state or the entire United States by selecting from dropdown menus or clicking on a map. The result is a breakdown of statistics and visualizations of data from the selected area. This can include any combination of the whole nation or a state by crime data or law enforcement personnel data.

**Customizable features.**

Users of CDE can customize their experience with the crime data by accessing the variety of resources and reports available for agencies or areas that have submitted NIBRS data:

- Downloads of participation and population data
- Links to state and federal UCR resources and supplemental resources for further study
- Estimated crime rates
- Data from customizable ranges of times, including numbers of different types of crimes in two-, five-, or ten-year increments
- Victim and offender demographics and relationships
- Offense characteristics like weapons and links to other offenses
- A clickable glossary to help users understand terms

**Automatic visualizations.**

CDE automatically creates a set of reports with graphs to visualize crime data for selected geographic areas and ranges of time. With CDE’s automatically generated graphs, users can easily generate visualizations without the need for their own software.

CDE can generate interactive data visualizations, such as the one shown in Figure 1, which displays victim and offender demographics and relationships and location types in 2017.

**Tools for specific agencies.**

Users of CDE can also select a report of statistics for one particular agency, including their own. The report can include all crimes, specific crimes, and details like victim-offender relationships...
and location types. (Figure 2 shows a simulated report for a county sheriff’s office in 2016.) Agencies can use these data tools to create visually appealing, informative graphs and statistics in seconds.

**FUTURE PLANS FOR FBI DATA COLLECTIONS IN CDE**

The FBI UCR Program will continue to develop CDE, replacing traditional static tables and publications with CDE’s interactive features. The FBI continues to plan future upgrades for CDE to make it even more useful for researchers and the law enforcement community. Developers will build functionalities into CDE for other major FBI data collections, as well as include other applications for datasets already in CDE.

**NIBRS and SRS.** The FBI will place greater emphasis on NIBRS over SRS as the FBI prepares to retire SRS on January 1, 2021. However, the FBI will continue to publish SRS and NIBRS data at least through 2020, which means the datasets will be available both through traditional publications and CDE—ensuring that users of NIBRS and SRS will continue to have access to datasets through this transitional phase.

**Law Enforcement Officers Killed and Assaulted (LEOKA).** LEOKA collects information about incidents in which subjects feloniously kill or assault on-duty law enforcement officers. Every year, the FBI posts LEOKA data and narratives in the Law Enforcement Officers Killed and Assaulted publication on the FBI website. The data collection includes information about such factors as numbers of incidents, circumstances of officer involvement in incidents, details of officer injuries, and subject weapon usage. Law enforcement researchers can use LEOKA data for analysis of trends, and police trainers can use the data to help officers be aware of risks.

**Hate Crime Statistics.** The Hate Crime Statistics collection gathers data about crimes motivated by offenders’ biases against victims’ race, gender, gender identity, religion, sexual orientation, or ethnicity. Each year, the FBI publishes this information online in Hate Crime Statistics. The publication includes statistics on the types of hate biases connected to criminal offenses, as well as additional information about such factors as characteristics of victims and offenders, location types, and breakdowns of statistics by jurisdiction.

**National Use-of-Force (UoF) Data Collection.** UoF is a new data collection of information about incidents of police use of force involving death, serious bodily injury,
or discharges of firearms at or in the direction of persons. The UoF program has completed a pilot study with a set of volunteer agencies and begun live collection of data. The FBI expects to gain enough participation for statistically representative results, and then the FBI will begin a schedule of publication of UoF data.

**Cargo Theft.** The FBI publishes an annual report of data about incidents of cargo theft. The publication includes such details as victim types, location types, and values of property stolen. The cargo theft data are currently available for download through CDE, and the FBI plans to include data reports and visualizations for cargo theft in the future.

**Data stories.** The FBI UCR Program is developing a set of data stories for CDE to help users understand the data and context of crimes. A data story will take the form of a report with easily understandable text and graphs about a particular topic. For example, the FBI is planning to create a data story about violence against women, and users will be able to find it in CDE. Further data stories will be based on other topics of interest to concerned citizens, law enforcement agencies, or community leaders.

**Federal UCR data.** The FBI is working with other federal agencies to populate the UCR dataset with data from federal agencies, including from the FBI itself.

**Quarterly updates.** The FBI plans to begin a quarterly schedule of updates for CDE beginning in 2020. The quarterly updates of CDE should resolve another challenge of the traditional publications: gaps in the data due to late or incomplete data submissions. With quarterly updates of available data in CDE, the FBI can fill the gaps when information becomes available. Users of the data can also access the updated datasets as often as they wish.

The FBI plans for CDE to be the main way law enforcement agencies and the public will access NIBRS and other UCR data in the future. To gain the maximum benefits of CDE functions and data utility, the FBI encourages U.S. law enforcement agencies to transition to NIBRS as soon as possible. 

**FOR MORE INFORMATION**

Users can find CDE at fbi.gov/cde or on the FBI’s NIBRS webpage at fbi.gov/services/cjis/ucr/nibrs. Those wishing to learn more about CDE can contact the FBI by email at UCR@fbi.gov. Agencies wishing to learn more about NIBRS can contact the FBI for information or guidance by email at UCR-NIBRS@fbi.gov or by phone at 304-625-9999.