CRIME DATA SETS

There and Back Again
Ensuring Law Enforcement's Continued Support for Modernized Crime Data

Sean E. Goodison
Police Executive Research Forum

J. Scott Thomson
Camden County Police Department

The efforts described in this issue, specifically to transition law enforcement to incident-based reporting (Strom and Smith, 2017), redesign victimization data (Langton, Planty, and Lynch, 2017), and develop new measurements for crime statistics (Lauritsen and Cook, 2017), each deserve high praise. We have no doubt that any of these recent efforts would drastically improve data, and many of the provided recommendations are long overdue. For example, additional data collections are planned to capture use-of-force incidents nationally (Federal Bureau of Investigation, 2017) and wider scope police data, such as calls for service, arrests, and administrative police data from across the country (Police Foundation, 2017).

Policing is entering a new world of data as a willing partner to expanded data collection. As noted in Strom and Smith (2017), law enforcement directly benefits from an incident-based reporting system rather than from summary statistics with increased precision in crime measurement, an ability to evaluate programs rigorously, and a comprehensive picture of crime that can be provided to the public. The hierarchy rule as currently used cannot accurately capture typical instances of crime when multiple offenses occur simultaneously, whereas incident-based reporting allows for a complete understanding of crime. Data, as described in Langton et al. (2017), could transform how police understand crime by providing an ability to assess unreported crimes and tailor strategies among populations not willing to report incidents to police. Capturing crime statistics has to advance beyond categories we have used for decades, especially in light of drastic technological and social

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change, and Lauritsen and Cook's (2017) approach would provide ways for police to measure incidents like "cyber crime" distinctly, rather than how they do so currently, in which such crimes are either not properly classified or combined with street crime.

Of course, some policing practitioners have questioned expanding official collections of data at the national level, as evidenced by the decades-long resistance to the National Incident-Based Reporting System (NIBRS). For example, police agencies often fear that transitioning to new categories will produce results that suggest an increase in crime (see Lauritsen and Cook, 2017; Strom and Smith, 2017). And other sources of information on crime, like victimization data, are not directly useful to agencies because the estimates remain national and not local (see Langton et al., 2017). To obtain buy-in from police chiefs, these concerns must be addressed.

The authors of the articles in this issue do an excellent job of addressing traditional concerns, as well as of highlighting the increasing capabilities for collecting data, and the need for data in day-to-day policing. In just the past decade, computer technology drastically improved data collection (through mobile stations in police cars or hand-held devices) as well as data storage in off-the-shelf records management systems. These improvements allow more data to be collected and reported far more easily than in the past. And police chiefs increasingly realize that high-quality data are necessary for rigorous evaluations to determine "what works" in policing. Limited measures that are not valid or reliable can undercut proper assessment of strategies and can undermine public trust. Additionally, citizens have an increased demand for information about crime and policing, and they expect police departments to be able to produce data. Expanding the data available within a police agency is now a matter of transparency and public perceptions of the legitimacy of police authority.

The state of American crime data is particularly important to the field. As noted by Wilson (2009), the United States has studied itself more than any other country because few other nations have the data, freedom, and variability to study social problems. American data are the source for most theories and analysis of crime. With the disproportionate amount of crime research done in or about the United States as compared with the rest of the world, finding ways to improve American data quality will have the greatest elasticity to improve the work in the field. Although the authors in this issue highlight the vast strides needed for improving American data, the fact that this conversation can now occur and resources can be dedicated to the effort from researchers and government is a testament to how seriously all sides seek better measures of crime.

Police chiefs understand the need for data and the growing climate to expand data. Nevertheless, there are still reasons to be cautious while advocating for better information. To maximize chances for success across the three efforts described in this issue, all parties involved in this sea change need to remain on board. We have four recommendations to help ensure that the policing profession will continue to support recent progress in crime data.

Coordinate the Message

Although changes to crime data are necessary, there is a danger of too much change occurring too soon. For example, there are simultaneous efforts to transition to incident-based reporting and transition to a hybrid incident–attribute model. Making NIBRS nationally representative is a costly process and will be a significant change for police departments. If police agencies are asked in short order to conceptualize phasing out NIBRS and convert to a different way to measure crime, then agencies may be resistant to further change. The perfect can be the enemy of the good.

We recommend that advocates of better data collection develop a unified outreach plan to explain how the data collection systems overlap, with potential timelines for suggested changes. Presenting the wide range of necessary changes is good, but projects cannot be seen as separate initiatives, unrelated to each other. Special journal issues like this one will help to bring these distinct efforts into a single focus for readers, and further clarification is necessary among the practitioners who will be charged with actually implementing the data entry (in the case of official crime statistics) or who will seek to use the data to augment tactics (in the case of the National Crime Victimization Survey).

Toward that end of coordination, the upcoming methodology and implementation report from the Crime Indicators Working Group (CIWG) will be critical to encourage dialogue among practitioners. For example, we recommend a single clearinghouse for information that clearly lays out how these three efforts complement each other and describes the practical expected outcomes for police departments (e.g., how does the public benefit, how can the agency benefit, and what resources exist to assist with transition). A singular plan or logic model for planned revisions will prove valuable to those tasked with implementing changes or accessing new data. Even if a plan is not universally applicable initially and requires some tailoring for individual agencies, having this unified message demonstrates an ability to lead while allowing for constructive feedback to guide police agencies effectively through these major changes. Such factors are critical for gaining cooperation in the long term.

Demonstrate Benefit

Police are primary data collectors and managers of any official crime data. Given the increase in workload or staffing that will be required for improved data collection, additional training and resources needed, or in some cases a full reconceptualization about how crime is counted (whether going from summary to incident or from incident to incident-attribute), law enforcement agencies will rightfully perceive these efforts to be a greater burden than the current status quo. Additionally, many departments already collect richer data than basic summaries for internal use. For those agencies, the challenge is to produce NIBRS-compatible data for national estimates at an additional cost. These concerns should not be trivialized because police leaders will be acutely aware of any additional costs, and rank-and-file officers will be immediately aware of increases in the work required of them

in entering and validating data. Law enforcement agencies' questions about whether the benefits of detailed national data are worth the costs of complying must be addressed clearly.

Our recommendation is to emphasize specific benefits while acknowledging the significant costs. In the past, some costs may have been ignored by those planning new data systems. For example, police concerns about the labor costs to comply with NIBRS had been long ignored even though it was a key impediment to NIBRS adoption across the country. The National Crime Statistics Exchange (NCS-X, as described in Strom and Smith, 2017) project has made considerable progress on that front, even providing direct assistance with some financial, planning, and technical costs. In making the case to police, advocates should acknowledge the costs while stressing the benefits side of the equation.

For example, the clear benefits are as follows: An increased ability to conduct program evaluations (because rich data are needed for rigorous evaluation, and most funders are starting to emphasize experimental or quasi-experimental designs as a precondition to an award), improved transparency as more data are publicly available, easier benchmarking between jurisdictions, and new abilities to answer questions from the public about crime and policing efficiently because expanded data will address many questions that otherwise would require a dedicated data pull or review. Additionally, we encourage the use of agencies' "success stories" as part of the outreach regarding benefits. Departments often consult with one another informally for decision making. An agency that is highlighting the progress, challenges, and usefulness of new data after transition will likely be noticed by other departments that are still questioning the cost–benefit for their organization.

Provide Tactically Useful Data

National-level crime and victimization data are of little practical use to individual police agencies. Compiling expanded data for a national collection comes at a cost to departments, yet victimization data nationally aggregated is a lost opportunity for police agencies. Although there is some value to benchmarking and basic comparisons between agencies, few if any departments seek to conduct extensive analysis of another jurisdiction's detailed data. As the FBI cautions with current summary statistics, direct comparisons between jurisdictions can be tenuous as a result of numerous unmeasured factors or details lost in aggregation, even at the agency level. An agency's day-to-day data operation is focused on tactics, often in microplaces within the jurisdiction. Data are tactically useful when determining crime concentrations within neighborhoods, providing the public with specific answers to local concerns, developing short- and long-term deployment strategies, identifying areas for program implementation, and assessing specific efforts.

To address this challenge, we strongly suggest including geocoding data and providing linkages to other official data collections (e.g., U.S. Census data) to provide further context. Geocoding incidents allows for better specificity regarding where within a jurisdiction crime takes place. When combined with U.S. Census data providing spatial socioeconomic and demographic characteristics, analysis at the microplace or neighborhood level is possible.

From a tactical standpoint, there is clear value. The aggregate heterogeneity between cities hides some neighborhood homogeneity. In other words, entire jurisdictions often are not comparable with other jurisdictions, but neighborhoods within a jurisdiction may be closely comparable with a neighborhood in a different jurisdiction. For example, Camden, NJ, and Washington, DC, do not make good comparisons at the city level. The jurisdictions have different demographics, population size/density, urban layouts, and even crime profiles. Nevertheless, there are likely microplaces in these two cities that are highly comparable. The ability to compare neighborhoods opens new tactical avenues and expands the pool for comparison outside a single jurisdiction, thus, providing a better incentive for agencies to participate in new data collections.

Both Strom and Smith (2017) and Lauritsen and Cook (2017) note the potential for geocoding, whereas Langton et al. (2017) details the importance of developing subnational estimates and addressing issues of urban respondent weighting. These are the correct steps to making national crime data more useable for departments. Given the existence of geocoded maps covering the United States, often linked to other data sources through the Topologically Integrated Geographic Encoding and Referencing (TIGER) program (see U.S. Census Bureau, n.d.), there may be a technical solution to allow national collections to assign geocodes based on standardized address, rather than relying on individual agencies to do geocoding or converting regional geocoding planes. Regarding the NCVS, data estimates at smaller aggregations are necessary to gain greater footing and use among practitioners. Victimization provides a necessary perspective on types of crime where police have no official records. The tactical value of victimization data, if applied to smaller units of analysis, could play a major role in tailored strategies to address crime. Yet these data currently are a missed opportunity for local departments.

Address Data Security

Although computing technology allows increases in the amount and level of organization of data over time, increases in data bring increased exposure to risks of hacking and other security breaches. According to the Identity Theft Resource Center (ITRC), American organizations (e.g., business, government, education, and health care) experienced a record high number of data breaches in 2016 (ITRC, 2017). Numerous high-profile hacks of official secure data, such as the infiltration of the U.S. Office of Personnel Management in 2015, demonstrate the potential damage to privacy and how the damage increases considerably as data include more variables.

Police departments are subject to laws governing release of public information, which can vary by jurisdiction. At the same time, not all police data are open to the public, and security of sensitive data is critical to investigations and to public trust in the police. And even in areas that are not covered by public disclosure laws, police agencies often must balance the public's "right to know" with a sensitivity to privacy issues and confidentiality. Even though agencies should err on the side of the public's right to know and provide information in a

timely manner, there are sensitive data elements. Victim data, specific addresses of incidents, information describing specific police tactics, and files regarding ongoing investigations are some data elements that often are exempted from public disclosure or are highly redacted if made public.[1]

As researchers use crime data, often personal identifiers are stripped. In contrast to summary statistics, the level of detail requested by NIBRS or other crime classification schemes has a mixture of legally protected variables and other variables that are highly sensitive if linked to an individual.

We recommend that researchers and practitioners develop a plan for security in concert with developing new crime measures. Discussions about data expansion and about improved security should occur concurrently. Waiting until after the expanded data exist is too late to address security concerns. The potential damage from a hack or breach, either internal or external to the agency, is a significant risk. When private data are exposed, the public can lose trust in government, making the job of policing more difficult, independent of the specific harm caused to the parties who are directly impacted by the data that were obtained illegally.

Conclusion

These three efforts to improve American crime data are important and necessary activities. We have the technological capabilities to produce more detailed data than the snapshot of crime currently measured in summary statistics, and as a society, we expect more detailed information to be available. Yet, we note four general cautions as plans for expanded data move forward, and we provide recommendations that we believe will encourage police agencies to be active partners in making improvements to data collection. First, the efforts described in this issue represent major changes to crime data, so there should be a unified plan to help manage these changes. Next, some data collections produce significant alterations to previous police practices, so it is important to explain the specific benefits and the experiences of other law enforcement agencies to show the value of expanded data. Also, because national data are not tactically useful to police departments, there should be an effort to allow for disaggregation of data to smaller units to encourage participation. Finally, data security is a growing concern, specifically regarding data hacks and breaches, so planning for new crime data measurement should also include plans for matching security to protect larger collections of data. By keeping these cautions in mind, we believe all parties can continue the constructive and overdue improvements of the nation's crime data.

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1.   It is worth noting there is sometimes confusion regarding police data not available to the public. Not being accessible directly to the public does not mean the information is secret. For example, victims of crime and lawyers assigned to a case (either prosecution or defense) can access information that would not be released publicly if related to their individual cases.

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Sean E. Goodison is a deputy director and senior research criminologist at the Police Executive Research Forum (PERF). His work is focused on quantitative research, research methodology, program evaluation, police use of technology, and national data collection efforts. Dr. Goodison is a member of the FBI's National Use-of-Force Data Task Force and the National Institute of Justice's LEADS Agencies Coordinating Council. Before joining PERF, he was a law enforcement analyst and civilian researcher for the Washington, DC Metropolitan Police Department (MPDC). He received his Ph.D. in criminology and criminal justice from the University of Maryland—College Park and two master's degrees, one in forensic science and another in criminal justice, from The George Washington University.

J. Scott Thomson has been chief of the Camden County Police Department since 2013 and is the current president of the Police Executive Research Forum's (PERF) board of directors. He served as chief of the former Camden Police Department from 2008 to 2013 and has been in law enforcement since 1992. Chief Thomson sits on the board of advisors for the New York University School of Law's Center on the Administration of Criminal Law and the National Initiative for Building Community Trust and Justice. He is the co-chair of The Policing Project at New York University Law School, an executive fellow for the Police Foundation in Washington, DC, and a member of the Harvard University Law Enforcement Summit Executive Leadership Group.