Chapter 13. Data and Reporting

"Cops on the street need data; sometimes their safety depends on it. And what they need is data that are easy to digest, accurate, and timely."[1] - Chief William Brooks, Norwood Massachusetts Police Department

Introduction of the Issue

Data is both a byproduct of policing and a necessary tool. Law enforcement data has been collected since the establishment of the Uniform Crime Reporting (UCR) program in 1929. Through the early years of collecting crime data, law enforcement professionals focused on their ability to speak authoritatively on the severity and types of crimes that occurred within their jurisdictions.[2] The need to share vital information about crime trends has not changed much since 1929, but the demand, timing, and types of data have changed. Now in the twenty-first century, our nation has become a vast consumer of information in nearly all aspects of life and professional sectors. Law enforcement has shifted from taking a reactive stance (i.e., moving from call to call) to a proactive position, such as using data to help reduce crime in their communities.

The use of law enforcement data has seen a significant evolution from the early days of capturing basic crime counts to the current engagement in rigorous research practice through evidence-based policing (EBP). Data collection is no longer just aggregate counts; it now includes incident-based data, which provide detailed and granular information that allows data users to better assess crime reduction strategies. In addition to the analytical flexibility that incident-level data provides, standardized incident-level data provide a platform for law enforcement and other criminal justice professionals to maintain both transparency with and accountability to the community members they serve.

The Federal government relies on federal, state, county, tribal, and local law enforcement agencies to enter the data accurately. Law enforcement agencies striving to implement EBP strategies will be thwarted if the data analyzed are incomplete, inaccurate, or otherwise unreliable. Even when data have been accurately collected, people may misunderstand or misinterpret it if the context or baseline is unclear in reporting. The same data can be used to both defend and refute the same hypothesis. As such, the all government agencies must continue their due diligence in collecting and reporting data that are reliable and objective.

The commission focused on global issues and recommendations regarding federal criminal justice data, data collection, and EBP. Specifically, the commission was tasked with

- reviewing current federal data collections as they relate to crime, the criminal justice system, and law enforcement
- evaluating methods on how the data are being collected and used, and identifying potential gaps within these collections
- reviewing EBP, including promising practices and ways EBP can help advance policing

Issues and recommendations involving data that pertain specifically to other topics are addressed within those chapters.

13.1 Federal Data

Background

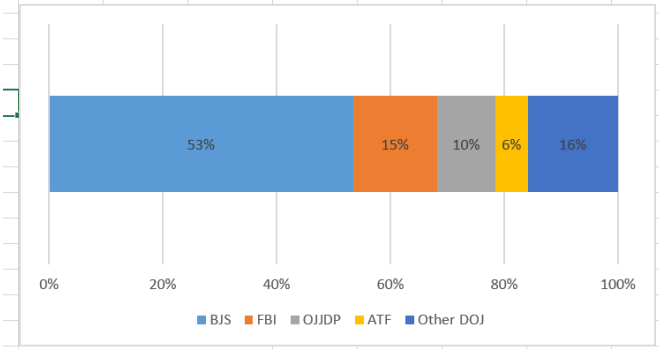
The executive branch of the U.S. government includes thirteen principal statistical agencies whose primary

[1] William Brooks, Chief of Police, Norwood Police Department, MA, email communication with Shelley S. Hyland, Federal Program Manager, Data and Reporting Working Group, April 30, 2020.
[2] Committee on Uniform Crime Records, *Uniform Crime Reporting: A Complete Manual for Police* (New York: International Association of Chiefs of Police, 1929).

responsibility is to collect essential statistical information for public use. These 13 principal statistical agencies receive approximately 40 percent of the overall funding for federal statistical activities.[3] Additionally, 94 federal agencies in the executive branch conduct statistical activities in conjunction with another program mission, such as enforcing laws or providing services.[4] Only about a quarter of these agencies collect data related to the criminal justice system. Since 1979, the Bureau of Justice Statistics (BJS) has served as the principal statistical agency for the Department of Justice (DOJ).

There is not one central system to collect criminal justice data within the federal government. The Office of Information and Regulatory Affairs (OIRA) within the Office of Management and Budget (OMB) coordinates the decentralized federal statistical system. Within DOJ, a number of agencies engage in statistical data collection (figure X). The methodology, size, and scope of these data collections vary widely. BJS oversees 53 percent of federal criminal justice data collections[5] within DOJ, followed by the Federal Bureau of Investigation (FBI; 15 percent), Office of Juvenile Justice and Delinquency Prevention (OJJDP; 10 percent), and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF; 6 percent). Eleven other DOJ agencies oversee the remaining 16 percent of federal criminal justice data collections (see supplement #).

Figure 1. Department of Justice federal data collections by overseeing agency.



Source: Supplement #.

About three-quarters (74 percent) of federal criminal justice data collections are conducted within DOJ (table X). Non-DOJ federal agencies are therefore responsible for 26 percent of criminal justice data collections, including the Centers for Disease Control and Prevention (CDC), U.S. Census Bureau, Administrative Office of the U.S. Courts, and Bureau of Labor Statistics (BLS). The data collected by these agencies are not contained within a singular collection or criminal justice area. Currently, more than 100 separate data collections capture various criminal justice data across the federal government (see supplement #).

Table 1. Federal data collections by criminal justice area and federal agency.

	Total	BJS	FBI	Other DOJ Agencies	Non-DOJ Agencies
Total	100.0 %	39.5 %	10.9 %	23.5 %	26.1 %
Crime	35.3	4.2	7.6	10.9	12.6
Law Enforcement	25.2	11.8	3.4	2.5	7.6
Courts	18.5	10.1	0.0	4.2	4.2
Corrections	18.5	12.6	0.0	5.9	0.0
Expenditures	2.5	0.8	0.0	0.0	1.7

Source: Supplement #.

[3] Office of Management and Budget, *Statistical Programs of the United States Government: Fiscal Year 2018* (Washington, DC: Executive Office of the President of the U.S., 2018), https://www.whitehouse.gov/wp-content/uploads/2018/05/statistical-programs-2018.pdf.
[4] Office of Management and Budget, *Statistical Programs*.
[5] For this chapter, the terms federal criminal justice data collections and justice-related data collections are used interchangeably and include only statistical data collections where the primary objective is to collect new or existing data in order to provide statistical results. These collections are covered under the Paperwork Reduction Act. It does not include performance measurement data collected through grants, cooperative agreements, and other funding mechanisms.

About 35 percent of federal data collections focus on crime-related issues (table X). However, the most prominent data collections involving the measurement of crime come from two major data sources: the FBI's Uniform Crime Reporting (UCR) program and BJS's National Crime Victimization Survey (NCVS). The FBI's UCR program has existed since 1930, when the Summary Reporting System (SRS) was created. The UCR still serves as the primary data collection for crime reported to police. In 1988, the FBI created the National Incident-Based Reporting System (NIBRS) to move from aggregate crime counts to detailed incident-level crime information.[6] Effective January 1, 2021, the FBI will retire the SRS and will transition to only NIBRS data collection.[7]

The NCVS is the other core measure of crime collected by DOJ, and it serves as the primary source of crime not reported to police. The NCVS is a residential survey of victims and captures both reported and unreported crime. NCVS estimates have largely only been available at the national level. However, BJS is currently undergoing an extensive redesign of the survey to produce subnational estimates. The NCVS also collects supplemental data on stalking, identity theft, and police-public contacts.[8]

Beyond crime data, BJS and the FBI collect a variety of data related to law enforcement. The FBI captures data on law enforcement officers killed and assaulted, personnel counts, and use of force. BJS collects data on characteristics of law enforcement agencies, such as personnel, policies, procedures, equipment, technology, and functions. BJS also has data on law enforcement training academies and for specific types of law enforcement agencies (e.g., local police, sheriffs' offices, campus police, and tribal law enforcement).

BJS collects most of the correctional data for the federal government, the majority of which is collected at the state and local level. The Federal Bureau of Prisons (BOP), the federal correctional agency, collects its own data; however, it also provides much of its data to BJS for statistical reporting. BJS also is the only federal government agency that collects data from state and local courts. The U.S. Courts, U.S. Attorneys' Offices (USAO), and U.S. Sentencing Commission only collect federal case data. The FBI captures criminal history data, while other agencies collect court case and disposition data.

Data produced by the federal government are largely descriptive. These data answer the questions of "how much?" (e.g., the number of law enforcement officers) or "how prevalent?" (e.g., the percentage of persons who had contact with police). However, two other elements are necessary to provide an important foundation to inform and evaluate public policies: key statistics produced by federal statistical agencies and underlying data that are publicly available. Researchers rely on data from federal statistical agencies for policy analysis and other social science research to examine critical criminal justice issues. These data are often used in research to focus on the "how" and "why" of various outcomes, which form the basis of evidence-based policy making, including EBP. The same data used to produce descriptive statistics in federal statistical agencies can also be used to evaluate programs. Federal award recipients often carry out these evaluation studies, often integrating the data collected by federal statistical agencies into more rigorous studies.[9]

Current State of the Issue

While BJS collects the majority of criminal justice data, a number of other federal agencies also capture justice-related data. More than 30 federal agencies collect criminal justice data through over 100 data collections (see supplement #). One benefit of multiple agencies collecting data is that agencies with established access to certain types of subjects are better equipped to collect data from these agencies or persons. For example, the FBI has been collecting crime data from law enforcement agencies for 90 years

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[6] Paul Wormeli, "Criminal Justice Statistics: An Evolution," *Criminology and Public Policy* 17, no. 2 (2018).
[7] "National Incident-Based Reporting System (NIBRS)," Federal Bureau of Investigation, accessed July 21, 2020, https://www.fbi.gov/services/cjis/ucr/nibrs.
[8] National Research Council, *Ensuring the Quality, Credibility, and Relevance of U.S. Justice Statistics* (Washington, DC: The National Academies Press, 2009), https://doi.org/10.17226/12671.
[9] National Academies of Sciences, Engineering, and Medicine, *Innovations in Federal Statistics: Combining Data Sources While Protecting Privacy* (Washington, DC: The National Academies Press, 2017), https://doi.org/10.17226/24652.

with a well-established infrastructure to capture these data. It would take millions of dollars and years for another government agency to set up a similar frame to accomplish the same task. Additionally, the CDC is the primary collector of data on injury and death, with an established series of data collections in hospitals. These collections provide access to data on injury and death involving law enforcement officers that may not be tracked through law enforcement agencies.

As expected, there are also a number of issues with a decentralized data collection. It is more difficult to identify the potential duplication of data collected. In addition, there is a lack of communication between federal agencies about the programs they implement. OIRA oversees and reviews all information collected from the public, but it relies on federal agencies to identify potential sources of duplication. Additionally, while OIRA may request that BJS or the FBI review data collection proposals from other agencies, these requests usually only involve data collected by another DOJ agency or a non-DOJ agency funded by a DOJ component.

Additionally, decentralization makes it difficult to identify gaps in the data being collected. A lack of clarity in what is being gathered across agencies and data collections makes it increasingly difficult to identify the knowledge gaps. The National Academies of Sciences, Engineering and Medicine (NASEM) has extensively reviewed and identified gaps in both the evolution of crime data and BJS data collections; however, there has not been a systematic review of all criminal justice collections by the federal government.[10] An exhaustive review of all data collections across the federal government was outside of the scope of the commission.

The recommendations offer practical ways to address issues caused by the decentralization of federal criminal justice data.

13.1.1 The president should direct the Office of Management and Budget to conduct a one-time review of criminal justice data collections across the government to identify duplication of data collection.

The collection of criminal justice statistics is highly decentralized in the federal government. More than 30 agencies collect data pertaining to criminal justice issues.[11] Certain topics, such as victimization, have data that are collected through multiple studies by multiple organizations. For example, BJS collects information on victims of intimate partner violence through their NCVS regardless of whether the violence was reported to law enforcement.[12] Information on victims of intimate partner violence can also be obtained from the CDC's National Intimate Partner and Sexual Violence Survey.[13]

The Paperwork Reduction Act (PRA) of 1995 gives OMB the authority over data collected for statistical purposes. While OMB is charged with making sure these collections do not overlap, the agency that submits the information collection request (ICR) for OMB approval is responsible for "describing efforts to identify duplication."[14] If the agency that submitted the ICR is unaware of existing data collection efforts, then this section will not be adequately addressed. Additionally, the OMB OIRA desk officer may not be aware of similar collections performed by other agencies. As such, duplications of data collection could still occur across agencies. To ensure the federal collection of criminal justice data does not unduly burden non-federal entities, the government must be able to identify duplications of data collection efforts. An evaluation and report by OMB would identify overlap in efforts and help guide resource distributions going forward.

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[10] National Academies of Sciences, Engineering, and Medicine, *Modernizing Crime Statistics: Report 1: Defining and Classifying Crime* (Washington, DC: The National Academies Press, 2017), https://doi.org/10.17226/23492; National Academies of Sciences, Engineering, and Medicine, *Modernizing Crime Statistics: Report 2: New Systems for Measuring Crime* (Washington, DC: The National Academies Press, 2018), https://doi.org/10.17226/25035; and National Research Council, *Ensuring the Quality.*

[11] See supplement #.

[12] Shannon Catalano, *Intimate Partner Violence: Attributes Of Victimization, 1993–2011* (Washington, DC: Bureau of Justice Statistics, 2013), https://www.bjs.gov/content/pub/pdf/ipvav9311.pdf.

[13] S.G. Smith et al., *National Intimate Partner and Sexual Violence Survey (NISVS): 2015 Data Brief – Updated Release* (Atlanta, GA: Centers for Disease Control and Prevention, 2018), https://www.cdc.gov/violenceprevention/pdf/2015data-brief508.pdf.

[14] Office of Information and Regulatory Affairs, *Creating a Supporting Statement Part A* (Washington, DC: Office of Management and Budget, 2019), 1, https://pra.digital.gov/uploads/supporting-statement-a-instructions.pdf.

13.1.2 The president should direct the Office of Management and Budget to seek guidance from the Bureau of Justice Statistics when reviewing criminal justice data collections proposed by federal government agencies outside of the Department of Justice.

To both prevent duplication of efforts and ensure that one agency within DOJ oversees justice-related collections, OMB should have BJS review criminal justice-related data collections that are submitted for review under the PRA. Currently, OMB seeks input from BJS on justice-related collections by DOJ components; this recommendation would extend coverage to all federal criminal justice data collections. As a result, OMB, with the assistance of BJS, would identify potential duplication of efforts, which would in turn reduce burden and save tax dollars.

DOJ should advise and oversee all justice-related data collections to reduce duplication. While other government agencies such as the CDC, BLS, and National Center for Educational Statistics (NCES) collect vital information to inform criminal justice issues, the lack of coordination across federal agencies can lead to duplication in data collected and funding. Because BJS is the principal federal statistical agency for DOJ, BJS has the knowledge to determine if proposed collections are conducted using appropriate research methods. Additionally, as outlined in BJS statute, 34 U.S.C. § 10132, BJS is authorized to "recommend national standards for justice statistics and for insuring the reliability and validity of justice statistics."[15] Advising OMB on other justice-related data collections would better allow for national standards to be developed.

13.1.3 Congress should provide funding to the Bureau of Justice Statistics for the National Academies of Sciences to conduct an analysis that identifies gaps in criminal justice data collected by the federal government.

Established by an act of Congress, the National Academies of Sciences, Engineering and Medicine (NASEM) is an independent entity charged with providing objective advice to the nation on matters related to science and technology. NASEM has conducted similar work in the past and would be in the best position to evaluate this issue. Building upon NASEM's *Panel on Modernizing the Nation's Crime Statistics* and the *Panel to Review the Programs of the Bureau of Justice Statistics*, NASEM should evaluate and identify data collection gaps across all federal agencies that are engaged in collecting criminal justice data. The report should include gaps in data collected that pertain to law enforcement, courts, sentencing, and corrections.

While crime measurement has been assessed by NASEM panels and presidential commissions in the past, it has not yet been fully addressed. Each of these panels and commissions have provided their unique contribution; however, areas remain that they were unable to fully address given their limited charges and scope. Current crime measures do not adequately capture crimes by and against businesses, organizations, and governments, nor do they capture environmental crimes.[16]

Data related to law enforcement, courts, and corrections need to be thoroughly evaluated to identify what is not being collected and what should be. BJS's data collections were reviewed by a 2009 NASEM panel; while some of this panel's recommendations have been implemented, not all have.[17] This panel identified data gaps in BJS's criminal justice portfolio but also noted that stagnant funding and staffing levels have made it impossible for BJS to meet these demands.[18] Furthermore, the report did not take into account criminal justice data collected by other federal agencies.

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[15] Justice System Improvement Act, 34 U.S.C. § 10132 (1979), https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title34-section10132&num=0&edition=prelim#sourcecredit.

[16] Janet Lauritsen and Daniel L. Cork, "Expanding Our Understanding of Crime: The National Academies Report on the Future of Crime Statistics and Measurement," *Criminology and Public Policy* 16, no. 4 (2017): 1075−98.

[17] National Research Council, *Ensuring the Quality*.

[18] National Research Council, *Ensuring the Quality*.

13.2 Data Collection and Reporting Methods

Background

The 1967 U.S. President's Commission on Law Enforcement and Administration of Justice (Johnson commission) noted that the greatest obstacle to the work of the commission was the lack of data.[19] The Johnson commission recommended the development of improved systems to collect data that would inform all aspects of the criminal justice system. The report relied on UCR data but noted that the data misrepresented the true amount of crime because of the public's reluctance to report on certain types of crime. The commission did not limit their criticism to the inadequacies in crime reporting. They also identified that published data about criminal justice were lacking, stating "much of the data are incomplete, inconsistent, and inaccurate."[20]

In the 50 years since the Johnson commission report, the federal government has made great strides to improve data collection and reporting. The creation of BJS a decade after the Johnson commission report greatly expanded justice-related data collection and statistical reporting for DOJ. BJS is now responsible for a broad portfolio of statistics and reports that address all aspects of the criminal justice system.[21] In addition, the FBI has adopted agile methods to improve and continually enhance its capabilities for data collection and publications. The FBI leverages its current technical networks and strong relationships with federal, state, local, and tribal agencies to collect and publish crime and law enforcement data to benefit the nation.

Federal data collection and reporting would not be possible without the cooperation of states, counties, local, and tribal agencies. Similarly, state, county, tribal, and local criminal justice agencies collect a myriad of data. Data sharing and reporting may be the most important aspect of data collection. There is little need to collect data if it will not be used. Law enforcement agencies collect data daily and use these data internally to help inform operations, policies, and procedures. The benefits of sharing and reporting data outweigh the negatives. Agencies may be concerned about privacy issues, but data can be shared and reported so that sensitive information is not released. Sharing data with other agencies assists with investigations. Additionally, reporting data to the public can help build police-community relations and increase transparency and public trust. Researchers can also use these data to build EBP practices.[22]

Data collection and sharing among all criminal justice agencies is essential for day-to-day operations. Data reporting at all levels of government is necessary for maintaining transparency, informing policy, and understanding the current state of the criminal justice system.

Current State of the Issue

There are two primary issues with data collection and reporting: mandatory reporting and standardization. These issues have an impact on all levels of government and its ability to provide reliable justice-related statistics.

The federal government does not have the authority to make data collection from states, counties, tribal, or local agencies mandatory. Federal agencies are only mandated to comply with federal data requests from the principal statistical agencies. Though the government is unable to mandate reporting, it can build in funding penalties. The most wide reaching federal funding source for states and local law enforcement agencies is the Edward Byrne Justice Assistance Grants (JAG) program. Currently, failing to report data for the Prison Rape Elimination Act and the Sex Offender Registration and Notification Act result in penalties to the JAG award. However, these penalties can only affect state awards. If a local agency fails to report to the state, then only

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[19] U.S. President's Commission on Law Enforcement and the Administration of Justice, *The Challenge of Crime in a Free Society* (Washington, DC: U.S. Government Printing Office, 1967), https://www.ncjrs.gov/pdffiles1/nij/42.pdf.
[20] U.S. President's Commission on Law Enforcement and the Administration of Justice, *The Challenge of Crime*, 266.
[21] Wormeli, "Criminal Justice Statistics."
[22] "5 Things You Need to Know About Open Data in Policing," National Police Foundation, accessed June 3, 2020, https://www.policefoundation.org/5-things-you-need-to-know-about-open-data-in-policing/.

the state is penalized.[23] There is no mechanism for penalizing local awards under the current JAG formula.

Although the Federal government cannot mandate participation, most respondents comply with data requests. BJS survey collections typically have a response rate of between 80 percent and 90 percent.[24] Additionally, 91 percent of law enforcement agencies report to the FBI's UCR program.[25] Crime reporting to the FBI is successful because the FBI has been collecting these data from agencies for 90 years, and as of 2018, 43 states have legislation mandating local agencies to report crime data to the states.[26] While crime reporting to the UCR is high, 51 percent of law enforcement agencies report via NIBRS, which has been in existence since 1988.[27] NIBRS requires a significant system conversion from submitting monthly crime counts to providing detailed incident-level case data. This slow adoption rate led to the development of BJS's National Crime Information Exchange (NCS-X) program in 2012, which provides funding to 400 law enforcement agencies and states to convert to NIBRS in order to achieve national representation.[28] In addition to NCS-X, the FBI offers data integration support as well as providing technical assistance on NIBRS data specifications and reporting requirements. Since the implementation of these additional programs, there has been a 46 percent increase in agencies that report to NIBRS (from 6,835 agencies in 2012 to 10,011 agencies in 2020).[29] The FBI's goal is to have all 18,000 law enforcement agencies in the United States reporting crime to NIBRS by 2021. Based on state-reported agency commitments, the FBI forecasts that 75 percent of law enforcement agencies will be submitting to NIBRS by January 1, 2021, which will account for 83 percent of the population.[30]

The second issue that plagues data collection and reporting across all levels of government is the lack of standardization in the data being collected. This is largely due to the decentralized record management systems (RMS) kept by criminal justice agencies. Currently, law enforcement agencies engage with private vendors to purchase or lease RMS, which results in agencies using various systems. RMS vendors treat the software as proprietary, thereby making it difficult for separate systems to communicate with each other. Multiple RMS systems lead to lack of data uniformity and query capabilities. Officers can query their own agency systems and separate federal and state systems, but often cannot access the RMS of neighboring departments. In cases where access is granted to the systems, they are not integrated, which means that separate queries must be run in each system. These software issues make it difficult for criminal justice agencies to share data with each other and nearly impossible to share data in real-time.

Multiple RMS systems also contribute to a lack of standardization in the data that are being collected. The FBI has developed standard definitions for reporting crime and use of force across law enforcement agencies to ensure the same data are being collected. Within local agency RMS solutions, data to support NIBRS are either directly captured by a RMS programed to NIBRS specifications or through backend data export functions. Most data exchanges between the local agency and state occurs through a batch export from an RMS, which is then imported to a state repository and finally submitted to the FBI UCR repository. Some states are starting to use transactional web services to exchange data. For example, Minnesota is considered a leader in using this new business model, both among agencies within the state and to the FBI UCR program

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[23] Alexia D. Cooper, *Justice Assistance Grant Program, 2016* (Washington, DC: Bureau of Justice Statistics, 2016), https://www.bjs.gov/content/pub/pdf/jagp16.pdf.

[24] National Research Council, *Ensuring the Quality,* 81.

[25] Trudy Ford, Section Chief, Criminal Justice Information Services, Federal Bureau of Investigation, email communication with Data and Reporting Working Group, February 28, 2020.

[26] National Academies of Sciences, Engineering, and Medicine, *Modernizing Crime Statistics: 2*, 63.

[27] Amy Blasher, Unit Chief, Criminal Justice Information Services, Federal Bureau of Investigation, email communication with Data and Reporting Working Group, May 7, 2020.

[28] Kevin J. Strom and Erica L. Smith, "The Future of Crime Data: The Case for the National Incident-Based Reporting System (NIBRS) as a Primary Data Source for Policy Evaluation and Crime Analysis," *Criminology & Public Policy* 16, no. 4 (2017).

[29] Amy Blasher, Unit Chief, Criminal Justice Information Services, Federal Bureau of Investigation, email communication with Data and Reporting Working Group, May 13, 2020.

[30] Trudy Ford, Section Chief, Criminal Justice Information Services, Federal Bureau of Investigation, email communication with Shelley S. Hyland, Federal Program Manager, Data and Reporting Working Group, July 15, 2020.

(see *Minnesota's Transition to NIBRS*).[31] Even with some standardization, a lack of training on data entry and quality can result in data that are error-prone and meaningless. This is especially true when law enforcement data is handled by multiple people. For example, a crime report is collected by the initial officer, possibly modified or added to by an investigator, and electronically entered by an administrative staff member. Checking for consistency and ensuring quality may not be part of the process.

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Minnesota's Transition to NIBRS

In 2012, Minnesota's Bureau of Criminal Apprehension (BCA) began looking into ways to address a lack of consistency in law enforcement data collection and reporting as a result of agencies using different RMS solutions and definitions. As a solution, the BCA sought to update its state repository and decided to upgrade to allow for statewide NIBRS submissions. In October 2013, the BCA began transitioning its SRS system to NIBRS, and by 2017 it had developed a hybrid system to accept both SRS and NIBRS submissions.[32]

The BCA used the National Information Exchange Model (NIEM) to develop its NIBRS-compliant system. NIEM "facilitates information-sharing between agencies by standardizing methodology and semantics, resulting in greater informational compatibility."[33] NIEM allows for interagency information sharing throughout the state when agencies have disparate systems. The Extensible Markup Language (XML) format allowed agencies to submit to the state and for the state to submit to the FBI. After testing and working closely with the FBI, the BCA received NIBRS certification in August 2016.[34]

To assist individual agencies with converting to NIBRS, the BCA developed a detailed set of specifications for RMS vendors. Additionally, the BCA provided law enforcement agencies and RMS vendors a guide that maps state offense categories to the UCR codes. This key is available through a web interface so RMS vendors can easily incorporate it into an agency's system. Minnesota plans to discontinue SRS reporting by the end of 2020. Currently, 53 percent of law enforcement agencies in Minnesota report to NIBRS, and the remaining agencies are in process of converting to NIBRS.[35]

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Another issue is that only a few RMS solutions have the capability to process the data and produce meaningful output for reporting and analysis. Agencies may be able to collect data but are often unable to pull the data out easily for analysis, making it difficult for criminal justice agencies to report on their data in a meaningful way. Larger agencies with analytical staff are better able to collate and analyze data. Many of these agencies have also been successful in releasing data and reports to the public, which promotes transparency. States that collect and compile data from local agencies can bridge the gap and help provide reporting and analysis. When states and local agencies do not have the capacity for reporting, sharing their data with the federal government allows these data to be analyzed and reported.

The recommendations offer practical ways to address issues related to data collection and reporting.

13.2.1 States should provide a technology solution that will allow all law enforcement agencies to be connected for real-time data retrieval.

There are almost 18,000 state and local law enforcement agencies in the United States, and they use a

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[31] "Going NIBRS: Two States Share Their Stories: Minnesota's Transition to NIBRS (Part 1 of 2)," Criminal Justice Information Services Link, April 11, 2017, https://www.fbi.gov/services/cjis/cjis-link/going-nibrs-part-1-minnesota-transition.
[32] Criminal Justice Information Services Link, "Going NIBRS."
[33] Criminal Justice Information Services Link, "Going NIBRS."
[34] Criminal Justice Information Services Link, "Going NIBRS."
[35] Patti Zafke, Product Manager, Minnesota Bureau of Criminal Apprehension, "Minnesota's Transition to NIBRS" (PowerPoint presentation, Data and Reporting Working Group, virtual meeting, May 14, 2020).

myriad of records management systems (RMS). [36] These RMS or law enforcement data collection systems are mostly commercial systems developed by private vendors. Little to no consistency exists in RMS within states, or even within counties. In counties with multiple cities and a sheriff's office, it is common for each agency to have its own RMS platform that is not interfaced with other agencies' RMS. This means agencies in the same county, and certainly in the same state, do not have direct and immediate access to other agencies' offense, incident, and criminal intelligence records. Different and unintegrated RMS solutions across agencies hinder effective data sharing, crime solving, and managing officer safety issues.

The implementation of NIEM standards has assisted the progress toward integrating law enforcement RMS.[37] While some areas have been successful at integrating data across law enforcement jurisdictions, the majority have not. As such, states should provide a solution to allow for law enforcement RMS to be fully interoperable across the state. The solution for this depends on current infrastructure in the state and available funding.

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One potential solution is for the state to adopt one RMS vendor to provide services for the all law enforcement agencies within the state. For example, the Rhode Island Police Chiefs Association has worked to migrate to one RMS statewide. Currently, every law enforcement agency in Rhode Island uses the same RMS vendor except Providence and New Shoreham. Due to limitations with the current statewide system, all agencies within Rhode Island will move to the RMS vendor for Providence police department. By 2021, all Rhode Island law enforcement agencies will use the same RMS platform.[38]

Another solution is for the state to provide an interface that allows RMS systems to communicate and exchange information. The State of New Jersey has accomplished this through the creation of NJ-DEx. New Jersey does not allow for a single RMS vendor to be dictated to local agencies; therefore, the state needed to consider a standards-based approach to exchange information.[39] New Jersey used the Global Justice XML Data Model (GJXDM), which allows for the secure exchange of information at all levels of government, and then incorporated NIEM, which provides common vocabulary to enable information exchange across different organizations.[40] As part of NJ-DEx, each data exchange entity creates an extract and data-sharing model as part of the RMS that conforms to state specifications. These data are then shared through the FBI's Law Enforcement National Data Exchange (N-DEx).[41]

13.2.2 States should enact legislation that requires criminal justice agencies to collect standardized criminal justice data for reporting to the state and federal governments. At a minimum, the legislation should require all law enforcement agencies within the state to report to the Federal Bureau of Investigation's National Incident Based Reporting System and National Use-of-Force Data Collection. The legislation should also include the collection of key data elements from courts and corrections on a person from arrest to release. The legislation should include funding appropriations for the collection and reporting of these data.

Because RMS systems are decentralized and vary widely across law enforcement agencies, data fields should be standardized so they can be collated at the state level. States and agencies that have converted to NIBRS will have standardized crime data that will be collated at the state and federal levels. However, law

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[36] Duren Banks et al., *National Sources of Law Enforcement Employment Data* (Washington, DC: Bureau of Justice Statistics, 2016), https://www.bjs.gov/content/pub/pdf/nsleed.pdf.

[37] "About NIEM," National Information Exchange Model (NIEM), accessed June 24, 2020, https://www.niem.gov/about-niem.

[38] Steven Pare, Public Safety Commissioner, Providence Police Department, RI, email communication with William Brooks, Chief of Police, Norwood Police Department, MA, April 23, 2020.

[39] National Information Exchange Model, "New Jersey Data Exchange*:* NIEM-GJXDM for New Jersey Law Enforcement Information Sharing," (Washington, DC: NIEM, 2009), https://www.niem.gov/sites/default/files/New_Jersey-casestudy.pdf.

[40] National Information Exchange Model, "About NIEM."

[41] National Information Exchange Model, "New Jersey Data Exchange."

enforcement agencies also need to collect other key criminal justice data, such as that on use of force.

While most state and local agencies report their crime data based on SRS or NIBRS specifications, such reporting is not required because the federal government cannot mandate it under federal law. However, states can mandate that local agencies report to the state. At least 43 states have legislation that requires local law enforcement agencies to report crime data to the state.[42] For decades, U.S. law enforcement agencies reported crime data to the FBI under the SRS of the UCR program. Effective January 1, 2021, all agencies will report under the NIBRS, as opposed to summary reporting through the SRS. However, as of April 2020, 51 percent of law enforcement agencies in the United States were reporting to NIBRS.[43] States should mandate NIBRS reporting so these data can be shared with the federal government and participating agencies for a comprehensive look at crime in the nation.

The lack of required reporting in all 50 states creates data voids and does not ensure that data users have a full and accurate view of crime in America. The same holds true for use-of-force reporting. The FBI's National Use-of-Force Data Collection was developed to fill this void, but agencies are not required to submit their use of force statistics. As of April 2020, 40 percent of agencies were reporting to the National Use-of-Force Data Collection.[44] To provide accurate statistics on law enforcement use of force, states should mandate that all law enforcement agencies report to the FBI's National Use-of-Force Data Collection.[45] Agencies benefit from reporting use of force as it increases transparency, which can build community trust.

[CROSS REFERENCE RESPECT FOR LAW ENFORCEMENT]

Data from law enforcement agencies are important to analyze crime, but data from county jails and the courts are equally important to understand the origins of crime, crime trends, and the effectiveness of the criminal justice system. Standardizing the collection of electronic criminal history, court disposition, and corrections data will enable the criminal justice practitioners to study the full impact of crime within our society. Florida enacted legislation in 2018 for all counties in the state to collect over 100 data elements tracking a person from arrest to release. All states should adopt similar legislation (see *Tracking Persons From Arrest to Release: A Lesson From Florida*).

[BEGIN TEXT BOX]

Tracking Persons From Arrest to Release: A Lesson From Florida

On March 30, 2018, Florida Governor Rick Scott approved Senate Bill 1392 to go into effect on July 1, 2018, as Chapter 2018-127.[46] "Promoted as a bipartisan transparency measure, the new system will gather data on all future cases across 67 counties, fully anonymized to protect identity, and track recidivism rates following incarceration to show the public how people cycle through prisons."[47] The legislation requires every county in Florida to collect data on persons from time of arrest to release or transfer from the state Department of Corrections to the Florida Department of Law Enforcement (FDLE). Prior to the passage of the bill, data collection efforts in Florida counties varied by agency and were independent. By providing common definitions of terms, the legislation provides statewide standards to improve consistency in data collection and reporting, which ensures that the data for each county are comparable.[48]

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[42] National Academies of Sciences, Engineering, and Medicine, *Modernizing Crime Statistics: 2*, 63.
[43] Blasher, email to Data and Reporting, May 7, 2020.
[44] Amy Blasher, Unit Chief, Criminal Justice Information Services, Federal Bureau of Investigation, email communication with Data and Reporting Working Group, April 22, 2020.
[45] This recommendation is also supported by the NAACP Legal Defense and Educational Fund, Inc., American Civil Liberties Union, and Justice Roundtable. These agencies provided public comments for consideration to the Commission.
[46] S.B. 1392, 2018 Leg. (FL 2018), https://www.flsenate.gov/Session/Bill/2018/1392; and Committee Substitute for Committee Substitute for Senate Bill No. 1392, Chapter 2018−127 (FL 2018), http://laws.flrules.org/2018/127.
[47] Michelle Chen, "Our Systems for Tracking the Criminal Justice System are Broken," *The Nation*, March 27, 2018, https://www.thenation.com/article/archive/our-systems-for-tracking-the-criminal-justice-system-are-broken/.
[48] "Landmark Florida Legislation Sets New Standard for Data Collection and Transparency," Council of State Governments, April 18, 2018,

The legislation was developed with guidance from Measures for Justice (MFJ), a nonprofit that collaborates with counties to track persons throughout the criminal justice system.[49] The data elements outlined in the legislation reflect the same elements that MFJ has advised other states to track. MFJ developed and tested their first draft measures in Wisconsin through funding by BJA. The measures were first piloted in Milwaukee and expanded to the entire state. Due to the success of the pilot, MFJ received additional funding to implement the measures in other states.[50]

Florida data are collected on more than 100 measures at multiple points in the criminal justice system and submitted to the FDLE monthly.[51] The FDLE is required to publish the data and make it available to the public. The following data must be collected:

> County detention facilities are required to report administrative facility information to include maximum capacity, the total jail population at year end, budget, the daily cost to house an inmate, revenue generated by the housing of federal inmates, and the number of staff assigned to supervise inmates. Inmate information required for the report includes admission type, inmate demographics, population of inmates based on type of admission, county or state sentences, and flag designations. These flag designations include sex offender, gang affiliation, domestic violence, habitual offender, and pretrial release violations.
>
> Clerks of court are required to report information pertaining to defendants and their case status. This information includes but is not limited to pretrial release status within 24 hours of arrest, bail modification and payments, data related to court dates, and final disposition information.
>
> State attorney's offices are required to report information pertaining to a defendant's case, victim information, annual felony or misdemeanor caseload, the number of attorneys in each prosecutor's office, charges referred by law enforcement each year, the types of illegal drug cases prosecuted, and the number of cases that are filed as no information by the prosecutor.
>
> Public defender's offices are required to report information pertaining to the annual felony or misdemeanor case load. They are also required to report the number of full-time, part-time, and contract attorneys.
>
> The Florida Department of Corrections is required to report information pertaining to each inmate. This information includes inmate demographics, type of conviction, flag designations; length of sentence, tentative release date and corresponding gain time, and disciplinary action and probation or parole information, including revocations.

The legislation provided funding to help counties collect and report data. The bill included $1,750,000 appropriation for the development of a state repository, which allows for separate systems to connect for reporting. The state repository was also to allow for user-friendly statistical reporting and publicly available data. In addition to the state repository, monetary incentives were provided to counties to ensure participation.[52] FDLE was required to have an online state repository for the data by January 1, 2020, but this has yet to be launched.[53]

[END TEXT BOX]

The key to any effective legislation lies with the ability to enforce it. State legislation should require all law enforcement agencies to report to NIBRS and the National Use-of-Force Data Collection; enable the

https://csgjusticecenter.org/landmark-florida-legislation-sets-new-standard-for-data-collection-and-transparency/.

[49] "The Basics," Measures for Justice, accessed June 24, 2020, https://.org/about/overview#background.

[50] Measures for Justice, "The Basics."

[51] Committee Substitute for Committee Substitute for Senate Bill No. 1392, Chapter 2018−127 (FL 2018).

[52] Council of State Governments, "Landmark Florida Legislation."

[53] Robert Gualtieri, Sheriff, Pinellas County Sheriff's Department, FL, email communication with Data and Reporting Working Group, May 11, 2020.

collection of key data elements from courts and corrections on a person from arrest to release; ensure the existence of a clear compliance strategy; and provide funding appropriations to ensure the collection and reporting of these data.

13.2.3 Federal law enforcement agencies should report to the Federal Bureau of Investigation's National Incident-Based Reporting System and National Use-of-Force Data Collection.

The inclusion of federal crime data with data from state, local, territorial, and tribal law enforcement agencies will provide a comprehensive view of crime in the United States while affording greater transparency and accountability. Congress enacted the Uniform Federal Crime Reporting Act (UFCRA) of 1988 to ensure federal participation in crime data collections.[54] However, few federal agencies comply because of the lack of enforcement or a clear implementation strategy. Currently, only 6 of 114 eligible federal agencies (5 percent) submit NIBRS data.[55]

To gain additional federal agency participation, the FBI has implemented strategies to inform federal agencies of the importance of reporting crime statistics to the FBI's UCR program. In January 2020, the FBI director issued a memorandum to federal agencies, communicating the importance of UFCRA compliance. Additionally, the FBI created a mechanism for federal agencies that would report smaller amounts of incidents to do so. This mechanism, the NIBRS Collection Application (NCA), is a fully functional NIBRS data submission tool that resides on the Law Enforcement Enterprise Portal. The NCA allows federal and tribal agencies that submit low quantities of NIBRS incidents the ability to report at no cost. By summer of 2020, the NCA had allowed another 45 federal agencies to report NIBRS, bringing the total percentage of federal NIBRS reporting agencies to 45 percent.[56]

Participation in the FBI's National Use-of-Force Data Collection is not mandated for any agency type, as there is no federal legislation to mandate reporting for federal agencies. The FBI has encouraged federal agencies to participate, but few have complied. Currently, 29 federal agencies (26 percent) report their incidents.[57] National estimates on use of force are hindered by the nonparticipation of federal law enforcement agencies. Approximately 10 percent of law enforcement officers in the United States work in federal agencies.[58]

13.2.4 States should enact legislation that requires law enforcement and correctional agencies to collect and report data to the state in accordance with the Death in Custody Reporting Act. The states should provide these data to the Department of Justice for national reporting.

The Death in Custody Reporting Act (DCRA) was originally passed by Congress in 2000 (P.L. 106-297) and reauthorized in 2014 as the Death in Custody Reporting Act of 2013 (P.L. 113-242). DCRA helps DOJ collect data from states and federal agencies on the number of individuals who died in law enforcement and correctional custody for national reporting. Specifically, DCRA requires states and federal law enforcement agencies to report to DOJ "the death of any person who is detained, under arrest, or is in the process of being arrested, is en route to be incarcerated, or is incarcerated at a municipal or county jail, state prison, state-run boot camp prison, boot camp prison that is contracted out by the state, any state or local contract facility, or other local or state correctional facility (including any juvenile facility)."[59] Data to be collected include deceased demographics, date, time and location of death, name of the involved law enforcement agency, and a description of the circumstances of death.

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[54] Uniform Federal Crime Reporting Act of 1988, 34 U.S.C. § 41303 (1989), https://uscode.house.gov/view.xhtml?path=/prelim@title34/subtitle4/chapter413&edition=prelim.
[55] Blasher, email to Data and Reporting, May 13, 2020.
[56] Blasher, email to Data and Reporting, May 13, 2020.
[57] Blasher, email to Data and Reporting, May 13, 2020.
[58] Brian A. Reaves, *Census of State and Local Law Enforcement Agencies, 2008* (Washington, DC: Bureau of Justice Statistics, 2011), https://www.bjs.gov/content/pub/pdf/csllea08.pdf; and Brian A. Reaves, *Federal Law Enforcement Officers, 2008* (Washington, DC: Bureau of Justice Statistics, 2012), https://www.bjs.gov/content/pub/pdf/fleo08.pdf.
[59] Death in Custody Reporting Act of 2013, 42 U.S.C. § 13727 (2014), https://www.congress.gov/113/plaws/publ242/PLAW-113publ242.pdf.

Unfortunately, a number of technical problems with DCRA have stalled its full implementation. After DCRA was authorized in 2000, BJS took the lead in collecting these data. BJS developed the Mortality in Correctional Institutions (MCI) in 2000 for jails and state prisons in 2001. The MCI has an excellent response rate; an average of 98 percent of jails and 100 percent of state prisons have reported to MCI since its inception.[60] In 2003, BJS also developed the Arrest-Related Deaths (ARD) program to capture data on persons who died while in the process of arrest. After the 2009 ARD collection, BJS conducted an assessment of the methodology and found that the "data collection likely did not capture all reportable deaths in the process of arrest. Therefore, BJS determined that the ARD data did not meet BJS data quality standards, and in March 2014, BJS suspended data collection and publication of the ARD data until further notice."[61]

Due to the funding penalty associated with the 2014 reauthorization, BJS was no longer allowed to collect the data. In 2016, the responsibility for collecting DCRA for state and local agencies was transferred to BJA. The Office of Justice Programs chose BJA as the data collection agent because they administer the JAG program.[62] BJA proposal development and approval has led to delays in collecting DCRA data; however, they began DCRA data collection for October 1, 2019, data in January 2020.[63] Due to overlap with BJA's DCRA collection, BJS's MCI collection will cease in 2020 for local jails and state prisons. Adherence to the legislation is important for all government agencies.[64]

While the legislation includes a penalty, the JAG penalty is applied to states and does not affect local agencies. To ensure states are 100 percent compliant, they should pass legislation requiring law enforcement and correctional agencies to report DCRA. This will ensure states will not receive a penalty for non-reporting.

13.3 Evidence-Based Policing

Background

In 1998, Lawrence Sherman coined the term evidence-based policing (EBP) with the basic principle that "police practices should be based on scientific evidence about what works best."[65] EBP intends to make policing as effective and efficient as possible.[66] EBP helps determine what works, what doesn't, and how to move policing into the realm of professionalism through valid, robust, and scientific evaluation. Over the past three decades, American policing has slowly moved in the direction of EBP; however, implementation of EBP as a practice of operations, policy, and strategy development in policing has failed to reach mainstream acceptance.

For decades, policing as an industry has reached for the brass ring of professionalism, attempting to be recognized in the same fashion as medical doctors, attorneys, and engineers. Yet, the integration of EBP and acceptance of science within policing is only now becoming mainstream. Weisburd and Neyroud (2011) proposed that science and policing would create a generation of police scientists firmly rooted in evidence-based practices that would fundamentally change how police at every level accomplish their jobs.[67]

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[60] "Data Collection: Mortality In Correctional Institutions (MCI) (Formerly Deaths In Custody Reporting Program (DCRP))," Bureau of Justice Statistics, accessed June 3, 2020, https://www.bjs.gov/index.cfm?ty=dcdetail&iid=243.

[61] "Arrest-Related Deaths," Bureau of Justice Statistics, accessed June 3, 2020, https://www.bjs.gov/index.cfm?ty=tp&tid=82.

[62] Office of the Inspector General, *Review of the Department of Justice's Implementation of the Death in Custody Reporting Act of 2013* (Washington, DC: U.S. Department of Justice, 2018), https://oig.justice.gov/reports/2018/e1901.pdf.

[63] Office of the Inspector General, *Review of the Department of Justice's*.

[64] This recommendation is also supported by ACLU, Amnesty International, NAACP LDF, and the Justice Roundtable. These agencies provided public comments for consideration to the commission.

[65] Lawrence Sherman, *Evidence-Based Policing, Ideas in American Policing* (Washington, DC: Police Foundation, 1998), 2, https://www.policefoundation.org/publication/evidence-based-policing/.

[66] Gary Cordner, *Evidence-Based Policing in 45 Small Bytes* (Washington, DC: National Institute of Justice, 2020), https://www.ncjrs.gov/pdffiles1/nij/254326.pdf.

[67] David Weisburd and Peter Neyroud, *Police Science: Towards a New Paradigm* (Washington, DC: National Institute of Justice, 2011), https://www.ncjrs.gov/pdffiles1/nij/228922.pdf.

PULL QUOTE: "As a reminder, these are the bottom-line outcomes of policing: reducing serious crime, holding offenders to account, maintaining safety and order, reassuring the public, providing quality services, using force and authority fairly and effectively, and using financial resources fairly, efficiently, and effectively. An evidence-based law enforcement agency will collect data so that it knows where it stands in relation to each of these important outcomes."[68] - Gary Cordner, Academic Director, Baltimore Police Department Education and Training Section

EBP is an approach used to identify effective solutions to many of the problems faced by police departments. It is not one-size-fits-all but instead is adaptable to the types of issues police commonly handle. EBP can be implemented regardless of agency size. While EBP emphasizes the use of scientific evidence, organizational evidence (data pertaining to the agency), professional evidence (pooled officer experience), and stakeholder evidence (groups that are likely to be affected by the research) should also be considered in order to develop policy and put it into practice.[69] EBP does not diminish experience or professional judgment; instead, it enhances those valuable qualities with outcomes that can be measured and reinforced with data and analysis. Conversely, and perhaps most importantly, EBP can be used to identify ineffective programs and strategies that may actually increase harm.[70]

Current State of the Issue

Resistance to EBP continues to exist in policing practice today. EBP represents organizational change within the American policing industry, which also requires fundamental culture change. Change is difficult for a variety of reasons; however, as Lawrence Sherman points out, "the most evidence-based explanation, at least in other fields, seems that opposition to change stems from *fear of the unknown.*"[71] Resistance to EBP may not be resistance to science, but opposition to a cultural shift that threatens the status quo or the intuitive skill set of the experienced police officer. A common misconception is that EBP ignores or replaces experience; on the contrary, EBP works best when conducted by those who have both policing and research experience,[72] or when law enforcement agencies partner with academic researchers.[73] EBP requires that police officers at every level possess a fundamental knowledge in research and evaluation. These two components form the foundation of determining what is evidence-based.

There is a solid body of evaluation and research in policing, but police departments have been slow to adopt the translation of this research into practice, for a number of reasons.[74] One of these may be confusion over what EBP is, because it overlaps with other popular policing practices: EBP complements intelligence-led policing and problem-oriented policing by providing an evidentiary foundation on which these two strategies are based.[75] Additionally, rigorous research projects are costly and time consuming, and outcomes can be difficult to understand. Strained budgets can also negatively affect an agency's ability to staff analysts. As well, law enforcement agencies can be resistant to partnering with the outside research partners that are often necessary to help with evaluations. These academic researchers publish results in journals that are not accessible and easily digestible to practitioners, which contributes to the resistance.

However, the primary reason for the slow uptake is the limited number of law enforcement practices that have been systematically evaluated. Agencies are more apt to pick what is most commonly being done. The

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[68] Cordner, *Evidence-Based Policing*, 81.
[69] Jerry H. Ratcliffe, *Reducing Crime: A Companion for Police Leaders* (New York: Routledge, 2019).
[70] Jerry H. Ratcliffe, Professor, Temple University, "Evidence-based Policing" (PowerPoint presentation, Data and Reporting Working Group, virtual meeting, April 23, 2020).
[71] Lawrence W. Sherman, "A Tipping Point for 'Totally Evidenced Policing': Ten Ideas for Building an Evidence-Based Police Agency," *International Criminal Justice Review* 25, no. 1 (2015): 13, https://doi.org/10.1177/1057567715574372.
[72] Ratcliffe, *Reducing Crime.*
[73] Cynthia Lum, *Translating Police Research into Practice* (Washington, DC: Police Foundation, 2009), https://www.policefoundation.org/wp-content/uploads/2015/06/Ideas_Lum_0.pdf.
[74] Cynthia Lum et al., "Receptivity to Research in Policing," *Justice Research and Policy* 14, no. 1 (2012).
[75] Ratcliffe, *Reducing Crime.*

benefits of EBP include research knowledge and increase in academic-practitioner partnerships (see *Progress in policing involves academia: The Philadelphia Foot Patrol Experiment*), technological advancements, improved police-citizen relations, and decreased crime.[76]

[BEGIN TEXT BOX]

Progress in policing involves academia: The Philadelphia Foot Patrol Experiment

From the first day of a modern police force in 1829 London, police officers have walked the beat. Yet with the invention of the patrol car and the radio, foot patrol was largely replaced by motorized rapid response. Walking a beat was relegated to a community-policing tactic, popular with the public but generally not considered viable for crime-fighting. This was reinforced when the Newark, New Jersey, police department collaborated with researcher George Kelling and found that the public appreciated foot patrol officers, but their presence had no impact on crime.[77]

That all changed when Charles Ramsey became Philadelphia's police commissioner in 2008. Ramsey had an idea that, guided with precision crime mapping tools, foot patrols focused closely on the highest-crime blocks and corners of the city could have an impact on violence. With 240 officers graduating from the Philadelphia Police Academy in 2009, there was an opportunity to test his idea.[78]

Ramsey enrolled local researcher Jerry Ratcliffe to help design the Philadelphia Foot Patrol Experiment.[79] The police department identified 120 violent crime hot spots across the city, then randomly selected half of them for foot patrol. The other hot spots received vehicle response policing as usual. Rookie officers, fresh from the academy, patrolled each hot spot in two pairs, covering Tuesday to Sunday morning in two shifts: 10 a.m. to 6 p.m. and 6 p.m. to 2 a.m. The experiment ran over the summer of 2009, and the results changed our thinking about foot patrol.

At the end of the summer, the foot patrol officers had reduced violent crime by 23 percent.[80] The Philadelphia police department's desire to experiment and learn—supported by a rigorous approach to evidence-based policing—demonstrated that foot patrol can have a direct impact on shootings and robberies. As a result, the department received the 2010 IACP Excellence in Law Enforcement Research Award for the Philadelphia Foot Patrol Experiment.[81]

[END TEXT BOX]

Understanding what works and why it works may provide an avenue for increased interest and acceptance of EBP. A growing body of police practitioners, or graduate-level police officers who conduct research in collaboration with academic partners or on their own, appears to be gaining in popularity, as seen with the NIJ's Law Enforcement Advancing Data and Science (LEADS) Scholars program.[82] It is important to build capacity at the executive level of policing in the basic understanding of research design, bias, and other statistical principles. It is just as essential to imprint EBP at the beginning of the youngest staff members' careers. Familiarity and exposure to EBP through education could be one potential catalyst to overcoming resistance. Legitimizing EBP through education legitimizes policing, much like medical providers, as

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[76] Cynthia Lum, *Translating Police Research into Practice*.
[77] George L. Kelling et al., *The Newark Foot Patrol Experiment* (Washington, DC: Police Foundation, 1981), https://www.policefoundation.org/publication/the-newark-foot-patrol-experiment/?gclid=EAIaIQobChMIrKSv46GL6QIVip-fCh1jxA2uEAAYASAAEgKOEPD_BwE.
[78] Ratcliffe, *Reducing Crime.*
[79] Jerry H. Ratcliffe et al., "The Philadelphia Foot Patrol Experiment: A Randomized Controlled Trial of Police Patrol Effectiveness in Violent Crime Hotspots," *Criminology* 49, no. 3 (2011).
[80] Jerry H. Ratcliffe, "Philadelphia Predictive Policing Experiment," accessed June 24, 2020, https://www.jratcliffe.net/philadelphia-predictive-polic.
[81] Ratcliffe, "Philadelphia Predictive Policing Experiment."
[82] "NIJ's Law Enforcement Advancing Data and Science Scholars Program for Law Enforcement Officers," National Institute of Justice, March 4, 2020, https://nij.ojp.gov/funding/nij-and-iacps-law-enforcement-advancing-data-and-science-leads-scholarships-law-enforcement.

professionals who target, test, and track policy and strategy for effectiveness and harm.

These recommendations offer practical ways for law enforcement agencies to adopt EBP.

13.3.1 Law enforcement agencies should adopt evidence-based policing for the development and implementation of internal and external practices, policies, procedures, and strategies.

Sherman (1998) coined the term evidence-based policing (EBP) with the basic principle that "police practices should be based on scientific evidence about what works best."[83] As the U.K. College of Policing further described, "in an evidence-based policing approach, police officers and staff create, review, and use the best available evidence to inform and challenge policies, practices, and decisions.[84]

EPB supplements and enhances experience with evidence to challenge assumptions and improve process and policy strategically to achieve better outcomes organizationally. As noted by Sherman (2020), "everything police agencies decide, from recruitment to assignments to discipline and dismissal, can be supported by better evidence."[85] Protocols, policies, and strategies backed by science and research in areas like managing physical evidence and eyewitness identification can help investigators avoid arrests of innocent people, which could result in wrongful convictions.[86] (See *Evidence-based policing: Improved eyewitness identification procedures*). Additionally, evidence-based practices using psychological testing during the hiring and selection phases have long been established.[87] Science cannot solve all of policing's problems, but data and analysis, which are the core of EBP, can provide the most logical and rational approach for police agencies moving forward.

[BEGIN TEXT BOX]

Evidence-based policing: Improved eyewitness identification procedures

Data from hundreds of exonerations of defendants who served time for crimes they did not commit have revealed that certain investigative practices likely put those people in jeopardy. Law enforcement officers have learned from those mistakes, most notably in the area of eyewitness identification. During the eyewitness identification process, law enforcement officers ask a witness to match their memory of the offender's face to the stimulus of a photographic array or lineup. Misidentifications were responsible for approximately 70 percent of exonerations where cases were overturned based on DNA.[88] In most cases, investigators undoubtedly thought they were using sound practices and the witnesses were well-meaning, but errors still occurred.

The National Research Council (NRC) identified changes police could make that would reduce the likelihood of honest mistakes by witnesses, such as developing and using standardized witness instructions and implementing double-blind lineup and photo array procedures.[89] They also recommended that all law enforcement officers be trained in eyewitness identification procedures, and that the training should incorporate the other recommendations. While some police departments have incorporated these changes,

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[83] Sherman, "Evidence-Based Policing," 2.
[84] "What Is Evidence-Based Policing?," U.K. College of Policing, accessed June 24, 2020, https://whatworks.college.police.uk/About/Pages/What-is-EBP.aspx.
[85] Lawrence Sherman, "Evidence-Based Policing and Fatal Police Shootings: Promise, Problems, and Prospects," *The ANNALS of the American Academy of Political and Social Science* 687, no. 1 (2020): 13.
[86] National Research Council, *Identifying the Culprit: Assessing Eyewitness Identification* (Washington, DC: The National Academies Press, 2014), https://doi.org/10.17226/18891.
[87] Cary Mitchell, "Preemployment Psychological Screening of Police Officer Applicants: Basic Considerations and Recent Advances," in *Police Psychology and Its Growing Impact on Modern Law Enforcement*, ed. Cary Mitchell and Edrick Dorian (Hershey, PA: IGI Global, 2017); Jonathan Lough and Michael Ryan, "Psychological Profiling of Australian Police Officers: A Longitudinal Examination of Post-Selection Performance," *International Journal of Police Science and Management* 8, no. 2 (2005); and Geoffrey Alpert, "Hiring and Promoting Police Officers in Small Departments: The Role of Psychological Testing," *Criminal Law Bulletin* 27, no. 3 (1991).
[88] G.L. Wells et al., "Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence," *Law and Human Behavior* 44, no. 1 (2020), https://doi.org/10.1037/lhb0000359.
[89] National Research Council, *Identifying the Culprit.*

many have not.

Wells et al. (2020) expounded on the recommendations of the NRC report and advocated for five additional improvements based on scientific research:

- conducting a pre-identification interview of the witness to document their description of the culprit
- identifying the need for evidence-based suspicion, which considers witness viewing conditions and attention paid to the offender
- adhering to guidelines for the selection of lineup fillers
- avoiding conducting more than one identification attempt with the same witness and suspect, based at least in part on the risk of memory-source error
- cautioning the use of one-on-one show-ups (presenting only the suspect photo and no fillers)[90]

Evidence-based findings from numerous research experiments and exonerations have informed law enforcement on better investigation practices, which increase confidence in their findings and reduce the likelihood of error.

[END TEXT BOX]

EBP provides an avenue for the long sought after title of "professional" among the police. Blending empirical, scientific research and experience provides the foundation to make the transition from policing as a craft to policing as a profession. Additionally, EBP provides legitimate, measurable change in how policing can and should evolve and transform internal and external expectations.

13.3.2 Congress should provide funding to create a College of Policing to provide and set standards for evidence-based policing education and training for law enforcement officers.

Law enforcement agencies should invest in the education of police personnel, both sworn and professional staff, in order to provide the essential level of expertise or proficiency in the components of EBP to those expected to use it. Additionally, any investment in the education of police staff will enhance the efficacy with which they fulfill their duties. Modeled after the U.K. College of Policing, the U.S. College of Policing would have three primary functions: developing research and providing infrastructure for improving EBP, setting education standards for law enforcement officers, and drawing on EBP to help set standards in law enforcement for agencies and officers.

The U.S. College of Policing would also employ a national curriculum within a university setting to offer either (1) an executive master's degree in the discipline of policing with an emphasis on EBP or (2) a certification program in the discipline of policing that provides for a series of classes appropriate for basic EBP knowledge and application.[91] The executive master's degree would provide police staff at the executive level a part-time, combined online and residential program of study concluding with a capstone or research thesis final and resulting in a master's degree. The certification program—designed for line-level staff such as officers, detectives, sergeants, and analysts—would provide a professional certification at the conclusion of the course, and possibly credits for an undergraduate degree.

Funding would be provided in the form of grants, ideally administered through the COPS Office or BJA, in conjunction with one or more accredited universities and subject matter experts. Dedicated annual funding would be used to offer a combination of tuition assistance, scholarships, and small grants that could be coordinated in partnership with the COPS Office, BJA, and NIJ to ensure equity in participation for small, medium, and large agencies. Curriculum development and standards would be created through a

[90] G.L. Wells et al., "Policy and Procedure Recommendations."

[91] *President's Commission on Law Enforcement and the Administration of Justice: Hearing on Social Problems Impacting Public Safety* (June 19, 2020) (written statement of Gary Cordner, Academic Director, Baltimore Police Department Academy, MD), https://www.justice.gov/ag/presidential-commission-law-enforcement-and-administration-justice/hearings.

coordinated effort among the COPS Office, BJA, the FLETC, the FBI National Academy, the National Police Foundation, the Police Executive Research Forum, IACP, IADLEST, and other leadership and academic programs.

13.3.3 Law enforcement academies, state Peace Officer Training and Standards, and law enforcement agencies should ensure evidence-based policing is incorporated into training curricula and reinforced throughout officers' careers through in-service training and promotional testing.

Although the concept of EBP was introduced nearly 30 years ago, most line-level law enforcement officers are unfamiliar with it and have not been properly trained about how it might help them do their jobs more effectively. The state Police Officer Standards and Training (POST) can assist in implementing practical and immediately operational national standards in basic academy and in-service trainings.

Academy training should include a practical introduction of EBP, such as research design and basic analyses. This training should build a foundation of knowledge and appreciation for the value of research and evaluation. In addition to academy training, officers should receive in-service training on EBP.

Law enforcement agencies should ensure that civilian analysts have training and experience in EBP topics such as basic statistics and research design. These staff should be offered in-service training opportunities to maintain and enhance their skills. These opportunities can occur in conjunction with in-service training for sworn staff. Likewise, EBP proficiency should become a testing and selection criterion for communities selecting chief executives.

[INSERT SUPPLEMENT X: List of Federal Data Collections]

(see Excel Workbook)