

The Dynamic Nature of Crime Statistics

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We are in the absurd position of endeavoring to diagnose and cure a social disease with little knowledge of its causes, its nature, and its prevalence.

Commissioner William P. Rutledge

Most people are familiar with the broad statements in headlines about crime trends in the United States based on the Federal Bureau of Investigation's Uniform Crime Reporting (UCR) Program. However, UCR should be seen as more than simply a measure of broad changes in crime at the national level. The information used by the federal UCR Program flows upwards from a call for service or incident report with a law enforcement agency to the UCR State Program before reaching the federal level. The basic building block of the whole program is a report of a crime or an arrest, and from that basic information a multitude of stories can be told.

To truly understand the proper use of UCR data, one must understand the purpose for which it was collected. The ultimate goal was to provide data and information to help law enforcement do its job. The problem with that rather succinct statement of purpose is that, throughout the nearly 85 years that UCR has been around, the "law enforcement job" has never been static. Policing has evolved from the 1920s to the present day, and within those changes, the relationship between policing and crime data has also evolved. Understanding the changing context of policing is key for understanding the overall design of UCR from its beginnings to present day. It allows us to check our modern expectations for law enforcement against a system built upon a different set of premises than those that are currently used.

As one of only two national measures of crime in the United States, UCR has a prominent place in our understanding of social phenomena. The second measure, the Bureau of Justice Statistics' National Crime Victimization Survey, benefits from more traditional and purposive research-design techniques. As such, the NCVS has a fairly straightforward interpretation as it relates to the data-collection process. The design

*Opinions expressed in this chapter are those of the authors and do not necessarily reflect the views of the Federal Bureau of Investigation or the US Department of Justice.

of the NCVS allows for statistically defensible estimates of nonfatal (and property) victimizations for both the nation and four regions of the country based on information taken directly from household members over the age of 12 – regardless of whether or not it was reported to law enforcement. The design also allows the measurement of change in victimization levels over time (Lauritsen & Rezey, 2013). However, there are limitations with the NCVS that would preclude using it to replace UCR. As a household survey, there are no measures of commercial crime, and the restriction to only interviewing household members who are over the age of 12 means that very little can be said about crimes against children.

The UCR Program, on the other hand, has a rather circuitous collection process that mimics both the federalized political structure of city to state to nation and its resulting different levels of scale. This process is so deeply immersed in the day-to-day administration of law enforcement that it can sometimes confound the completeness and comparability of the data. Where the NCVS may be weak, UCR can provide strength. The UCR data are inclusive of all victims, regardless of age. They include commercial crime, and will allow for a greater specificity of location – down to the jurisdiction – than the NCVS. The UCR and the NCVS provide for complementary views of the complete picture of crime in the United States. Given that data collected as a part of the UCR Program are not a product of designed collection, the interpretation can become more problematic.

This chapter is intended to accomplish two things. First, it presents a basic understanding of the major data-collection components of the UCR Program that allows one to understand what information is available for analysis. Second, this chapter draws connections between the state of policing and law enforcement at various junctures in the history of the UCR Program. In many ways, this chapter reads like a history of the UCR Program. That is unavoidable considering how long this collection has been in existence. In the end, the reader should see how the role of analysis has shaped the development of the UCR Program. “[W]e are compelled to recognize that crime statistics must originate with the police and that without police support there can be no crime statistics” (*Uniform crime reporting: A complete manual for police*, 1929, p. vii).

The Uniform Crime Reporting system (UCR) was conceived by police chiefs and other leaders in law enforcement in the latter part of the nineteenth century and the early twentieth century. Created in a time of increasing professionalization on the part of law enforcement, there was a desire to create an accountability method allowing for comparisons regardless of the differences of law that exist between local areas. The time period 1900 to 1929 was the first era of police reform – an ongoing theme in the history of law enforcement. Early reformers, including Leonhard Fuld, Raymond Fosdick, Bruce Smith, Richard Sylvester, J. Edgar Hoover, and August Vollmer advocated for more education, greater professionalism, and reduced corruption in law enforcement (*Uniform crime reporting: A complete manual for police*, 1929; Vila & Morris, 1999). Without comprehensive crime data, police chiefs believed that they were unable to defend their work against frequent accusations of inefficiency and incompetence. In addition, there were no means for police executives to evaluate effectively the performance of patrol officers and detectives under their management. It was within this context that the first discussions of the Uniform Crime Reporting Program took place (*Uniform crime reporting: A complete manual for police*, 1929).

The primary consideration in the development of these tables was that they should serve as the basis of a nationwide system of uniform crime records. They have served this end admirably and the essentials of uniform crime records must not be lost sight of in any modification which may be made of them. However, they do not include data essential to the solution of many police problems. (Wilson, 1942, p. 202)

As mentioned earlier, the primary characteristic that differentiates the UCR Program from other data collections about crime is that it is based upon official reports that come to the attention of law enforcement and are voluntarily forwarded to the UCR Program. As such, the data are generated as a result of an administrative process rather than an interview or survey, like the National Crime Victimization Survey. Official criminal justice information progresses from the call for service with law enforcement to the federal UCR Program with aggregation imposed upon the data at each step of the way. The basic building block of the whole UCR Program is an initial report of a crime or an arrest in a local jurisdiction. The flow of information in the UCR Program mirrors the hierarchical structure within politics and law enforcement in the United States.

The creation of the program itself in 1929 was predicated on the idea that it was necessary to provide a common definition for the reporting of crime in order to maintain comparable data both from year to year and agency to agency. While there was a significant amount of discussion about the possibility of creating consistency with the criminal code among all states, the reality of achieving that result was viewed unlikely. In the absence of a unified system, the International Chiefs of Police (IACP) proposed a system based upon a series of standardized definitions with forms to be recorded by local police and sheriffs (Walker & Boehm, n. d.). This process of standardization results in a loss of granularity at each stage. However, what could be lost in nuance was viewed as a gain in the ability to identify patterns across larger spatial areas or time periods. It is analogous to the idea of maps and scale. The types of maps that would be used to navigate through the streets of a particular city would not serve to measure distances across the United States. In the same manner, different questions about crime and criminality require different data with differing levels of detail.

The most detailed information is held by local law enforcement agencies in their records management systems. From those local records management systems, information is forwarded to the State UCR Programs. State Programs are entities charged with the responsibility to manage the collection of UCR data within a particular state. There is no one particular state agency whose responsibility is to manage the UCR Program. State Programs can be associated with the state police, a statistical analysis center, or some other branch of the state government. At the inception of State Programs in the 1960s, the thought was that state agencies would be able to coordinate and communicate more effectively with their local agencies because of proximity and having fewer agencies to manage (Federal Bureau of Investigation, 1960–2004). The information available at each point along this continuum reflects the types of questions being asked at that level of geography or the style of policing being used at that time. This information is often consolidated both conceptually and geographically before moving up the hierarchy (Barnett-Ryan, 2007).

Scope of the Uniform Crime Reporting Program Summary Reporting System

In 1930, the UCR Program's first year of data collection, 400 law enforcement agencies in 43 states reported data to the Federal Bureau of Investigation. Currently, the UCR Program has grown to encompass over 18 000 law enforcement agencies from all 50 states, the District of Columbia, and some of the United States' territories as eligible participants. While the conceptual scope of the UCR Program has both expanded and contracted since its inception in 1929, the driving force behind adjustments has always been to serve the strategic needs of law enforcement. Those strategic needs are driven by political goals and trends in policing styles.

From its inception, the UCR Program has been a voluntary program. Law enforcement agencies choose to participate at their own discretion with no extra funding provided to them by the FBI for that specific purpose. As such, there are law enforcement agencies that choose not to participate in the UCR Program in any given year. However, many agencies have begun to participate because of requirements associated with non-FBI funding or because reporting facilitates the awarding of non-FBI funding. Since 1995, annual participation has ranged from 16 522 to 18 108 law enforcement agencies annually. However, the number of agencies contributing a full year of data is less than that – ranging from 80.4 to 93.1% of participating agencies (see Table 1.1). The voluntary nature of the UCR Program ensures that there will always be a need to account for missing or incomplete data from law enforcement agencies (*Crime in the United States*, 1995–2013). Currently, the UCR Program imputes, or estimates, for missing data or incomplete agencies for publication tables in *Crime in the United States*, its annual compendium. The estimation procedure used

Table 1.1 Uniform Crime Reporting Program participation levels, 1995 to 2012.

<i>Year</i>	<i>Total Agencies</i>	<i>Total Population</i>
1995	16 765	262 755 000
1996	16 798	265 284 000
1997	17 062	267 637 000
1998	16 522	270 296 000
1999	16 788	272 691 000
2000	16 825	281 421 906
2001	16 971	284 796 887
2002	17 324	288 368 698
2003	17 381	290 809 777
2004	17 499	293 655 404
2005	17 456	296 410 404
2006	17 523	299 398 484
2007	17 738	301 621 157
2008	17 799	304 059 724
2009	17 985	307 006 550
2010	18 108	308 745 538
2011	18 233	311 591 917
2012	18 290	313 914 040

can best be described as a version of mean substitution, where either crime rates of similar agencies as determined by size and type are applied to an agency's population to impute a figure for missing data, or by weighting the data up to a full year to accommodate incomplete reporting (Barnett-Ryan, 2007).

The Original Uniform Crime Reporting Program (Summary Reporting System)

The original UCR Program, or what is sometimes referred to as the Summary Reporting System (SRS or Summary), represents the current set of data collected as a continuation of the program that was established in the 1930s. This distinguishes the data from incident-level data collected in the National Incident-Based Reporting System (NIBRS), which was established in the 1980s and early 1990s. While the original data were limited to information solely related to offenses, the SRS grew throughout the years to include information related to arrests, details about homicides, assaults and deaths of law enforcement officers, and police employee data. Criticisms of the limitations associated with the SRS should take into account the historical context of the development of the UCR Program, the evolution of policing styles, and their related impact on the types of analyses sought at the time (Barnett-Ryan, 2007; *Uniform crime reporting: A complete manual for police*, 1929; Walker & Boehm, n.d.).

The first, and still the most widely used, of the data collected by UCR Program are the offenses reported to law enforcement. The original seven offenses that the IACP identified were murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, motor vehicle theft, and larceny theft. Arson was added to this list in the 1970s. These eight offenses are called the Part I crimes, and they can be further subdivided into violent crimes and property crimes. The violent offenses are murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. All remaining Part I crimes are considered property offenses. (These two categories are common aggregate totals published and used with UCR data. However, they should not be confused with the distinction of crimes against persons and crimes against property, which are designations used to identify appropriate counting rules within the program.) Why were those seven offenses originally selected from all the possible offenses investigated by law enforcement? In short, the drafters of the initial standard guidelines believed that these offenses were the most likely to come to the attention of law enforcement regardless of whether an arrest was made. In addition, surveys of the various state criminal codes showed that these offenses were also good candidates for standardization with minimal variation among the states (*Uniform crime reporting: A complete manual for police*, 1929; Walker & Boehm, n.d.).

Definitions were based primarily upon common law, which applied to all states and territories with the exception of the Philippines (a territory at the time). Many other aspects of the law were not included in the data collection due to the lack of consistency with the application of those concepts (for example, degrees associated with the offense or felony vs. misdemeanor). IACP went through a painstaking process of assessing the criminal statutes across all states to determine a "schedule" of offenses (or a lookup table) that would both allow for the most comprehensive and inclusive definition of the Part I crimes, as well as a list of each statute and how

they should be classified (*Uniform crime reporting: A complete manual for police*, 1929; Walker & Boehm, n.d.).

All of the early collections occurred with the use of paper forms. Even though the data are currently collected and stored as electronic data sets, these paper forms provided the underlying skeleton or structure to the data collection that exists today. The first form that provided the basic offense information was the *Return A*. Current data collections in use today are also based on the *Age, Sex, and Race of Persons Arrested* forms; the *Supplement to Return A*; the *Supplementary Homicide Report*; and the *Police Employee* form (Barnett-Ryan, 2007).

Information on offenses collected on the *Return A* form includes the basic counts provided monthly by contributing agencies, as well as other measures of police activity such as clearances by arrest or exceptional means, and the finding of unfounded offenses. Unfounded offenses are those crimes that are reported or discovered by the police, but in the subsequent investigation, it is understood that no crime took place. These crimes are reported, but subtracted from the totals of “actual offenses.” Clearances are those offenses that have been resolved either by the arrest of one or more offenders connected to the offense, or in the case of exceptional means, there are factors that will prohibit law enforcement from making an arrest. The rules associated with clearances by exceptional means require that the agency knows who the perpetrator is and where he or she is currently located, but is unable to arrest him or her. Examples include the death of the offender or extradition being denied by another entity. Finally, there are subcategories within the offenses that can be used by contributing agencies to report weapons associated with robbery and aggravated assault, the method of entry for burglaries, and the type of vehicle associated with the motor vehicle theft (*Summary Reporting System (SRS) user manual*, 2013).

A second group of criminal offenses was identified as Part II. These offense classes are seen as unlikely to be reported separately to police due to embarrassment or efforts to conceal the crime by the victim. When these complaints were made in the early part of the twentieth century, they were typically turned over to private agencies for investigation. For these reasons, it was seen that these offense classes would only come to the attention of law enforcement if there was an arrest. Early on in the program, the information provided by law enforcement on Part II offenses was based upon charges against individuals (through the now defunct *Return C*). However, that collection was ultimately dropped in the 1970s due to the difficulty getting information on charges from prosecutors and courts. In its place, a new data collection was established on arrests of individuals and their demographics for both Part I and Part II offenses via the *Age, Sex and Race of Persons Arrested*. The demographics are limited to a combination of age and sex categories and a separate collection of race for adults and juveniles on two separate forms (*Summary Reporting System (SRS) User Manual*, 2013).

In addition to these two basic collections, SRS grew to include detailed information on homicide incidents through the *Supplementary Homicide Report*, Part I offenses on the *Supplement to Return A*, and *Police Employee* data. The *Supplementary Homicide Report* was developed to capture some of the basic information that was gathered by law enforcement in the process of investigating homicides and represents the first attempt by UCR to capture incident-level data. It contains information on victim and offender demographics, weapons associated with the homicide, and other information on the circumstances. The *Supplement to Return A* collects data on property values, types of property, and information on time of day or location for the

Part I offenses. Finally, the *Police Employee* data include annual counts of sworn officers and civilians for both males and females (*Summary Reporting System (SRS) user manual*, 2013).

The main principles that guided the choice of the data collected for published tables at the beginning of the program were concentrated on data quality issues, such as completeness, accuracy, and uniformity, and also on the avoidance of overly detailed tables. The ultimate and only goal for national data was to provide a source of comparison for police executives to use to evaluate the relative effectiveness of their agencies. From those basic beginnings, the role of analysis of crime statistics grew to encompass the shifting attitudes of law enforcement to its application in management and law enforcement activity (Wilson, 1942).

August Vollmer and his student, O. W. Wilson, were two of the biggest proponents of scientific policing in the early part of the twentieth century until the late 1960s. Wilson extended the concepts of Part I and Part II crimes to include Part III (lost and found), Part IV, and Part V crimes. All of these types of crimes had varying levels of police records that could be used to track and trend levels, as well as evaluate the relative effectiveness of the police officers of a particular agency. Wilson summarizes his position on police records and data in his 1942 book, *Police records*:

There is a direct relationship between the efficiency of the police department and the quality of its records and records procedures. Complete information is essential to effective police work; reports of crimes and other matters of concern to the police must be classified, indexed, and filed so that information is readily available to the officers working in the field. Analyses of these reports are also useful to the commanding officers. Every police administrator is called upon continually to make decisions related to the distribution of his force, the assignment of men to particular tasks, the expenditure of funds for one purpose or another, and the revision of plans of operations in relation to changing crime conditions. (p. 1)

Analysis was seen as the purview of the police executive. Wilson details many types of analysis that should be conducted for the proper administration of the department to include effectiveness measures for detective operations, traffic control, or juvenile crime control. However, the results of those findings would only be meaningful to managers making decisions about allocation of resources and officer time for particular areas of the jurisdiction. Analysis was not seen as a tool to assist in the daily decisions of patrol officers or investigations of detectives (Wilson, 1942). There is a direct connection between the limited role of analysis in law enforcement at this time and the limited amount of information collected (Wilson, 1963).

Changes to the Recording of Crime in Recent Years

The lack of authentic and comparable records of the extent and incidence of crime has made it impossible to demonstrate what substantial change should be adopted for improvement in the administration of criminal justice. (*Uniform crime reporting: A complete manual for police*, 1929, p. 17)

As indicated in the introduction, the UCR Program is not static. Since its beginning in the early 1930s, law-enforcement agencies and Congress have mandated various

changes and additions to the program to keep up with current demands for information related to crime and criminal justice issues, albeit these changes are sometimes slow in coming. The result, however, is that the participation by law enforcement and the completeness of information will vary widely depending upon which part of the statistical program is being analyzed. In addition, completeness of data could depend upon regional differences of law and its treatment of newer crime categories – such as arson and hate crime.

In 1979, arson was made a permanent part of the list of crimes on which the UCR Program collects offense information. However, since reporting of arson was spotty, the UCR Program published arson along with the other seven *Index* crimes (murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny theft and motor vehicle theft) crimes as a *Modified crime index* rather than incorporate it in its traditional *Crime index*. (Both the Crime Index and the Modified Crime Index were suspended in the early 2000s in favor of publication of violent crime and property crime aggregates.) Initially there were plans to incorporate the arson data collection with the data collected by Federal Emergency Management Administration's National Fire Data Center. However, as priorities within the UCR Program shifted toward the development of a new generation of data collection for the UCR Program, the project was eventually abandoned in the 1990s. Arson data continue to be sparsely reported to the UCR Program depending upon local considerations of law enforcement jurisdiction and responsibility of investigation of arsons (Federal Bureau of Investigation, (1960–1994).

A Paradigm Shift from Reactive to Proactive Policing and Incident-Based Data

While August Vollmer and O.W. Wilson were instrumental in introducing analysis to law enforcement decisions, the audience for crime analysis was the law enforcement executive. Police reforms up until the 1960s were concentrated on increasing the management efficiency of policing as an organization but not really directed at the effectiveness of those practices. Although criminologists in the early twentieth century explored community disorder and its relationship to crime, policing was largely a response to a report of a crime incident. In 1979, Herman Goldstein published his paper, "Improving policing: A problem-oriented approach," which outlined a general approach towards reducing crime through addressing the conditions that lead to crime. His problem-oriented policing (POP) approach was also one of the first methods of policing that advocated for a more decentralized use of analysis than before. In the problem-oriented policing method, patrol officers, as well as managers, are expected to become experts in the crime conditions of their patrol areas (Goldstein, 1979).

Because problem-oriented policing focuses on the end result rather than a specific method of policing, the role of information and data increased in importance as both an analytical and assessment tool. The SARA model (Scanning, Analysis, Response, and Assessment) was developed by John Eck and William Spelman during their work with the Newport News Police Department (Eck & Spelman, 1987). At two points in the SARA model – analysis and assessment, law enforcement data take center stage in law enforcement decision making related directly to a community problem. The work in Newport News was one of the first instances where Goldstein's ideas were put

into practice. The SARA model relies heavily on information about crime and disorder along with other contextual information to identify characteristics of the local problems. The information collected through the SARA process ultimately feeds into the development of an appropriate law-enforcement response and provides the means to assess the effectiveness of that response toward reducing crime and disorder. In order to implement problem-oriented policing, law enforcement needed to access and use its data more effectively than in the past.

Since that time, other methods of proactive policing have arisen, including situational crime prevention, community-oriented policing, COMPSTAT, intelligence-led or information-led policing, and, more recently, smart policing (Clarke, 2008; Coldren, Huntoon, & Medaris, 2013; Lee, 2010; Ratcliffe, 2008; Scott, Eck, Knutsson & Goldstein, 2008; Weisburd, Mastrofski, McNally, Greenspan & Willis, 2003). While each has nuanced differences in approaches toward management and the addressing of crime problems, a central tenet is a reliance on data and a desire to see that the “end product of policing” is the reduction of crime. All of this analysis was made possible by the emergence of readily available and affordable computing power for law enforcement starting in the 1970s. This quantitative revolution moved law enforcement away from records management systems that relied upon note cards and paper forms into methods that allowed for the collation and aggregation of larger amounts of data for organization and analysis (Bruce, 2008; Dunworth, 2000).

In the 30 years since the development of the SARA model, crime analysis and intelligence analysis has flourished in law enforcement agencies. While the larger departments often have a dedicated crime-analysis unit, even the smallest agencies have some expectation that their officers and civilian staff will analyze and assess current and historical conditions related to crime and disorder. This stands in stark contrast to the rudimentary analysis conducted during the mid-twentieth century. Contemporary crime analysis includes a variety of approaches and techniques, and there is also a variety of classification schemes to categorize types of crime or intelligence analyses (Boba, 2005; Ratcliffe, 2008; Wilson, 1942).

One of the more often used classification schemes is Rachel Boba’s classification of crime analysis. She qualifies analysis as tactical, strategic, or administrative. These three types of analysis are separate from the investigative analysis that is most often associated with policing. All are based on pattern analysis but with data that differ on the spatial and temporal scope. Boba’s tactical analysis is focused more on current crimes and the resolution of linked criminal events while strategic analyses are concerned with long-term trends and responses to those problems. The audiences for tactical and strategic analyses are primarily line officers and line supervisors. Finally, crime analysts use administrative analyses to communicate the results of larger research projects to either police executives, policy makers, or the public.

An additional approach to classifying intelligence analysis is introduced by Jerry Ratcliffe. He identifies law enforcement intelligence analysis as tactical, operational, or strategic. Tactical analyses are those most often associated with police activity. The positive result of a tactical analysis is either an arrest or conviction. Operational analyses take a step back from the incident or case level to include information about regional patterns or trends. Operational analyses are used to develop long-term crime reduction strategies. Finally, Ratcliffe’s strategic analyses focus on wider issues that could include noncriminal justice responses from policy makers as well (Boba, 2005; Ratcliffe, 2008).

While using somewhat different terminology, Boba's and Ratcliffe's approaches share many characteristics. The most significant connection between the two is that the analytical process occurs at different levels of scale depending upon the question at hand and goal of the analysis. Law enforcement analysis and the associated data can more correctly be seen as a continuum that includes small-area microlevel analyses, regional mesolevel analyses, up to the national macrolevel analyses. It is a system that NIBRS, the new-generation UCR, mirrors with a standardized method of reporting incident-level data. Understanding this framework is necessary to understanding the role of the types of data collected and analyzed by law enforcement within the UCR system.

Tactical Analysis and the Origins of UCR NIBRS Data

Tactical intelligence and analysis focuses on a particular crime or set of crimes in order to aid in the investigative process. Tactical analysis uses the most detailed information at the disposal of law enforcement. It is at this point most criminal justice information is recorded by a law enforcement agency (city, county, or state). Because of the specific nature of these analyses, the more aggregate forms of UCR data are not usually helpful. However, information that is captured at the agency level is streamlined and ultimately becomes part of the information that is transmitted and compiled through the continuum of UCR data. These include such features as time, day, offense, location, weapons information, victim and offender information, property stolen, recovered, or seized, and arrestee information.

Tactical Analysis and UCR

In 2007, the Commonwealth of Massachusetts had a confessed sex offender in their custody. This individual had confessed to 10 separate sex crimes. Given his confession as a serial offender, prosecutors were concerned that there may be additional crimes to which he had not confessed. The Massachusetts Crime Laboratory requested assistance with identifying possible rape kit candidates for DNA testing in order to link the offender with possible additional crimes. While rape kits are collected on all reported rapes, they are expensive to analyze, and often they are left unanalyzed unless there is a suspect to compare with the samples. Using knowledge of locations of past crimes, addresses of the suspect and known victims, and addresses associated with restraining orders, the boundary of a "hunting ground" was estimated. Based upon the extent of the "hunting ground," all other possible candidate rape kits were identified for further testing from sex crimes with the same MO. While there were no other hits, this example shows a potential utility of crime data that allowed the Massachusetts State Police to establish that the suspect had made a full confession with confidence (D. Bibel, personal communication, June 16, 2010).

Operational Analysis and Regional and State-level Data

Operational analysis, as an example of mesoanalysis, requires a slightly broader view than tactical analysis in both time and geography. It still concerns itself mainly with one particular jurisdiction (or parts of a particular jurisdiction) but could also expand

to include neighboring jurisdictions as well. These analyses aid crime-reduction strategies most commonly associated with community-oriented policing or problem-oriented policing. Because these crime reduction efforts are not typically in response to a call for service, operational analysis can be important for law enforcement to be able to justify their proactive responses to the community through analysis. It is also important to identify areas where law enforcement efforts will have the most impact.

Because of the potential need to pull information from other jurisdictions, it is necessary to begin discussing manners of standardizing common data elements among multiple law enforcement agencies. In addition, the types of analyses focused on crime reduction often have little need for the highly detailed, unique characteristics of particular crimes that are used in the investigative process. By aggregating and standardizing data, often it is easier to identify patterns. It is at this juncture that UCR State Programs play a role. While the enhanced understanding of broad patterns within a state can make up for the details that are lost in terms of nuance, the geographic connection to the original incident is often lost completely. A few states maintain an incident-based statistical system and collect statewide crime data at the incident level. For those states, state policy makers decide on the amount of geographic detail to maintain (for example, latitude/longitude or ZIP code).

While originally conceived as a tool of shared management, the role of the state program began to expand under incident-based reporting. When the plans for NIBRS were originally released, they contained a provision for states to develop a state system according to their own specifications as long as the same basic criteria of a NIBRS incident were met to allow forwarding on to the national program. This allowed for states to construct standardized systems customized to answer common concerns or address known problems that are unique to their state rather than relying on a one-size-fits-all solution. In the “middle ground” of state and regional systems, there is more detail than currently available from NIBRS while instituting some measure of aggregation from the highly granular local systems.

Operational Analysis and UCR

An example of ongoing use of operational analyses for crime reduction is Project Safe Neighborhood (PSN). This began as an initiative under President H. W. Bush’s Justice Department. It uses enhanced enforcement and prosecution to target gun-related crime by leveraging statutes that provide for increased penalty or federal prosecution for individuals that commit a crime with a gun or possesses a gun illegally. To accomplish this, PSN uses analysis not only to target specific areas for enforcement efforts, but also to identify good candidates for enhanced prosecution.

Many jurisdictions and cross-jurisdictional task forces have created crime suppression units in their implementation of PSN. Crime suppression units are efforts that target specific areas identified as geographic trouble hot spots with such law enforcement approaches as buy-bust operations. Often individuals arrested as a result of buy-bust operations are subject to the enhanced penalties associated with federal gun laws as they often have prior convictions for serious violent offenses. The intent of these arrests is to reduce crime by removing the most egregious recidivists from neighborhoods. State UCR incident-based data can provide the required data for proactive policing strategies that became part of the law enforcement landscape during the 1980s and 1990s.

Strategic Analysis and NIBRS Data

The broadest level of analysis in terms of geography and time are strategic analyses. Strategic intelligence provides insight and understanding into patterns of criminal behavior and the functioning of the criminal environment. Strategic analysis is future oriented, ultimately aiming to influence long-term organizational objectives: policy, resource allocations, and strategy. Analytical techniques used to achieve these objectives require more data than may be collected by an individual agency. It requires larger geographic scope, and often a longer timeframe than is usually of interest to a local law enforcement agency. NIBRS data have the most potential impact for criminal justice policy and allocation of resources in their strategic use.

Strategic Analysis and UCR

In 2008, Brooke Bennett, age 12, was kidnapped and found murdered in Vermont. At first, the police suspected that she had been abducted by a stranger she had met online. In the initial investigation, police discovered a series of communications between Brooke and an individual on her MySpace page. These early facts lead to calls for sweeping changes to the Vermont sex offender laws regarding online predatory behavior. The state legislature used an analysis of Vermont incident-based data provided by the Vermont State Program to look at victim-offender relationships associated with sex crimes. This analysis provided a more dispassionate view of the characteristics of sex crimes against children. Statistics indicated that 93% of child sexual assaults are perpetrated by someone known to the child – 34% of assaults are committed by a family member. Using these data, the Vermont Senate Committee on Judiciary created a 34-point comprehensive plan for Vermont's sexual abuse response system. After a more extensive investigation of the crime against Brooke Bennett, her uncle was ultimately convicted of her murder. He had created a false trail on Brooke's MySpace page, taking advantage of assumptions that the public often make about sex offenders and their crimes (M. Schleuter, Vermont Department of Public Safety, Personal Communication, June 4, 2010).

National Incident-Based Reporting System

The shift in focus towards a system of law enforcement analysis during the 1980s gave rise to greater demands for information from the UCR Program at the national level. The *Blueprint for the future of the Uniform Crime Reporting Program* was issued by the US Department of Justice in May 1985. In this report, the first description of the NIBRS appeared. NIBRS is a reflection of basic information on crime incidents that come to the attention of law enforcement (Poggio, Kennedy, Chaiken, & Carlson, 1985).

One of the most important aspects to understand about NIBRS is that it is built upon the basic information that was gathered in all of the various and sundry forms that comprise the Summary Reporting System of UCR. The biggest advancement of NIBRS is not that it collects vast amounts of new information – though there are some examples of that – it is that all the information that was aggregated into tallies on separate forms in the Summary system is now maintained on an individual level and all of the

linkages among that information are retained for analysis. By preserving the linkages that used to be only available within the agency’s own data, NIBRS provided a new way for users to explore the nature of crime across greater areas than previously available.

Some of the other enhancements gained with NIBRS are the promotion of many of the Part II offenses to a different category of Group A offenses reflecting changing attitudes of victims and the reporting of crimes, as well as the change in response from law enforcement to the investigation of certain offenses. Under SRS, only arrestee information is collected on Part II offenses. With the transition to NIBRS, expanded incident-level data are collected on many of those same offenses – 46 original Group A offenses. A second offense category in NIBRS is the Group B offenses. For the 11 Group B offenses, only arrestee information is provided. (See Table 1.2 for a list of offenses.)

In its original form, NIBRS is built around a structure of six different segments dedicated to a different type of information on a criminal incident of one of 46 possible offenses that are identified as Group A offenses. They are the administrative, offense, property, victim, offender, and arrestee segments. Within each of these segments are pieces of information called data elements specifically for collecting

Table 1.2 Offense types in National Incident-Based Reporting System (as of January 2013).

<i>Crimes against persons</i>	<i>Crimes against property</i>	<i>Crimes against society</i>
Assault offenses	Arson	Drug/narcotic offenses
Aggravated assault	Bribery	Drug/Narcotic Violations
Simple assault	Burglary/breaking and entering	Drug Equipment Violations
Intimidation	Counterfeiting/forgery	Gambling offenses
Homicide	Destruction/damage/vandalism	Betting/wagering
Murder/non-negligent manslaughter	Embezzlement	Operating/promoting/assisting gambling
Negligent manslaughter	Extortion/blackmail	Sports tampering
Justifiable homicide (not a crime)	Fraud offenses	Pornography/obscene material
Kidnapping/abduction	False pretenses/swindle/confidence game	Prostitution offenses
Human trafficking	Credit card/ATM fraud	Prostitution
Human trafficking, commercial sex acts	Impersonation	Assisting or promoting prostitution
Human trafficking, involuntary servitude	Welfare fraud	Purchasing prostitution
Sex offenses	Larceny-theft offenses	Weapons law violations
Rape	Pocket picking	Group B Offenses
Sodomy	Purse snatching	Bad checks
Sexual assault with an object	Shoplifting	Curfew/loitering/vagrancy violations
Fondling	Theft from building	Disorderly conduct
Nonforcible sex offenses	From coin-operated machine or device	Driving under the influence
Incest	Theft from motor vehicle	Drunkenness
Statutory rape	Theft of motor vehicle parts or accessories	Family offenses, nonviolent
	All other larceny	Liquor law violations
	Motor vehicle theft	Peeping Tom
	Robbery	Runaway (not a crime)
	Stolen property offenses	Trespass of real property
		All other offenses

standardized data on one of those six aspects. In total, there are currently 58 data elements recorded on a NIBRS incident. A NIBRS incident can contain multiples of many of the segments depending on the circumstances. The administrative segment contains information pertinent to the incident itself, meaning only one administrative segment is reported for each Group A incident. However, up to 10 different offense types, one for each property type loss with up to 10 property descriptions, up to 99 offenders and arrestees, and finally up to 999 victims can all be reported connected to a single incident. Because of the additional avenues for reporting multiple offenses, there is no need for the Hierarchy Rule to determine which offense should be reported in a criminal incident that exists in the SRS (*National Incident-Based Reporting System (NIBRS) user manual*, 2013).

The expanded information on a Group A incident consolidates all the existing data collections and builds upon that foundation. Information that can be found on the *Supplementary homicide report* is included such as victim and offender information and their relationship to each other, weapon information, and circumstances surrounding the incident. Property information on the *Supplement to Return A* can be found as well. Offense characteristics and exceptional clearances collected on the *Return A* are also included. However, there are a few key areas with new data included in the original NIBRS incident. The incident includes indicators for computer crime, crimes committed by offenders suspected to be under the influence, type of criminal activity connected to drug crimes or property crimes (for example, distributing or manufacturing), or gang violence. Quantities of drug amounts, injuries against victims, and the type of weapon that arrestees were armed with are also collected.

Expanding Role of Law Enforcement – Expanding Data?

While the original formats of the legacy Summary information and the NIBRS incident were based upon the most common elements of data collected on a criminal incident, law enforcement is increasingly working with community groups, industry groups, and victim advocacy groups in their crime reduction strategies. Newer data collections in UCR, and specifically NIBRS, reflect these emerging relationships. The first example from the 1990s was the addition of hate crimes to both the Summary and NIBRS data collections, but subsequently data collections for cargo theft and human trafficking were also added.

The Hate Crime Data Collection was added to the UCR Program by Congressional Mandate in 1990. The Hate Crime Data Collection focuses upon the identification of incident motivated in whole or in part by biases against race, ethnicity, religion, sexual orientation, gender, or disability. NIBRS is able to collect bias motivation in a particular incident with one additional data element. In its summary form, agencies forward information on the date of the incident, multiple offenses connected to the incident and the location type by offense. In addition, the incident report provides information on the type of bias motivation connected to the hate incident, victim type, the number of offenders, and the race of the offenders as an individual or group. The types of victims collected on the Hate Crime form include individuals, businesses, financial institutions, government, religious organizations, society or public, other, or unknown. In the case of an individual victim type, the agency is to note the number of victims. Participation in hate crime data collection has been slowly growing since

its inception with 2011 participation reflecting 91.8% of the population from 49 states and the District of Columbia. However, there remains a lack of consensus over the quality of the data received by the FBI given that there is not universal acceptance of the need for hate crime designations by law enforcement (*Hate crime data collection guidelines and training manual*, 2012).

Since that time, there have been two large additions to the UCR data collections mandated by congressional legislation – Cargo Theft and Human Trafficking. Both of these collections required the addition of either forms/databases in the legacy Summary program, as well as new data elements or data values in NIBRS. Cargo theft is indicated on a NIBRS incident by a single flag on the administrative segment. Human trafficking is captured by the creation of two new offenses distinguishing commercial sex acts from involuntary servitude as the two main forms of human trafficking.

A final recent example of emerging partnerships between law enforcement and victim advocacy groups is the revision to the definition of rape. One of the main points of criticism levied against the UCR Program Summary Reporting Program is its inability to reflect changes in perspectives on ideas of criminality. The historic definition of forcible rape (“the carnal knowledge of a female forcibly and against her will”) in the UCR Program is an example of a concept that was limited in its requirements about the types of sex acts and the gender of victims and offenders that could be included in the forcible rape counts and was not in keeping with current standards towards the criminal justice response to sexual assault. After many years of conversations with various advocacy groups for victims and women, the Justice Department approved a fundamental change in the definition in 2012. This is the first definition change since the beginning of the UCR data collection in 1929. The new broadened definition reads: “the penetration, no matter how slight, of the vagina or anus with any body part or object or oral penetration by a sex organ of another person, without the consent of the victim.” Rather than solely being driven by law enforcement practices, these new collections and revisions are a result of the expanding work of law enforcement with community organizations to identify and reduce crime and disorder (*Reporting rape in 2013: User manual and technical specification*, 2013).

Conclusion

Placing the UCR Program in its historical and functional context is an important part of understanding the program’s strengths and weaknesses. When viewed as a continuum of data passing from local agencies to the State Program to the FBI, the UCR Program is seen to collect information appropriate for analyses geared toward each level in a hierarchical system of law enforcement. Tactical and operational analyses can be performed using data available in records management systems at the local level. UCR allows for these data to be maintained as each local agency sees fit. As details are lost when data are forwarded to the State Program, patterns emerge that are geared towards operational and strategic analysis. National-level strategic analyses call for the broadest view, and the data collected at that level are appropriate for making sweeping statements about crime in the United States.

The UCR Program is best known for broad statements about national crime trends in the United States; however, those trends are best interpreted within the unique framework of the collection of administrative data based on official reports,

which summarizes and records the normal activities of law enforcement agencies. Agencies have been contributing uniform data on reported events for decades allowing for a level of trend analysis at the national level that is not often replicated by other data collections. One consequence of the longevity of that trend is the impact of changing attitudes of policing on the manner in which data is recorded and moves through the system. These changes are not necessarily captured from year to year. The additions and enhancements to the UCR Program throughout its existence are a reflection of this dynamic nature of policing in the United States and are often easier to spot.

For modern users with access to computers in order to handle large datasets, UCR data appears to be a straightforward process. However, beginning this type of data collection in 1929 was prescient on the part of the IACP at a time when data collection was difficult. The resulting Summary system was designed to meet the analytical needs of law enforcement and its policing styles during the twentieth century. NIBRS, the next generation of UCR data, is built upon the idea of flexibility at the state and local level. Through its use of incident-level data, the data collection has been expanded and encompasses a vast amount of data to respond to the growing use of information and intelligence by law enforcement in their day-to-day activities. In addition, the use of crime data by individual consumers and organizations has increased for a variety of uses such as property purchases or the location of businesses. As society continues to increase the role of data and intelligence in all aspects of life and law enforcement expands its role to address the problems of crime and disorder, the UCR Program will be in a unique position to respond and reflect those changes to its users.

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