

# Use of Data in Police Departments: A Survey of Police Chiefs and Data Analysts

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# Abstract

In order to determine the use of data in police departments, 1,379 police agencies serving populations of at least 25,000 were surveyed. Separate surveys were sent for completion by police chiefs and data analysts; the response rate was over 50% for both groups. Three types of analysis were completed: analysis of chief responses, analysis of analyst responses, and then a comparison of chiefs and analysts. Chief and analyst responses were broken into comparison groups by size of population served.

In general, responses followed the expected trend of agencies serving larger populations doing more analysis with more types of data than their smaller counterparts. Agencies serving over 100,000 people were much more likely than agencies serving smaller populations to use data to improve performance and for planning and to be involved in multiagency information sharing. Agencies receive frequent requests for information from community leaders, the media, and the public and most analysts provide information to their agencies in regular reports and bulletins.

Law enforcement agencies are using crime analysis tools to improve both their daily functions and for planning future initiatives. Although many departments do not use, or have access to, other criminal justice system data, most departments would benefit from having readily available data in a format that would allow analysis without additional hardware. Access to such data may finally provide criminal justice and law enforcement agencies the tools to build statistical indicators that would enable them to better predict and better respond to crime.

# Introduction

As policymakers and taxpayers demand program effectiveness and policy accountability, government agencies and practitioners have become concerned about the creation of statistical indicators of performance. Most efforts have been concentrated on linking, sharing, and integrating agency and departmental data systems, which promises to improve performance at both the micro and macro levels.

At the micro level, service providers become better able to work with clients, patients, offenders, or other users because they are better able to access all of the data necessary to understand needs and develop appropriate responses. At the macro level, policymakers are able to address broad-scale problems more effectively because they have regularly reported indicators, either single measures or composite indices, that help them understand trends, new situations, and interconnections among variables and activities.

Practitioners in many policy areas, such as education, health care, the economy, and the environment, currently use indicators of performance. In those areas, effective indicators serve the same function as effective models in scientific study, i.e., they identify some or all of the key factors that should be known for hypothesizing and testing. In education, for example, the drop-out rate is usually considered an important indicator of a system's effectiveness, whereas average daily attendance, while also a statistic, usually is not. For the U.S. economy, the Index of Leading Economic Indicators is used to predict economic performance 6 to 12 months in the future. Armed with such statistics that can proxy for system performance or forecast future behavior with reasonable

success, service providers and policymakers are able, if willing, to chart courses more informed than otherwise, and hopefully more successfully.

With few exceptions, criminal justice has not provided policymakers with similar indicators. At the micro level, much is being done within states and regions to share and integrate data to ensure that officers and officials have all of the information necessary to deal with people apprehended, arrested, or imprisoned. At the macro level, however, the indicator best known and most widely used by policymakers is the Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR).

The UCR has well-known problems due to uneven agency reporting, definition interpretation, and failure to count certain classes of offenses reliably. Because the UCR system relies on the willingness and ability of victims to report crimes, it is held hostage to the vagaries of individual reporting. Paradoxically, more effective agencies may even find themselves with victims more willing to report crimes and thus appear to have more crime than their counterparts. As a guide to understanding the how's, what's, and why's of offending and offenders, the UCR has proven limited as a policy indicator.

As a response to these limitations, the U.S. Department of Justice and its Bureau of Justice Statistics have for many years promoted the adoption of incident-based reporting (IBR) by law enforcement agencies. In particular, they have encouraged participation in the National Incident-Based Reporting System (NIBRS). This system requires far more extensive detail regarding the offense, offender, property involved, and victim than traditional reporting, which often includes only crime counts. With more detailed information compiled and recorded for statistical analysis, service providers and

criminal justice policymakers will, in theory, have more realistic portraits of crime and its environments, which will enable them to develop the means to better address crime.

In practice, use of these systems is still incomplete. According to the FBI, only 26 states were certified to report NIBRS data in 2004, while 12 are currently in the testing phase. The Association of State Uniform Crime Reporting Programs (ASUCRP) in a survey of its members found that a majority of states have IBR systems with limited or cumbersome query capabilities.

Similarly, efforts at sharing and integrating data within and among criminal justice agencies are also incomplete at this point. In fact, the development of these systems for creating indicators or data-driven policy planning has yet to begin. For example, the 2003 Conference on Justice Information Technology Integration Project, held jointly by the National Governors Association (NGA) and the U.S. Office of Justice Programs (OJP), reviewed current types and amounts of technical assistance and local and statewide data sharing efforts. The project found a multitude of problems being faced by states, most notably current budgeting and financing. None of the information provided by NGA and OJP indicated that states or local agencies are actively pursuing the development of integrated data into specific policy-enhancing capacity.

A recent report by the U.S. Department of Justice's Office of Community Oriented Policing Services (COPS) and the Police Foundation, *Problem Analysis in Policing*, discusses how these problems affect data-driven policy for law enforcement, particularly problem analysis in policing (Boba, 2003). The report states that "problem analysis represents a method of providing police agencies with the capability to conduct in-depth, practical research" (p. 2). Problem analysis, according to the report, is not

limited to crime analysis but is “action research in that it involves using formalized methods of study with a goal of arriving at practical solutions” (p. 3). The report asserts, however, that in practice, not all law enforcement agencies will have the capacity for such analysis. It is likely that smaller agencies may require the assistance of outside agencies.

This conclusion was affirmed by another COPS report, *Crime Analysis in America*, published in conjunction with the Police Foundation and the University of South Alabama (O’Shea & Nicholls, 2002). This national survey of U.S. law enforcement agencies studied crime analysts, their resources, and their uses. It divided responding agencies into those with at least 100 sworn personnel and those with fewer. The report found that the size of department did not predict crime analysis capabilities, but did find that larger agencies provided a wider range of analysis. The report also found that agencies with a specific crime analysis position provided more, and better, crime analysis.

To improve law enforcement access to data and analytical tools, the Urban Serving Universities, a coalition of 13 urban universities, instituted the Improving Crime Data (ICD) project. Funded by the National Institute of Justice, the project aims to develop and apply advanced methods of criminal justice data and analysis to improve local decisionmaking and anticrime efforts in urban communities with a possible goal of pairing crime incident data with other sources of data to create a better index of crime. The Justice Research and Statistics Association (JRSA) is partnering with the Urban Serving Universities to gather information on current data sharing/integration efforts and their uses for policymaking. The following sections describe the study and its findings.

# Methods

Surveys were used to gather information on current data sharing and integration efforts to identify the needs and capacities for data usage in local law enforcement agencies. The surveys allowed respondents to provide the information at their convenience in a cost-effective manner. To determine what information should be gathered via the surveys, JRSA convened focus groups of criminal justice professionals in Illinois, Oklahoma, and Pennsylvania. (Please see Appendix A for a list of agencies participating in the focus groups.) As a result of the focus groups, two surveys were developed, one for police chiefs and one for data analysts. In agencies without data analysts, any person filling that role was encouraged to complete the survey.

The chief survey was one page, front and back, consisting of 15 questions and an open-ended recommendation section. The final analyst survey was longer, with two pages front and back containing 43 questions and an open-ended recommendation section. (Please see Appendix B for copies of the surveys.) The chief survey was designed with fewer questions to increase the likelihood of participation; as a result, the answers for some questions were restricted to fewer options than were given the analysts.

To encourage participation, two mailings were sent. The first round of surveys was mailed in January 2004; a second set of surveys was mailed to nonresponding agencies in March 2004. In order to increase the probability that agencies would return the surveys, letters were included explaining the study. Self-addressed, prestamped envelopes were also included in the mailing and respondents were given the option of completing the survey online at the JRSA Web site.

The online surveys were originally posted with online survey software called OmniForms. After posting, however, it was determined that the software did not allow multiple responses to be selected for one question in the analyst survey. The surveys were then reposted with software called SurveyMonkey. Since some responses using the original software had already been received, the question with the error was excluded from the analysis. In some cases, however, respondents included the multiple responses in the comments or recommendations sections; these surveys were edited and included in the analysis. Given that the percentage of responses coming in over the Web site was so small, this exclusion should have no effect on the analysis as presented.

### Sample

The survey sample for this study was selected from the 2000 Law Enforcement Management and Administrative Statistics (LEMAS) survey. All police agencies serving populations of at least 25,000 were selected from the LEMAS database for inclusion. As a result, surveys were sent to 1,379 agencies.

### Response

Chief surveys were received from 779 agencies (56% of the sample) and data analyst surveys were received from 741 agencies (54% of the sample). Most of the responses were received via mail (75% of chiefs, 73% of analysts). For 10 agencies, multiple analyst and chief responses were received. These multiples were not duplicates, but rather differing responses from the same agency. This is not surprising for data analysts, as the second mailing may have been given to a different analyst in agencies with multiple analysts and both were returned. It is more difficult to explain the multiple

chief responses, although it suggests that at least in some agencies, chiefs were not actually the individuals completing the surveys. The final total of chief surveys included in the analysis was 790, while 752 data analyst responses were included.

As can be seen in Table 1, response rates for both chiefs and analysts increased with size of population served. No surveys were received from Vermont, Delaware, and West Virginia; no analyst surveys were received from Maine. Since these states are small, however, only a few agencies fit the criteria for inclusion in our sample. In Vermont, for example, only one agency received the mailing.

**Table 1. Response Rate for Chiefs and Analysts, by Size of Population Served**

<b>Population Size</b>	<b>Chief Response Rate</b>	<b>Data Analyst Response Rate</b>
250,000 or more	76%	75%
100,000 – 249,999	61%	62%
50,000 – 99,999	57%	60%
25,000 – 49,999	53%	48%

Just under half of the participating agencies indicated that they are reporting NIBRS data to the FBI, which is higher than the national average of roughly 31%, according to SEARCH, the National Consortium for Justice Information and Statistics. Agencies reporting NIBRS data may be more technologically advanced than their counterparts, simply due to the requirements of the program. As a result, the findings of this survey may be slightly skewed and may not adequately represent agencies on the lower end of the technology spectrum.

# Results

Due to the large amount of information obtained through the surveys, only issues most relevant to the ICD project are presented here. For more detailed information, please see Appendix C for tabular chief survey results by question and Appendix D for tabular analyst survey results by question.

Three types of analysis were completed. First, chief responses were reviewed and responses were compared by the size of population served by the participating agencies. Second, analyst responses were reviewed and responses were again compared by the size of population served. Finally, chief and analyst responses were compared for similar questions. This final comparison also included a comparison of agencies by size of population served.

Four groups were used to compare agencies by size of population served: agencies serving populations of 250,000 or more; agencies serving between 100,000 and 249,999; between 50,000 and 99,999; and between 25,000 and 49,999. It was expected that results would trend across the groups; specifically, it was anticipated that agencies serving a larger population would have more access to data and use data more often than their counterparts serving smaller populations.

## Chief Survey Responses

The chief surveys focused on five main areas of interest: use of data, personnel response to data collection, the collection and reporting of incident-based data, sharing data, and the providing of statistics to the community and media.

### *Use of Data*

Most of the responding chiefs indicated that criminal justice data, particularly calls for service, arrest, incident report, traffic stop, clearance rates, and hot spots data, are useful in managing their agencies. For most of the data types, responses followed the predicted trend, with the agencies serving the largest populations being more likely to report the use of data than the agencies serving smaller populations. Since it was assumed that the group of agencies serving the largest populations would be more likely to use most of the data categories, it was surprising to find that agencies serving populations between 100,000 and 249,999 were more likely to report the use of hot spots, police pursuit, and disposition data. Also unexpected, the agencies serving the smallest population were most likely to report the use of arrest data.

The agencies serving the largest populations were least likely to report the use of state crime publications. This is not surprising, as these publications are published on an annual basis and are often not available until a year after the data were collected. These agencies most likely produce their own internal publications tailored to their needs and using much more recent data. Agencies serving smaller populations, however, may not have the resources or staff to produce their own reports, and may be more interested in comparing their data with other similarly sized agencies in the state. In these cases, the state publications would be more useful.

Few chiefs reported the use of non-criminal justice data, nor was there any indication that these types of data would be useful if available. The exception to this was the use of Census data, with most chiefs reporting the use of Census data in their

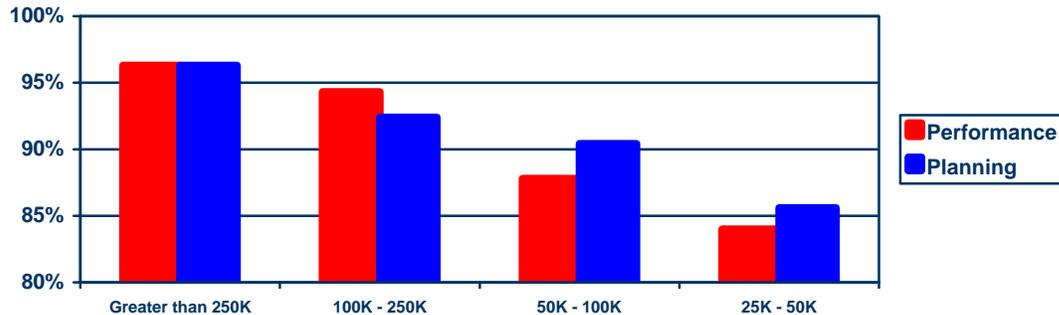
departments. This most likely reflects the continued emphasis on mapping by law enforcement and the use of Census tract and population data.

Currently chiefs are using the data they collect for a variety of functions. The functions most often reported include using data to:

- assess department performance,
- make budget decisions,
- make deployment and tactical decisions,
- respond to inquiries, and
- compare with other jurisdictions.

As seen in Figure 1, most agencies are using data to improve performance and for planning. Agencies serving large populations are more likely to use data to help agency performance, while smaller agencies are more likely to use the data for planning programs or policies.

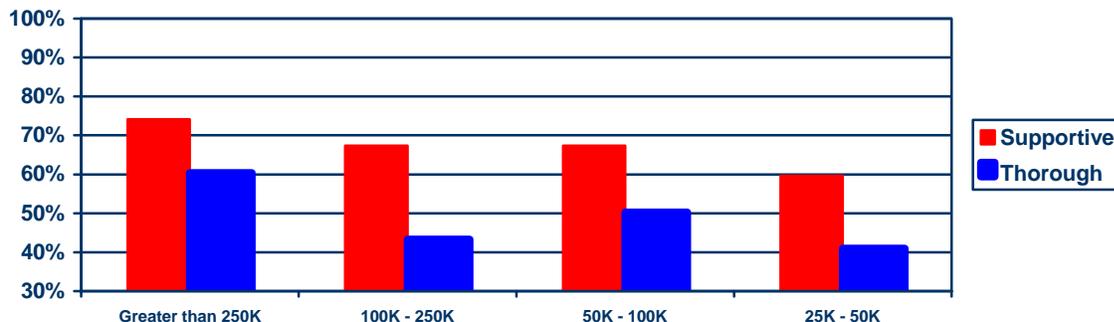
**Figure 1. Use of Data for Performance and Planning, as Reported by Chiefs**



#### *Personnel Response to Data Collection*

Most of the chiefs felt that officers are supportive in their efforts to gather required information. Just under half of all chiefs, however, felt that officers would only be “somewhat thorough” if required to collect additional information (Figure 2).

**Figure 2. Response of Personnel to Gathering Information**

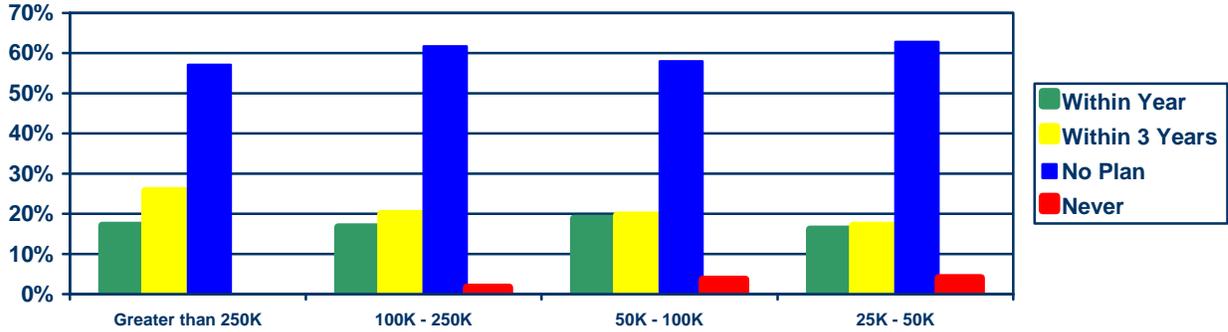


*Collection and Reporting of Incident-Based Data*

Just under half of the chiefs report that their agencies are currently collecting and reporting data to the FBI's NIBRS. NIBRS, unlike the system for reporting summary data, requires the gathering of information relating to the characteristics of the offense, victim(s), offender(s), arrestee(s), and property included in a reported incident. Due to the increased requirements for reporting NIBRS data, agencies have been relatively slow in converting to incident-based reporting. In this study, agencies serving smaller populations were more likely to be reporting NIBRS data; 44% of agencies serving populations from 25,000 to 49,999 report NIBRS data, compared to 27% of agencies serving populations of 250,000 and more.

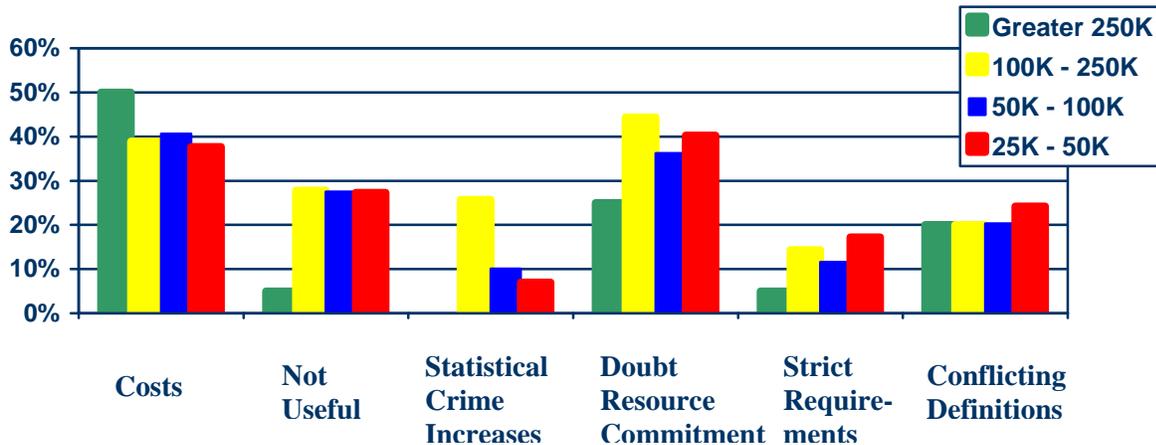
As seen in Figure 3, agencies serving larger populations are slightly more likely to have a plan to implement NIBRS in the next 3 years. Most agencies not currently reporting incident-based data, however, have no plan to do so.

**Figure 3. Plans to Implement NIBRS**



When asked why agencies have no plan to implement NIBRS, agencies serving the largest populations were the least likely to report that NIBRS is not useful. Rather, financial matters seem to be the main reason agencies have not begun reporting incident-based data; most blamed the doubtful commitment of state and federal resources and the costs associated with changing systems. Figure 4 shows the differences among agencies serving different population sizes.

**Figure 4. Why Agencies Are Not Implementing NIBRS**

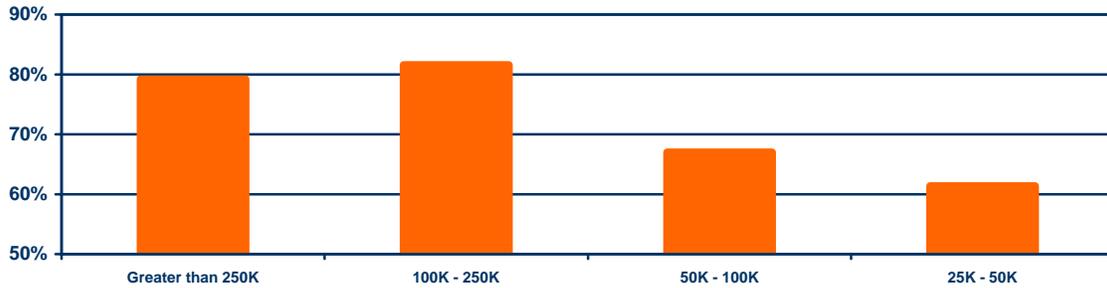


Although chiefs were asked about the amount budgeted for data analysis and collection, the wording of the question led to answers that are difficult to interpret. Because police officers are the ones actually collecting data, it is possible that police officer salaries, a large part of the department budget, could have been considered an element of data collection, whereas the purpose of the question actually was to find out more about the costs of data entry and analysis functions. Most chiefs reported that agencies budget between 1% and 5% for data collection and analysis functions. Over a quarter of chiefs responding said that they budget over a quarter of their total funds for collection and analysis, which may be a result of how they interpreted the question.

### *Sharing Data*

While most chiefs responding to this survey reported involvement with multiagency information sharing, agencies serving populations over 100,000 are much more likely to be involved than those agencies serving smaller populations. Although chiefs were not asked why they were not participating, it seems likely that agencies serving larger populations have greater crime problems and potentially more mobile offenders. With large populations moving between urban centers and suburbs, agencies need a system to keep track of people offending in multiple but contiguous areas. Figure 5 shows the percentage of agencies involved in information sharing. Agencies currently involved in data sharing efforts find them valuable; between 65% and 75% of all groups of respondents reported that the effort was very valuable.

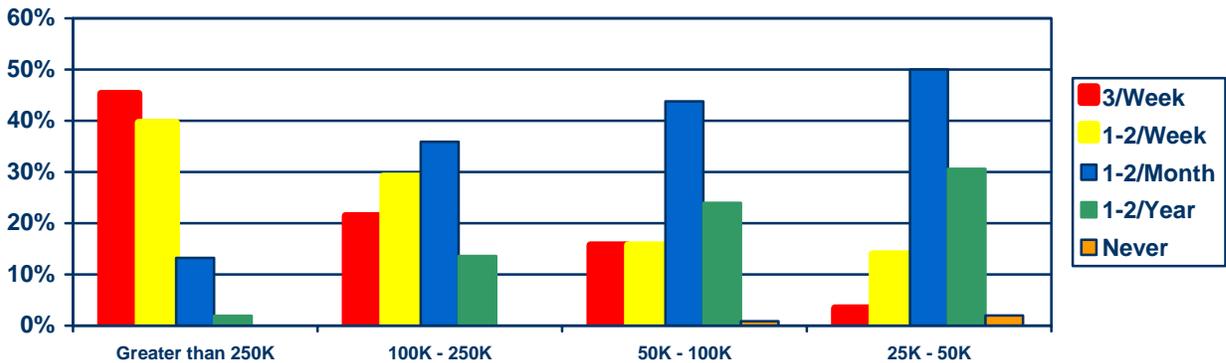
**Figure 5. Percentage of Agencies Involved in Multiagency Information Sharing**



*Providing Statistics to the Community and Media*

Police chiefs face a constant demand for information from community leaders, the media, and the public. Almost 75% of chiefs report that community leaders request statistics at least once a month; 30% of these report requests at least once a week. As can be seen in Figure 6, agencies serving larger populations receive more frequent requests, often at least three a week.

**Figure 6. Frequency of Information Requests Received by Agencies from Community Leaders**



Only about half of the chiefs rate the media's understanding of data provided them as good. Chiefs of agencies serving the largest populations, 250,000 and more, rated the media's understanding poorer than did chiefs in the other three groups.

### Analyst Survey Responses

Like the chief surveys, the analyst surveys focused on five main areas of interest: use of data, agency structures and resources, data for strategies, data sharing and outside assistance, and incident-based data. Since the analyst survey was twice as long as the chief survey, analysts were able to provide much more detail about the use and analysis of data in their agencies.

### *Use of Data*

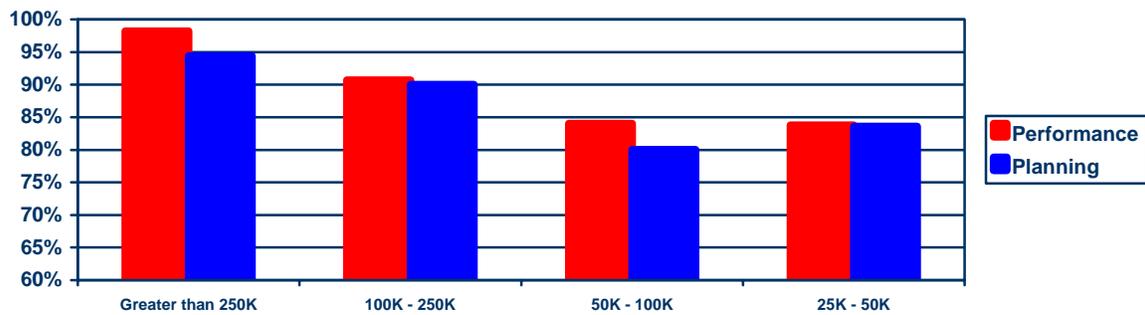
Analysts use calls for service and incident report data most often in their jobs. Few analysts report the use of any non-criminal justice data, with the exception of Census data. There were few differences among agencies in regard to the types of data used. One notable difference, however, was in the use of medical examiner data; agencies serving populations of 250,000 and more were more likely to use such data than agencies serving smaller populations.

The trends for the types of data used were as expected; agencies were more likely to use data as the size of the population they served increased. The largest difference among agencies was for the use of drug and/or gun seizure data, with agencies serving large populations being much more likely to have and use the data. Agencies serving populations over 100,000 would be more likely to use any additional data if made available than agencies serving populations under 100,000. This is most likely due to the

size of the crime analysis units; agencies serving smaller populations may not be able to handle any additional analysis.

As expected, agencies serving larger populations are more likely to use the data for evaluating performance and for planning future initiatives. Analysts in all agencies agree that data are used more often for performance than for planning (Figure 7).

**Figure 7. Use of Data for Performance and Planning, as Reported by Analysts**

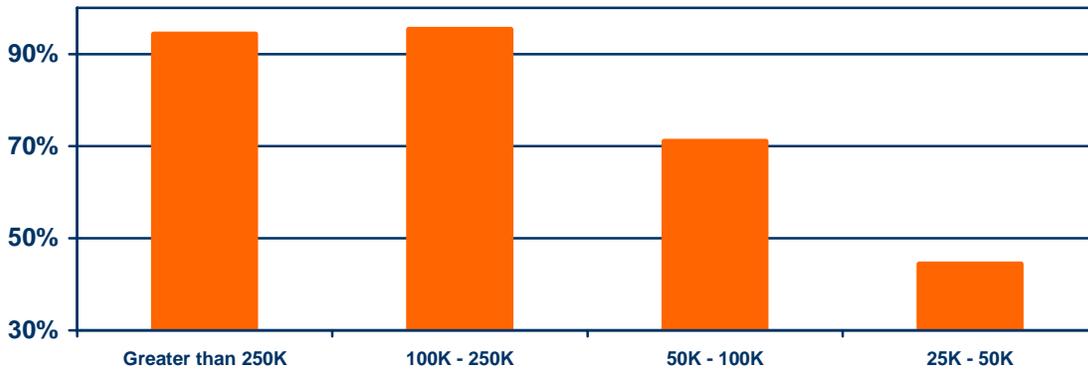


### *Agency Structures and Resources*

Although most agencies serving populations over 100,000 report having a crime analysis unit, agencies serving under 50,000 are much less likely to have a separate unit (Figure 8).

On average, crime analysis units tend to have only a single analyst. Agencies serving larger populations have more analysts; about 13% of agencies serving more than 250,000 people report having more than 10 analysts on staff.

**Figure 8. Percentage of Agencies with a Crime Analysis Unit**



Analysts across agencies are similar; most analysts have an undergraduate degree. Analysts in agencies serving 100,000 people or more are more likely to receive training for their jobs; only 70% of analysts in smaller agencies report receiving any analysis-specific training. Most analysts receive training from outside agencies, but almost half report that their training is not up-to-date.

With the demand for increased information sharing and improvements in technology, it is not surprising that most of the agencies responding to this survey have automated records management systems (RMS). With over 80% reporting automated systems, the number seems higher than expected. The high number of automated agencies in our sample may actually reflect our selection method and a self-selected response set. In fact, agencies reporting NIBRS were more likely to respond to this survey. Since NIBRS requires the collection of a large number of incident characteristics and must be reported electronically, by default that means that most of these agencies are automated. Surprisingly, there was little difference among agencies serving the different population groups.

Despite the automation, many analysts would like to improve their ability to extract data from their record management systems, especially analysts in agencies serving populations under 100,000. Analysts would also like to see increased analysis capacity and improved data quality. When asked how analysts could improve their technical capacities, most in agencies serving 250,000 or more reported that they would increase the number of staff performing analysis functions. Analysts in agencies serving fewer than 250,000 instead reported that they would improve the software used for analysis and reporting.

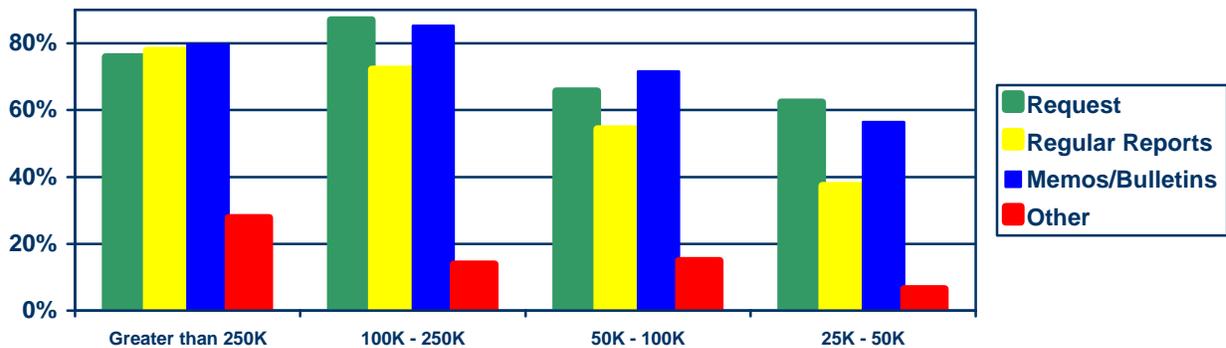
Although the push toward technology has in essence led business to the Internet, it was surprising to find that almost 93% of the responding agencies reported having a Web site. It seems likely, however, that as city and county governments move to providing instant access to information to their citizens, law enforcement information, and therefore law enforcement agencies, are included on these community Web sites. These sites, however, may provide little more than contact information. In fact, fewer than half of the agencies serving populations under 100,000 provide crime statistics via the Web. Agencies serving populations of 250,000 or more are much more likely, with 83% of analysts in these agencies reporting that crime statistics are provided on an agency Web site.

#### *Data for Strategies*

Roughly half of the respondents report that their agency is able to track offenders over time. In most cases, this system tracks offender arrest history; jail, court, and probation/parole data are included in only about half of the agencies.

Over half of the analysts reported that information is regularly distributed in the agency, most often in memos and bulletins or upon request. Fewer than half of the analysts in agencies serving fewer than 50,000 provide the information in regular reports, compared with almost 80% of the analysts in agencies serving 250,000 or more (Figure 9).

**Figure 9. Dissemination of Data in Agencies**



*Data Sharing and Outside Assistance*

Analysts in agencies serving large populations are much more likely to use data systems that are integrated with systems of other departments or agencies; 76% of analysts in agencies serving populations over 250,000 use integrated systems, compared with 60% of agencies serving populations under 50,000. These systems tend to be maintained by the county, and in most cases these integrated systems allow agencies to share criminal incident and person information with other law enforcement agencies. Just under half of the analysts report that their agency shares automated data with courts, and few share with corrections or probation offices. The likelihood of sharing data

increases with increased population. Only half of the analysts, however, rate data sharing efforts as successful.

Few analysts seek analytic assistance from outside agencies, but most report that they would be receptive to assistance if offered. For most, maintaining confidentiality of the information would be the largest concern, followed by issues surrounding the maintenance of data integrity.

### *Incident-Based Data*

Only 40% of the analysts report that their agency is collecting and reporting incident-based data, and most have no definite plan to implement a NIBRS-compatible system. Most blame their current records management systems and the need to update to support incident-based reporting, as well as the need to redesign collection processes and reporting forms.

### Comparison of Chief and Analyst Survey Responses

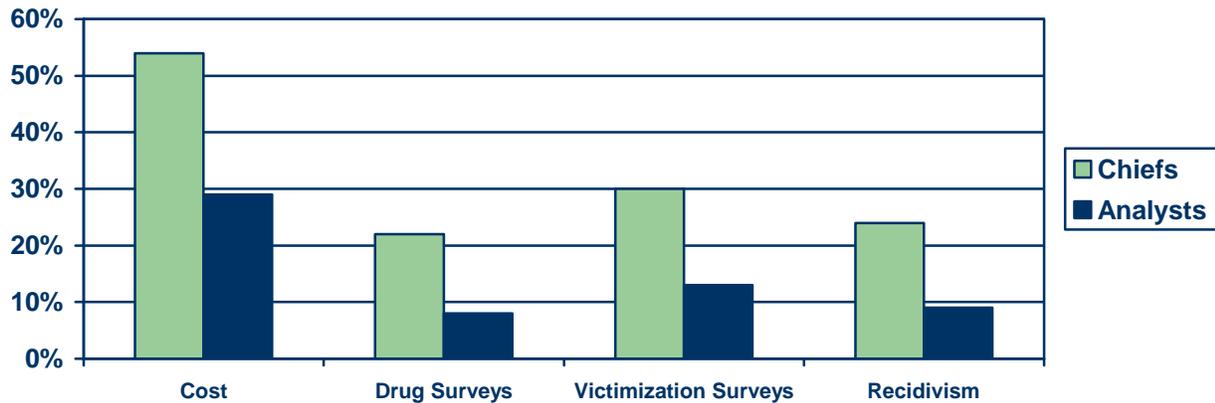
Since the chief and analyst surveys were different lengths and were designed for different purposes, the wording differed slightly for several of the questions. Chiefs, for example, were asked about data useful in managing their agency, while analysts were simply asked what data are used in their agency. In total, 14 of the questions are similar enough in their content to compare responses. As a result of phrasing, however, responses can't always be compared without explanation. In the following sections, only agencies with both chiefs and analysts responding are included in the analysis. Multiple responses from single agencies are excluded.

### *Use of Data*

While most of the responses can be compared, answer options for one of the questions differed in the analyst and chief surveys. As a result, these data are not included in the following comparisons.

Chiefs are more likely than analysts to report the use of some categories of criminal justice data. The differences between chiefs and analysts are most apparent in agencies serving populations between 100,000 and 249,999. In these agencies, chiefs and analysts differed by at least 5% in 10 of the possible 15 categories of data types.

**Figure 10. Reported Use of Data by Chiefs and Analysts**

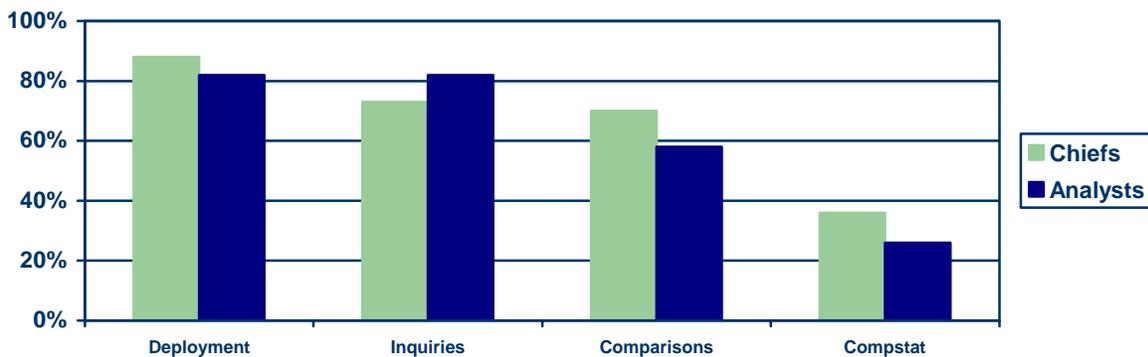


It is not surprising that chiefs would be more likely to report the use of cost data; for the other categories, however, it appears that either chiefs may be overestimating the use of data in their agencies, or analysts are underestimating. Figure 10 lists the largest discrepancies found for all agencies.

Chiefs and analysts also differed in their perceptions of how the data are used (Figure 11). Again, the wording for these questions differed slightly, with chiefs being

asked how they use data in their agencies, while analysts were asked how data are used in the agency. Analysts seemed to underestimate how data are used for making deployment decisions and for comparisons to other agencies; chiefs seemed to underestimate the number of inquiries for information received by the agency.

**Figure 11. Use of Data as Reported by Chiefs and Analysts**



Chiefs and analysts tend to agree that data often affect performance and are used for planning. The only difference across agency size occurred for agencies serving populations between 50,000 and 99,999. In these agencies, chiefs were much more likely to report that data affect planning (91% of chiefs vs. 80% of analysts).

#### *Personnel Response to Data Collection*

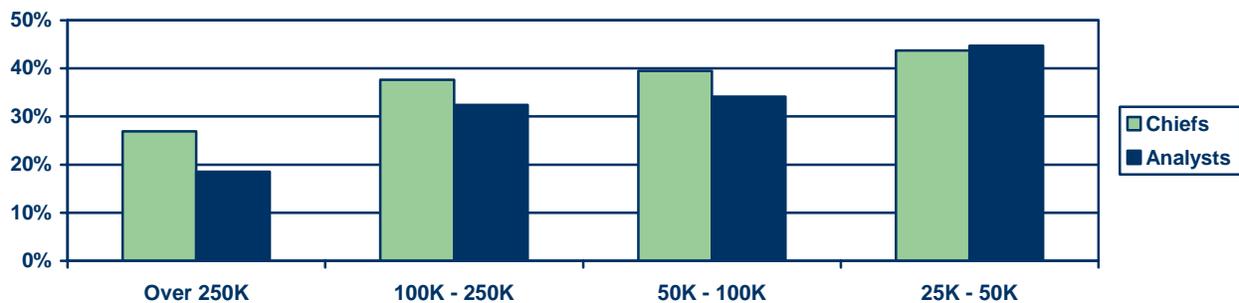
There was little difference between chiefs and analysts in regard to the support received from officers in gathering data. Most agree that officers are supportive but would only be somewhat thorough if required to collect any additional information. The discrepancy between chiefs and analysts was most evident in agencies serving 100,000

people or more; in these agencies, chiefs indicated that they felt officers would be more thorough than analysts did.

### *Collection and Reporting of Incident-Based Data*

Chiefs in agencies serving populations over 50,000 are more likely to indicate that their agencies are collecting and reporting NIBRS data (Figure 12). The difference may simply be an issue regarding familiarity with the term NIBRS; analysts may only know that they are collecting data for use in their agency and may not know that their data collection specifications define the data as NIBRS data. Analysts in agencies not currently reporting NIBRS, however, are more likely than chiefs to report plans to report NIBRS data in the next three years.

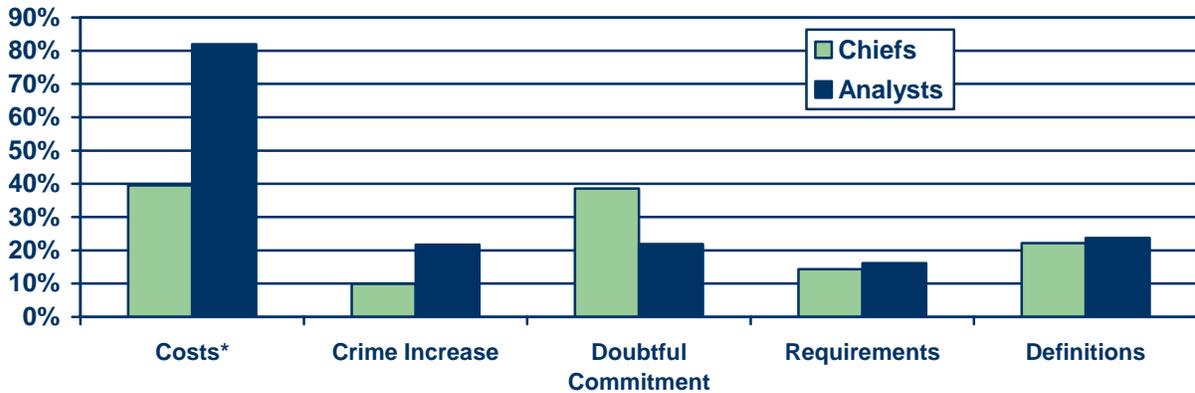
**Figure 12. Agencies Reporting NIBRS Data, Comparison of Chiefs and Analysts**



Although both surveys asked why agencies are not currently reporting NIBRS data, the analyst survey provided more answer options (23) than the chief survey (6). Five of the six options on the chief survey can be directly compared with answer options on the analyst survey; the sixth corresponds to a category of cost-related options that are further broken down for the analysts. For this sixth question, a response to any of the

answer options corresponds to a “yes” response. As can be seen in Figure 13, analysts reported more issues with reporting NIBRS data than did chiefs.

**Figure 13. Chief and Analysts Reasons for Not Reporting NIBRS Data**



\*Cost comparison includes a category offering more response options for analysts, which may account for their higher response rate.

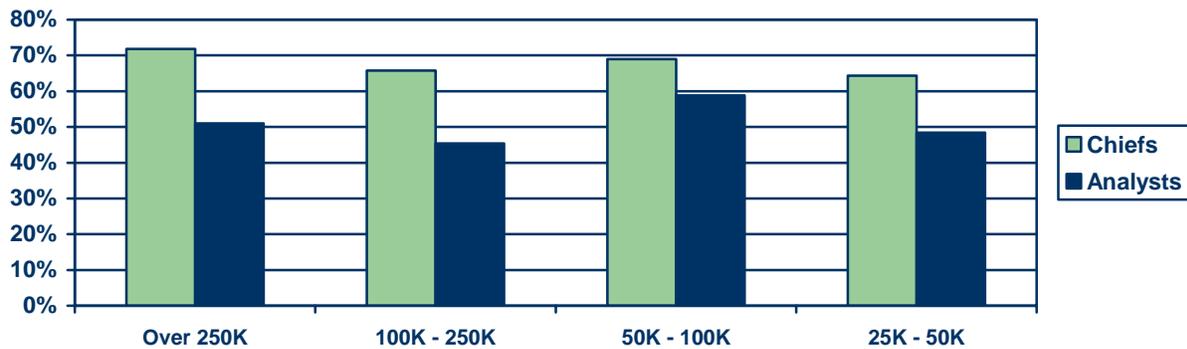
### *Sharing Data*

Both chiefs and analysts were asked about sharing agency data, but the questions were worded slightly differently and can only be compared with caution. The wording on the chief survey specifically asked if the department is currently involved in sharing data, while analysts were asked whether the department is currently *or is planning on* participating in an information sharing project. As expected, the numbers are much higher for analysts, with 97% responding that their agencies are or will be sharing data, compared with 67% of chiefs responding that their departments are currently sharing data.

In the survey, chiefs were asked to rate the value of multiagency efforts to share data. A similar question was posed to the analysts, but instead asked whether analysts

find data sharing efforts to be successful. In agencies that are currently sharing data with outside agencies, chiefs report the project to be more valuable than analysts do. As can be seen in Figure 14, this finding is consistent across agency size.

**Figure 14. Percentage of Chiefs and Analysts Reporting Information Sharing Projects are Valuable / Successful**

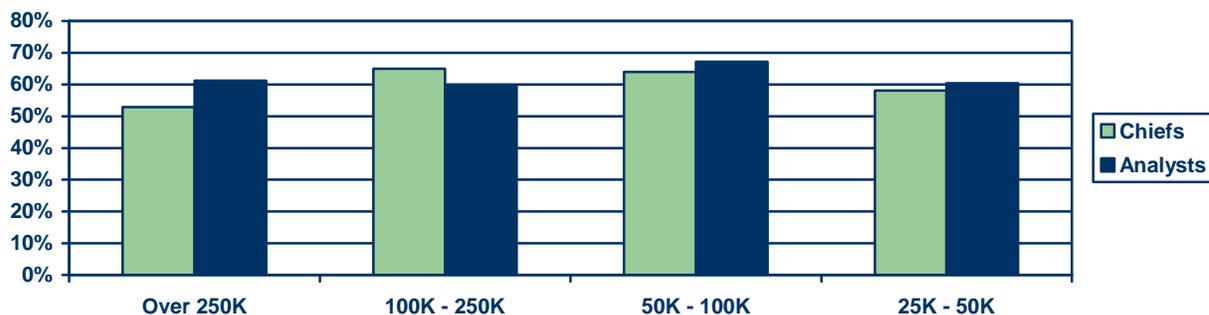


*Providing Statistics to the Community and Media*

Chiefs report more weekly requests for information from external sources than do analysts. It is possible that chiefs actually receive more requests for information, and these requests are not filtered down to the analysts. It is just as likely that either chiefs overestimate the number of requests received by an agency, or that analysts underestimate the number that are handled outside the crime analysis units.

In general, roughly only half of chiefs and analysts agree that the media have a good understanding of the information that the agency provides them (Figure 15). Chiefs of agencies serving populations between 100,000 and 250,000 rate the media slightly better than the other agency categories.

**Figure 15. Percentage of Chiefs and Analysts Rating Media Understanding as Good**



## Discussion

Police departments across the country are indeed using criminal justice data. As expected, most agencies are using the data to help performance and for planning programs and policies. Using reports, memos, and bulletins, analysts are sharing data within their agencies. Information is also shared on a regular basis with community leaders, the media, and the public. Over half of the police agencies are involved in an information sharing project with outside agencies and report that such projects are valuable.

Although law enforcement agencies are sharing data, most are only sharing limited data with other law enforcement agencies. According to the survey results, agencies are not sharing data with local courts, corrections, or probation offices. Agencies may therefore not know when arrestees are currently active in their or in a surrounding jurisdiction's criminal justice system.

Agencies tend to be automated and to have a Web site. Most agencies serving populations of over 50,000 people have a crime analysis unit, which is generally staffed by at least one full-time analyst. Even though most analysts have an undergraduate

degree and receive some kind of job-specific training, it is evident that more up-to-date training is needed, especially for agencies serving populations under 100,000.

While agencies find that their officers tend to be supportive in their data collection efforts, it is unclear whether officers would be thorough if required to collect additional information.

Just under half of the surveyed agencies are currently reporting NIBRS data to the state. Despite the fact that most of the agencies are automated, most of the agencies not currently reporting have no plan to implement a NIBRS collection system. Most agencies cite cost as the most important factor that keeps them from reporting incident-based data.

At the start of this project, it was expected that trends would follow a consistent pattern across the categories based on the size of the population served by the agencies responding to the surveys. Although the trend was as expected for most of the survey data, at several points the responses of agencies serving populations of 100,000 to 249,999 were not as expected. Since most of these agencies are likely to be in large suburbs outside of large urban areas, it is likely that these agencies have a larger tax base and therefore more resources at their disposal. With the additional resources, they can spend more money on data analysts and analysis, unlike their possibly cash-strapped urban counterparts.

In summary, it seems clear that law enforcement agencies are using crime analysis tools to improve both their daily functions and for planning future initiatives. Although many departments do not use or have access to other criminal justice system data, it seems clear most departments would benefit from having readily available data in

a format that would allow analysis without additional hardware. Access to such data may finally allow criminal justice and law enforcement agencies the tools to build statistical indicators that would enable them to better predict and better respond to crime.

## References

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O'Shea, T.C. and Nicholls, K. (2002). Crime Analysis in America. Washington, D.C.: Office of Community Oriented Policing Services.

## Appendix A. Focus Group Participants

## Illinois

Chicago Police Department  
Crime Analysts of Illinois Association  
Hanover Park Police Department  
Illinois Criminal Justice Information Authority  
Illinois State Police  
Integrated Justice Information System  
Office of the Cook County State's Attorney  
Sangamon County Sheriff's Department  
Streamwood Police Department

## Oklahoma

Beaver Sheriff's Office  
Dewey Police Department  
Duncan Police Department  
Eufaula Police Department  
Jackson Sheriff's Office  
Lexington Police Department  
Marlow Police Department  
Oklahoma Criminal Justice Resource Center  
Oklahoma Department of Corrections Research and Evaluation Unit  
Oklahoma Sentencing Commission  
Roger Mills Sheriff's Office  
Wagoner Police Department

## Pennsylvania

Berks County Adult Probation and Parole  
Governor's Policy Office  
JNET  
Justice HUB  
Lower Allen Township Police Department  
Mercyhurst College Civic Institute  
Pennsylvania Commission on Crime and Delinquency  
Pennsylvania Sentencing Commission  
Pennsylvania State Police  
Philadelphia Police Department

## Appendix B: Surveys

## Appendix C: Chief Survey Results

## Appendix D: Analyst Survey Results