Muskie School of Public Service
University of Southern Maine

2016
Law Enforcement Data Use Report

Contents

Executive Summary

The intent of the survey was to capture a snapshot of current data use practices by law enforcement agencies in the state of Maine in order to understand how data are currently being used by and among these agencies and to identify where resources may be needed to support their use of data.

RESPONSE RATE | A total of 86 surveys were completed and analyzed for this report. The response rate for this survey was 56%.

NUMBER OF OFFICERS EMPLOYED | On average, responding agencies employed 12 officers; town/city agencies employed 9.5, while county agencies employed nearly double that at 18.0.

AGENCIES WITH WEBSITES | The majority (84%) of survey respondents reported that their agencies had websites, but only 21% of agencies with websites provide crime statistics on the sites.

AUTOMATED RMS (RMS) SYSTEMS | A strong majority (96%) of respondents reported that their agencies have automated record management systems (RMS) with which they collect data.

TYPE OF CRIMINAL JUSTICE DATA MOST FREQUENTLY USED BY LAW ENFORCEMENT AGENCIES | Survey respondents reported that the type of criminal justice data most frequently used was *calls for service* data; 97% of respondents reported using this type of data.

CRIMINAL JUSTICE DATA TYPE NOT CURRENTLY USED BUT IDENTIFIED AS USEFUL | The type of criminal justice data that respondents most frequently identified as likely to be useful was *recidivism data*; 46% of respondents not using this type of data indicated that they thought it would be useful to their agencies.

TYPE OF NON-CRIMINAL JUSTICE DATA MOST FREQUENTLY USED | The most frequently reported type of non-criminal justice data used by law enforcement was *social media data*; 72% of respondents specified using this type of data.

NON-CRIMINAL JUSTICE DATA TYPE NOT CURRENTLY USED BUT IDENTIFIED AS USEFUL | The type of non-criminal justice data that respondents most frequently identified as likely to be useful was *emergency room data*; 54% of respondents not using this type of data indicated that they thought it would be useful to their agencies.

TASKS FOR WHICH DATA ARE USED | Of the 86 total respondents, 80 respondents reported using data for *budgeting purposes* sometimes or more frequently.

FACTORS HELPFUL IN INCREASING THE USE OF DATA AND STATISTICS FOR DECISION MAKING | Survey respondents reported *increased systems integration among law enforcement agencies* as the factor that would be most helpful in increasing the use of data and statistics for decision making.

USE OF NIBRS | Just over half (52%) of all survey respondents affirmed that they collect and report incident-based (NIBRS) data.

REASONS FOR NOT USING NIBRS | Forty percent (40%) of those who provided a reason for not reporting NIBRS data attributed their resistance to *doubtful commitment of state resources and training to local agencies for continued implementation.*

MULTI-AGENCY EFFORT TO SHARE/INTEGRATE DATA | Approximately four out of five respondents (81%) reported that their departments are currently involved in multi-agency efforts to share/integrate data.

VALUE OF DATA SHARING EFFORTS | More than three-quarters of respondents (78%) indicated that that their data sharing efforts were *very valuable,* and the remaining respondents (22%) indicated that their efforts were *somewhat valuable.*

BUDGETS FOR DATA COLLECTION AND ANALYSIS | The largest group of respondents (40%) estimated that 1% or less of their agencies' budgets were used for data collection and analysis.

FREQUENCY OF DATA REQUESTS | Forty-six percent (46%) of respondents reported receiving external requests for data once or twice a month.

CRIME ANALYSTS | A small proportion of respondents (6%) reported that their agencies had a crime analyst.

ASSISTANCE WITH ANALYSIS | Approximately three out of ten (29%) law enforcement agencies seek assistance in data analysis from outside agencies.

UP-TO-DATE TECHNOLOGY | Roughly one out of every five respondents (22%) considered their agencies' technology to be *somewhat* or *very outdated.*

ADDITIONAL FUNDS FOR DATA COLLECTION AND REPORTING | Forty percent (40%) of respondents reported that if additional funding was available for data collection and reporting they would spend it on software.

TRACKING OFFENDERS OVER TIME | A little over a third of respondents (38%) reported that their agencies had access to data systems that allow the tracking of offenders over time.

Background

The field of law enforcement is moving steadily (if not swiftly) toward intelligence-led policing (ILP). **While there is no single definition of ILP, this type of policing is collaborative and focuses heavily on information gathering, analysis, and the sharing of intelligence between agencies.** ILP was existent prior to the terrorist attacks of 9/11, but its importance was more widely established after, when the 9/11 Commission identified the failure to share information as a contributing factor that allowed the attacks to occur.[1]

Today, ILP continues to play a vital role in the fight against terror, but it is also recognized as having value beyond that role, in everyday policing. ILP allows law enforcement agencies to work "smarter," leveraging limited budget resources into fewer targeted areas in order to realize a greater return on monetary and time investments.[2] In addition to this benefit, ILP is predictive rather than reactive; as such, it allows law enforcement to disrupt and prevent crime, creating additional benefits in terms of protecting potential victims and increasing public safety.[3]

The expected benefits of ILP are clear, but implementation has nevertheless been slow. Fully implemented, ILP involves six steps or levels:

    1.) planning and direction,

    2.) information collection,

    3.) processing/collation,

    4.) analysis,

    5.) dissemination, and

    6.) reevaluation.[4]

Operationalizing each of these steps requires commitment and resources, which agencies hold in various amounts. Small law enforcement agencies (and Maine has many of these) have far fewer resources at their disposal than larger agencies, and this is reflected in the level to which they can achieve ILP.

Every agency, however, has some capacity to move in the direction of ILP. Most agencies, including the smallest, have the ability to collect information in the form of data, and most agencies are engaged in some measure of data sharing within networks of county and regional participants.[5] Slightly larger agencies may be producing intelligence by combining information (or data) with analysis, either internally or through the use of contracted analysts. **These basic ILP activities—the collection and sharing of data as well as the analysis of it—are the focus of the remainder of this report, which summarizes a survey conducted in 2016 to ascertain the degree to which Maine law enforcement agencies are collecting, sharing, analyzing, and using data.**

About This Report

This report summarizes the findings from a survey conducted in 2016 by the Maine Statistical Analysis Center (SAC) at the Muskie School of Public Service in collaboration with the Maine Chiefs of Police Association. **The intent of the survey was to capture a snapshot of current data use practices by law enforcement agencies in the state of Maine in order to understand how data are currently being used by and among these agencies and to identify where resources may be needed to support their use of data.**

Toward that end, a comprehensive list of all Maine law enforcement agencies was obtained from the Maine Attorney General's Office. This list was compared to a similar listing maintained by the Maine Chiefs of Police Association. Once a master list was created, the Maine SAC, in conjunction with the Muskie School's Survey Research Center, sent an email to each contact on the list. The emails originated from Robert M. Schwartz, Executive Director of the Maine Chiefs of Police Association, a name likely to be familiar to the recipients. The emails contained an explanation of the survey's purpose and importance and included an individualized link for recipient to click in order to complete the online survey. The Survey Research Center used SNAP survey software for this purpose.[6] Follow-up calls were subsequently made to recipients who had not completed the survey within the allotted time.

These recipients were encouraged to complete the survey and were provided with reminder emails with the survey links when necessary. These efforts resulted in 86 completed surveys[7] and a response rate of 56%.

With permission from the Justice Research and Statistic Association (JRSA), the Muskie School borrowed heavily from a survey previously conducted by the JRSA in designing the present survey.[8] The JRSA survey, conducted in 2004, was national in scope and targeted agencies serving relatively large populations—the smallest agencies served between 25,000 and 49,999 residents. Only one of Maine's local agencies is large enough to fall within this range. This size difference and the fact that this survey was done more than 10 years later mean that comparisons between the current Maine survey and the national one must be made with caution.

Description of Survey Respondents

A total of 86 law enforcement agencies responded to the survey. Of these agencies, 70 (81%) were local law enforcement agencies, 10 (12%) were county agencies, 3 (3%) were state agencies[9], and the remaining 3 (3%) were public university law enforcement agencies.

Figure 1: Distribution of Respondents by LE Type (n=86)

County (n=10) 12%

State (n=3) 4%

University (n=3) 3%

Town/City (n=70) 81%

On average, responding agencies employed

12 officers.

According to the U.S. Department of Justice, almost half of US law agencies had fewer than 10 officers in 2013.[10]
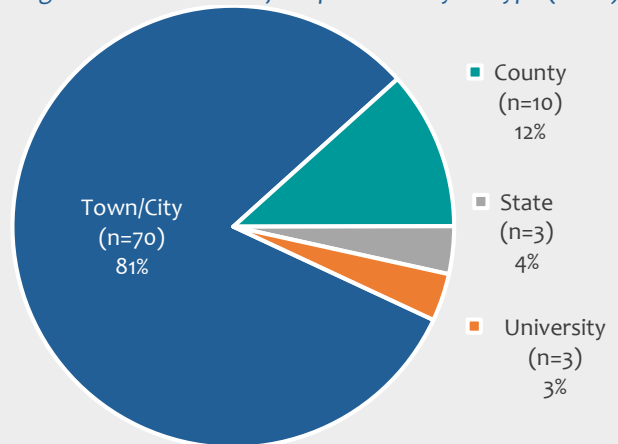
Responding law enforcement agencies varied in size, ranging from 1 full-time officer employed by one small town agency to 302 full-time officers employed by the Maine State Police. The mean (or average) number of officers was 25, but this value was greatly skewed by the large number of officers employed by state agencies. A more accurate measure of central tendency for skewed data is the median (or middle) value, which for these data was 12 officers. **The median number of officers for town/city agencies was 9.5, while the median for county agencies was nearly double that at 18.0.**

# Agency Websites & Crime Statistics

The majority (84%) of survey respondents reported that their agencies have websites, but this proportion varied between small and medium agencies. Seventy percent (70%) of small agencies (having 10 or fewer officers) maintain websites while 94% of medium agencies (having 11 to 30 officers) do.[11]

Figure 2: Proportion of Agencies with Websites (n=86)
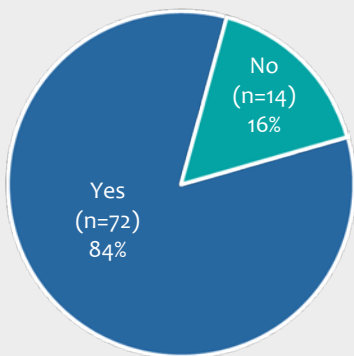
A small proportion, 21%, of agencies that maintain websites provide crime statistics on the sites.

*Figure 3: Proportion of Websites with Crime Stats (n=70)*
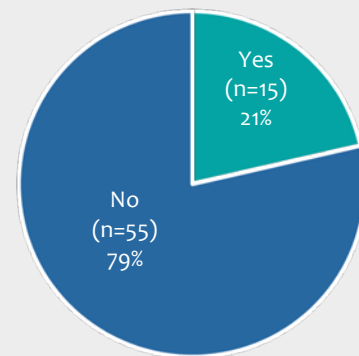
"Many local jurisdictions now post crime data in some form on their public websites, and a few agencies release crime data just a few days or weeks beyond the [reporting] period."[12]

Record Management Systems

A strong majority (96%) of respondents reported that their agencies have automated record management systems (RMS) with which they collect data. The three agencies that reported having no RMS were small agencies (having 10 or fewer officers).

Figure 4: Proportion of Agencies with RMS (n=85)
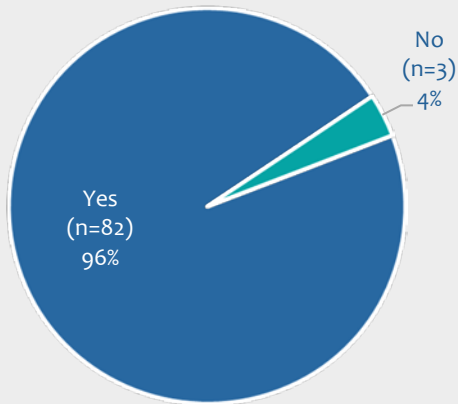
While the information captured by these record management systems has value, there is a downside to the proliferation of data. Namely, it requires technical skill to organize, maintain, extract, and analyze data. Agencies lacking personnel trained to carry out these tasks may be inundated by the volume of information with no way to make meaning of it.[13]

"Traditionally, [data collection] has been the most emphasized segment of the [intelligence] process, with law enforcement agencies and prosecutors dedicating significant resources to gathering data."[14]
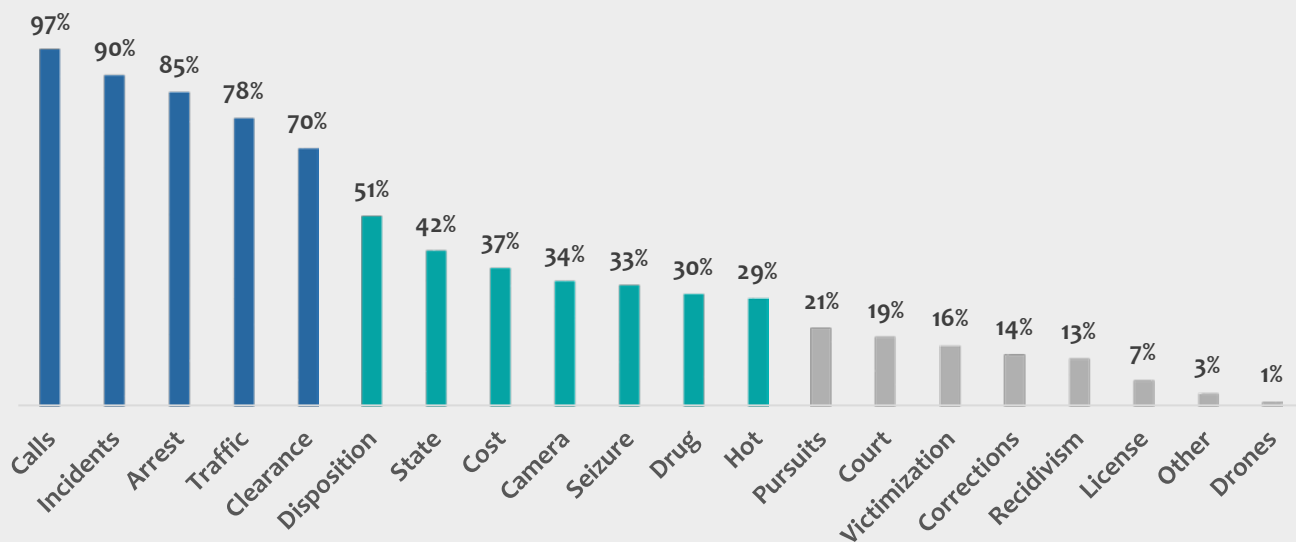
Criminal Justice Data Used by Agencies

Law enforcement agencies utilize a variety of criminal justice data in the process of policing Maine's communities. **Survey respondents reported that the type of data most frequently used was _calls for service_ data; 97% of respondents reported using this type of data.** The next frequently used types of data were _incident report data_ (90%), _arrest data_ (85%), _traffic stop data_ (78%), and _clearance rate data_ (70%).

Data that are used with moderate frequency included _disposition data_ (51%), _state crime publications data_ (42%), _cost data_ (37%), _body camera data (footage, audio)_ (34%), _drug/gun seizure data_ (30%), _drug use survey data_ (30%), and _"hot spots" data_ (29%).

Infrequently used data types included _police pursuit data_ (21%), _court caseload data_ (19%), _victimization survey rates_ (16%), _corrections data_ (14%), _recidivism rates_ (13%) _license plate scanner data_ (7%), _"other"_ (3%), and _UAVs/drone footage data_ (1%).

Figure 5: Proportions of Agencies Utilizing Each Type of Criminal Justice Data (n=86)

# Criminal Justice Data That Would Be Useful to Agencies

Respondents were asked about the types of data they were not using but would find useful if available.[15] **The type of data that respondents most frequently identified as likely to be useful was *recidivism data*; 46% of respondents not using this type of data indicated that they thought it would be useful to their agencies.** At 44% and 41%, *drug use survey data* and *"hot spot" data* were likewise frequently reported as likely to be useful.

Data Types

Recidivism	Body camera	Police
Drug use survey	Cost	Arrest
Hot spots	State crime publications	Traffic stop
Disposition	Corrections	Drones
License	Clearance rate	Other
Victimization	Drug/gun seizure	Gunshot
Court	Incidents	Other

"Police often apply the Pareto principle (i.e., the "80/20 rule") to offenders in their communities, purporting that 20 percent of the criminals are responsible for 80 percent of the crime. True or not, recidivism is a core concern of police and corrections."[16]

Figure 6: Proportions of Agencies That Identified Currently Unused Types of Criminal Justice Data as Useful
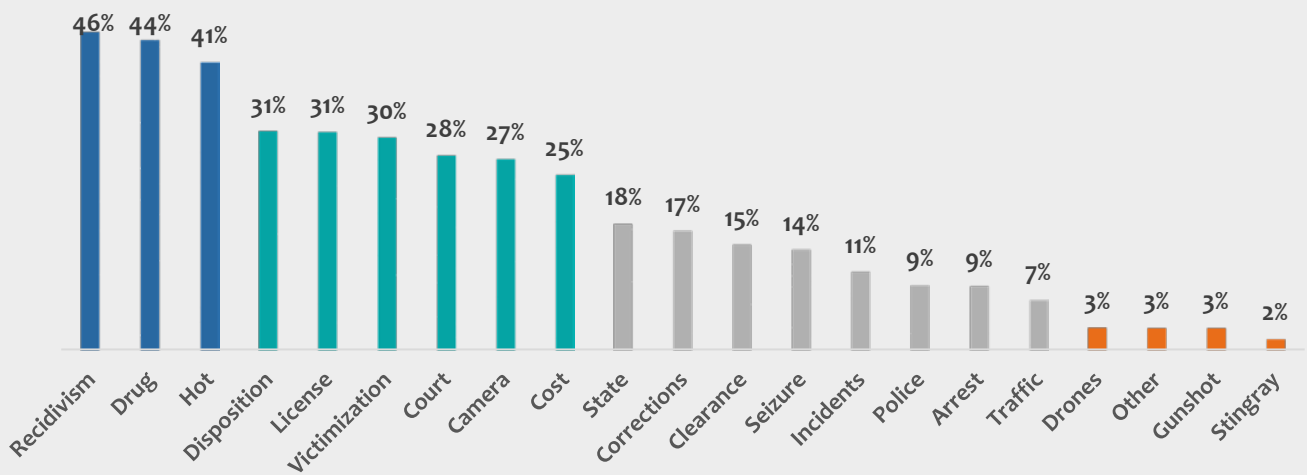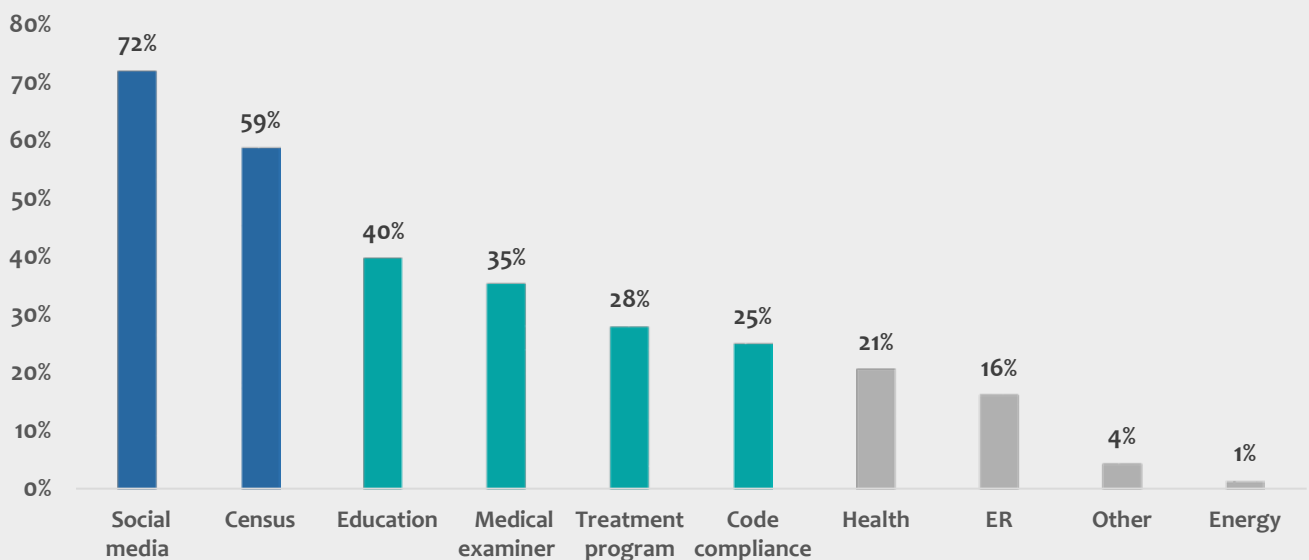
Non-Criminal Justice Data Used by Agencies

In addition to criminal justice data, respondents reported that their agencies used a variety of non-criminal justice data sources. **The most frequently reported type of non-criminal justice data used by law enforcement was *social media data*.** Seventy-two percent (72%) of respondents specified this type of data, followed by *census data*, at 59%. *Education data, medical examiner data, treatment program data,* and *code compliance data* were also reported as being used by a quarter or more of all respondents.

> "[L]aw enforcement increasingly relies on social media tools to prevent crime, accelerate case closures and develop a dialogue with the public."[17]

Less than a quarter of respondents reported that their agencies were using *health data, emergency room data, energy data,* or other forms of data.

Figure 7: Proportions of Agencies Utilizing Each Type of Non-Criminal Justice Data (n=68)

Non-Criminal Justice Data That Would Be Useful to Agencies

Respondents also reported the types of non-criminal justice data they were not using but would find useful if available.[18] **The type of data that respondents most frequently identified as likely to be useful was emergency room data;** 54% of respondents not using this type of data indicated that they thought it would be useful to their agencies. At 52% and 50%, *social media data* and *treatment program data* were likewise frequently reported as likely to be useful.

"[ER data] can be analyzed to validate or challenge existing knowledge, support police deployments, target resources and support problem-solving."[19]

Figure 8: Proportions of Agencies That Identified Currently Unused Types of Non-Criminal Justice Data as Useful
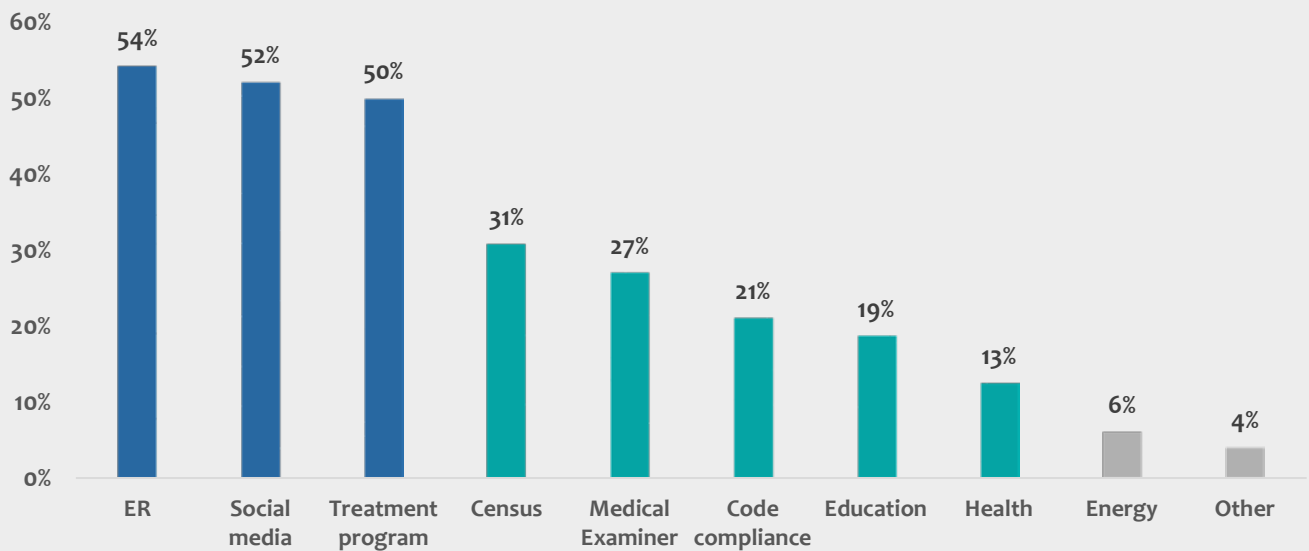
Frequency of Data Use

Respondents were asked to indicate how frequently data were used to perform a variety of policing tasks. **The majority of respondents (80 out of 86) reported using data for** *budgeting purposes* **sometimes, frequently, or always.** More respondents (a total of 37) reported always using data for budgeting than for any other task. Data were next frequently used to *carry out assessments of overall department performance* and for *program planning*.

Medium-sized agencies (those with 11 to 30 officers) were more likely than small agencies (having fewer than 11 officers) to use data for *promotion decisions and performance reviews*, to *determine crime patterns*, and to *respond to inquiries*. They were less likely than small agencies to use *COMPSTAT-type processes*.[20, 21]

Tasks:

COMPSTAT-type processes

Crime **mapping**

Responses to **inquiries**

Promotion decisions and **performance** reviews

Deployment and other tactical decisions

Determining crime **patterns** and/or trends

Policy decisions and evaluations

Program **planning**

Assessment of **overall** department performance

Budgeting decisions

Figure 9: Frequency of Data Use Across Ten Different Task Areas
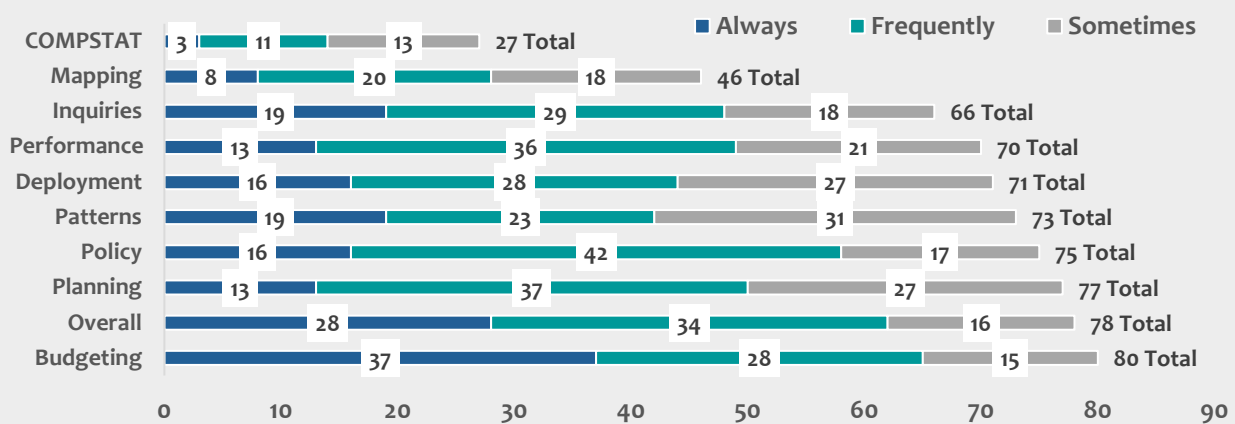
NOTE: Totals include responses of *sometimes*, *frequently*, and *always*; responses of *seldom* and *never* are not reported

Improvements to Increase Data Use

Despite the current level of use, data could be used even more frequently in law enforcement agencies. **When asked to rank which factors would be helpful in increasing the use of data and statistics for decision making, survey respondents reported** *increased systems integration among law enforcement agencies* **with the highest frequency.** Such integration would allow agencies to access pertinent information from other agencies with ease. They reported *improved ability to extract data from RMS* with the second highest frequency and *improved data entry* with the third highest frequency.

Factors that may be helpful in increasing the use of data and statistics for decision making:

Increased systems **integration** among law enforcement agencies

Improved ability to **extract** data from RMS

Improved data **entry**

Increased analysis **capacity** (e.g., more analysts, improved hardware and software)

Improved data **quality**

Increased **cooperation** of other agencies

Greater **support** from management for analysis

Figure 1: Ranking of Factors That Would be Helpful in Increasing Use of Data and Statistics for Decision Making (n=81)
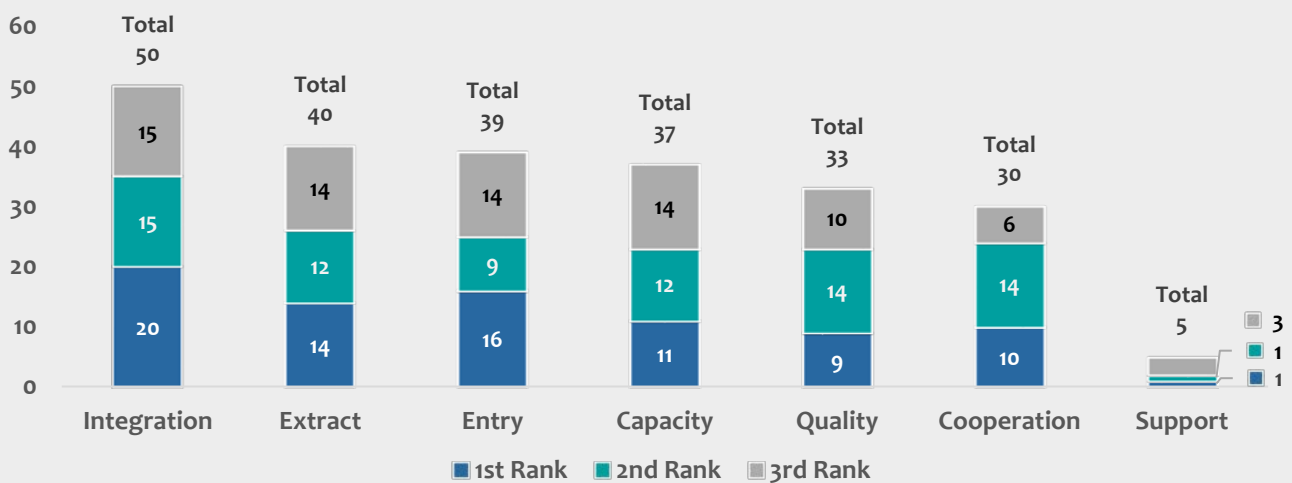
Use of NIBRS Data

"The National Incident-Based Reporting System (NIBRS) was developed by the FBI to improve the statistical reporting and analysis capabilities of the law enforcement community. The specifications for NIBRS are the result of a collaborative effort between the FBI and local, state, and national criminal justice agencies and professional organizations."[22]

Just over half (52%) of all survey respondents affirmed that they collect and report incident-based (NIBRS) data. The proportion was similar for small and medium-sized law enforcement agencies (having 10 or fewer officers and 11 to 30 officers, respectively).[23] An additional 19% of respondents reported the intention to collect and report this data within three years, suggesting a 2019 reporting rate of approximately 71%.

Figure 11: Proportion of Agencies Collecting/Reporting NIBRS (n=79)
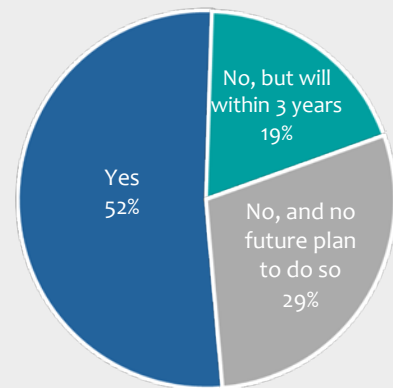
Note: The statistics reported here differ from numbers provided by the Department of Public Safety (DPS). According to the DPS, 22 out of 136 (16%) Maine law enforcement agencies were submitting automated NIBRS data in 2016.[24] This discrepancy is perhaps explained by the wording of the survey question, which asked if agencies "collect and report" NIBRS data. It could be that agencies are collecting but not reporting the data—an option the survey did not make available.
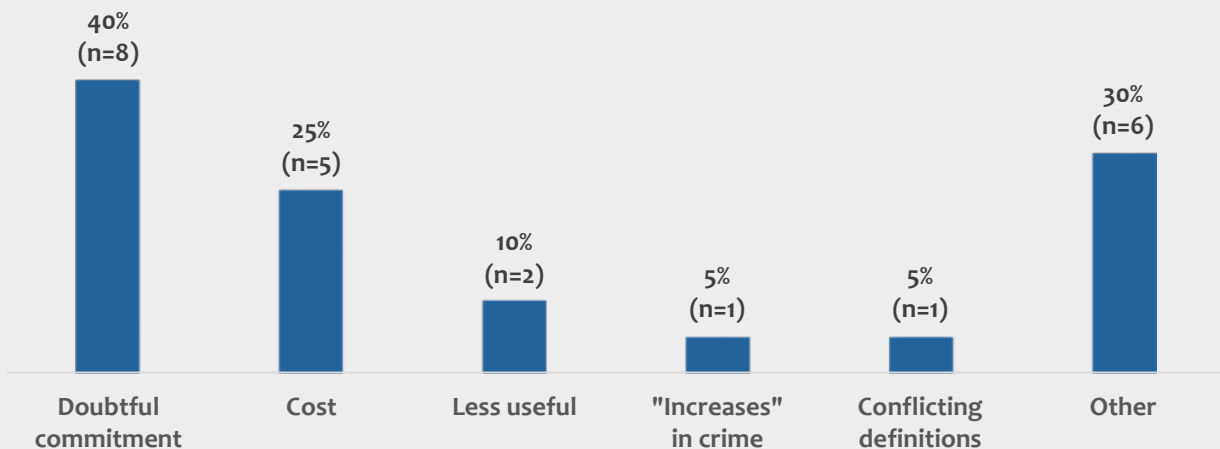
Reasons for Not Using NIBRS

Those who indicated that they do no report NIBRS data and have no plans to do so were asked to give reasons why. Respondents could choose as many reasons as applied from a list provided or, if their reasons were not on that list, they could enter reasons in a space provided. **Forty percent (40%) of those who provided a reason for not reporting NIBRS data attributed their resistance to** *doubtful commitment of state resources and training to local agencies for continued implementation.* Twenty-five percent (25%) attributed their resistance to *cost.* An additional 30% reported "other" reasons.[25]

Reasons for not reporting NIBRS data:

Doubtful commitment of state resources and training to local agencies for continued implementation

Cost

NIBRS more **useful** for national or macro-level analyses than for local strategic analysis and planning

Possible **"increases" in local crime** statistics due to shift from UCR Summary to NIBRS and related changes in how/what data are collected

Conflicting definitions of statutes and offenses on different government level
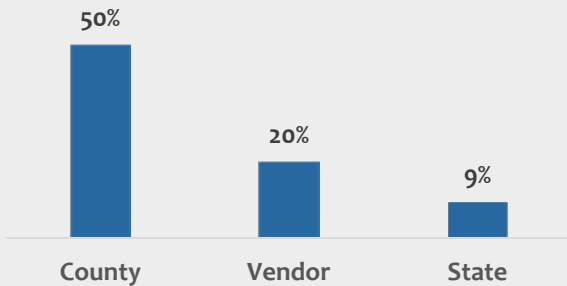
Other

Figure 12: Reasons Agencies Provided for Not Using NIBRS (n=20)

40%
(n=8)
Doubtful commitment

25%
(n=5)
Cost

10%
(n=2)
Less useful

5%
(n=1)
"Increases" in crime

5%
(n=1)
Conflicting definitions

30%
(n=6)
Other

Multi-Agency Data Sharing

Approximately four out of five respondents (81%) reported that their departments are currently involved in multi-agency efforts to share/integrate data.

Figure 14: Proportion Agencies Involved in Multi-Agency Sharing (n=83)

Yes (n=67) 81%

No (n=16) 19%

Figure 13: Entities With Whom Agencies Share/Integrate Data (n=86)

50%   20%   9%

County   Vendor   State
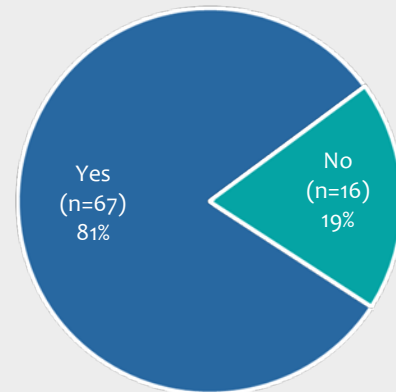
Half of all respondents (50%) share/integrate data among their respective counties, 20% share/integrate with agencies that use the same data vendor (i.e., Spillman or IMC[26]), and 9% share/integrate with the state or state agencies.

Over three-quarters of respondents (78%) indicated that that their data sharing efforts were *very valuable,* and the remaining respondents (22%) indicated that their efforts were *somewhat valuable.* No respondent indicated that their efforts were *not very valuable.*

Figure 15: Estimated Value of Interagency Data Sharing (n=65)

Very valuable (n=51) 78%

Somewhat valuable (n=14) 22%
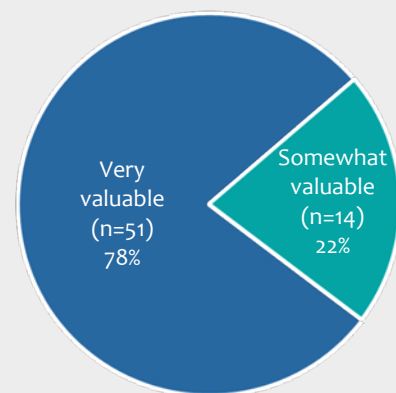
Data Collection and Analysis Budget

Survey respondents were asked to estimate the proportion of their agencies' budgets that were used for data collection and analysis.

Twenty-two percent (22%) reported that either no funds were used for those functions or that the amount used was too small to quantify. Since all agencies collect data, these findings suggest that survey respondents may not have considered compensation for the time officers spend collecting and entering data when responding to this question.

The largest group of respondents (40%) reported that 1% or less of their agencies' budgets were used for data collection and analysis.

"Just as corporate industries have embraced and invested in operations research for their success, criminal justice agencies will need to invest in increased analytic capacity to . . . efficiently and effectively create a more comprehensive vision for policing."[27]

Twenty-nine percent (29%) reported that between 1 and 5% of their agencies' budgets were used for these functions. Only 8% of respondents reported that more than 10% of their agencies' budgets were used for data collection and analysis.

*Figure 16: Agency Data Collection and Analysis Budgets (n=72)*
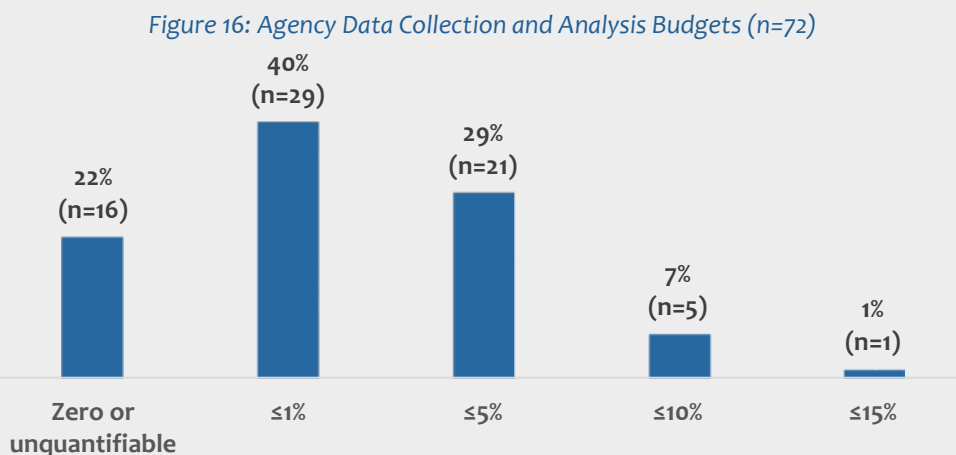
Frequency of Data Requests

Law enforcement agencies occasionally receive requests for data from various sources (local government, community groups, media, etc.) **Forty-six percent (46%) of respondents reported receiving requests for data once or twice a month.**

Only four percent (4%) reported receiving no requests. Thirty-two percent (32%) reported receiving requests once or twice a year. Eighteen percent (18%) reported a high frequency— requests occurring one or more times per week.

*Figure 17: Frequency of Data Requests (n=82)*
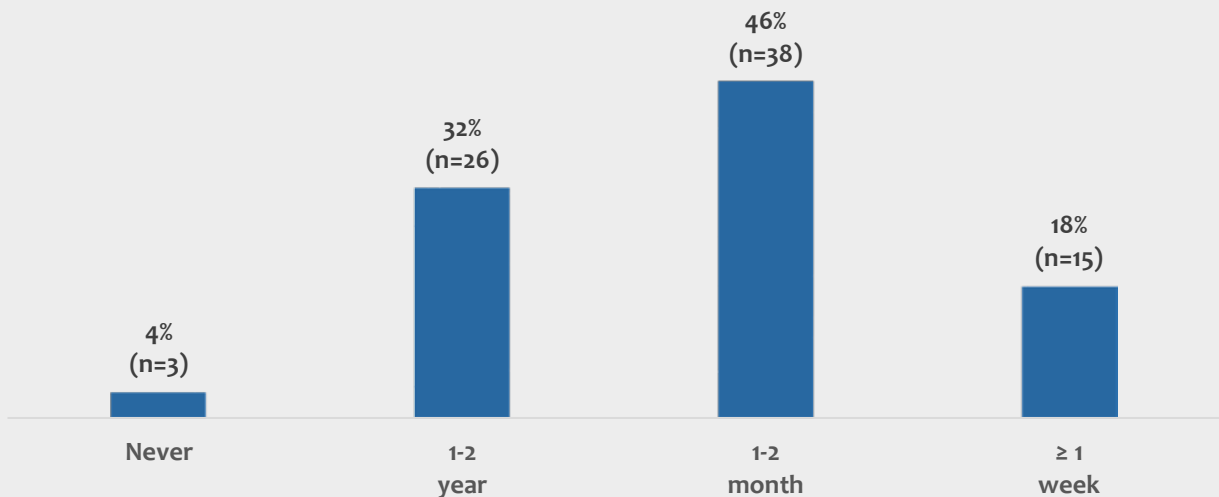
Agency Data Analyst

A small proportion of respondents (6%) reported that their agencies had a crime analyst. All of these agencies were large, made up of 30 or more officers.

> "Without analysis, there is no intelligence. Intelligence is not what is collected; it is what is produced after collected data are evaluated and analyzed."[28]

Figure 18: Proportion of Agencies With Crime Analyst (n=82)


No
(n=77)
94%

Yes
(n=5)
6%
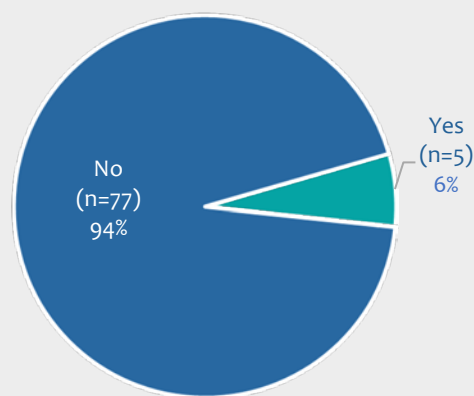
> "Budget officials will want to know whether your agency can get the benefits of crime analysis by means other than having a crime analyst on staff. Possible alternatives include having sworn officers perform crime-analysis tasks, sharing an analyst, or outsourcing the work. A number of factors may make those alternatives attractive, such as the size of your jurisdiction, your agency, and your agency's budget; the type and amount of crime in your jurisdiction; the culture of your organization; and the role and level of expertise of your crime analysts."[29]

Assistance With Data Analysis

Approximately three out of ten (29%) law enforcement agencies seek assistance in data analysis from outside agencies. When agencies seek assistance, they are most likely to look to *other law enforcement agencies (75%)* or to the *state Uniform Crime Reporting Unit (75%)*. An additional 25% seek assistance from *universities/colleges*.

Agencies from which law enforcement seeks assistance in data analysis:

Other law enforcement agencies
State Uniform Crime Reporting (UCR) Unit
Universities/colleges
Statistical Analysis Centers (SACs)
Private consultants
Vendors/suppliers
Other

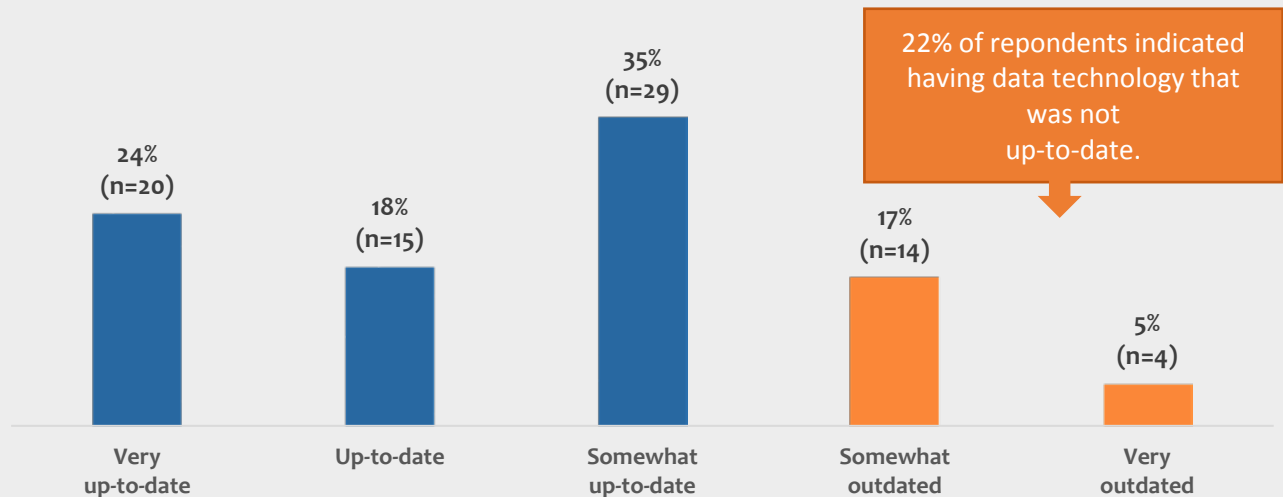*Figure 19: Proportion of Agencies Seeking Assistance With Data Analysis From Outside Agencies (n=24)*
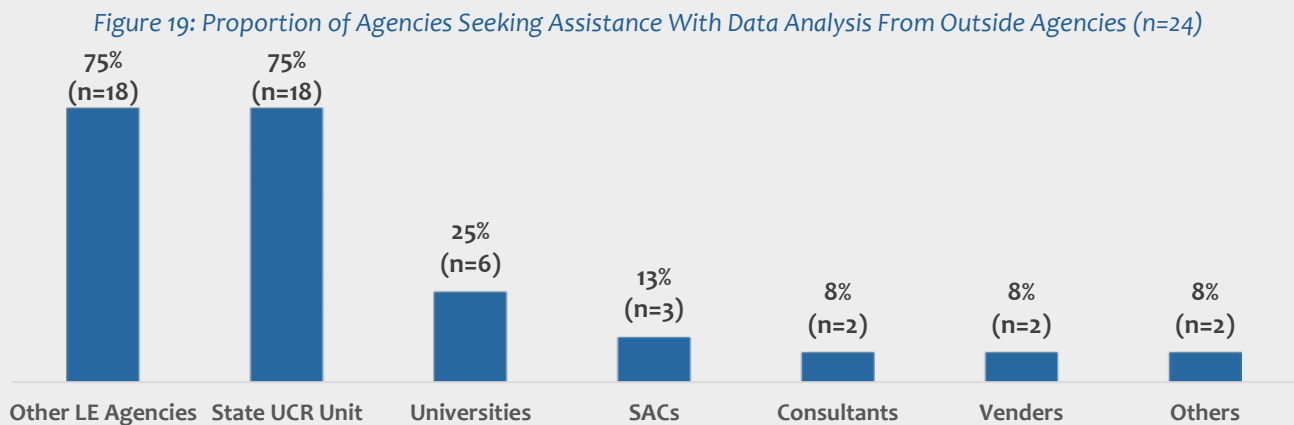
"[H]iring specialist consultants or partnering with a university or professional organization may provide the most fruitful approach to deal with special or complex analytic problems."[30]

Up-to-Date Technology

While the majority of respondents (78%) reported that their technology was at least *somewhat up-to-date*, **roughly one out of every five respondents (22%) considered their agencies' technology to be *somewhat* or *very outdated.*** This proportion is consistent with findings from a national survey conducted nearly a decade ago, which found that 21.7% of agencies using integrated databases rated them as old or obsolete.[31] These findings reflect the ongoing challenge of maintaining systems given the rapid changes in the field of technology and competing budgetary demands.

"Better data systems and access would seem to hold much potential for increasing the effectiveness of police, particularly when coupled with crime analysis capabilities that can be used to improve strategy, resource allocation, and managerial control and accountability."[32]

Figure 20: States of Technology (n=82)

24%
(n=20)

18%
(n=15)

35%
(n=29)

22% of repondents indicated having data technology that was not up-to-date.

17%
(n=14)

5%
(n=4)

Very
up-to-date | Up-to-date | Somewhat
up-to-date | Somewhat
outdated | Very
outdated

Spending Areas

Respondents were asked if they had more money to spend on data collection and reporting, which areas they would spend it on. **Forty percent (40%) of respondents reported that they would spend the money on *software*.** An additional 31% of respondents reported they would spend it on staff. Spending on *personnel training*, *hardware*, and *personnel salaries* trailed these categories, at 15%, 14%, and 1%, respectively.

"Data mining tools, which were reserved for large federal agencies and research centers, are now available to enhance decision making and analysis in the state and local law enforcement arena. Used extensively in the business community, the newer data mining tools do not require huge IT budgets, specialized personnel, or advanced training in statistics."[33]

Figure 21: Areas on Which Agencies Would Spend Available Funds for Data Collection and Reporting (n=81)
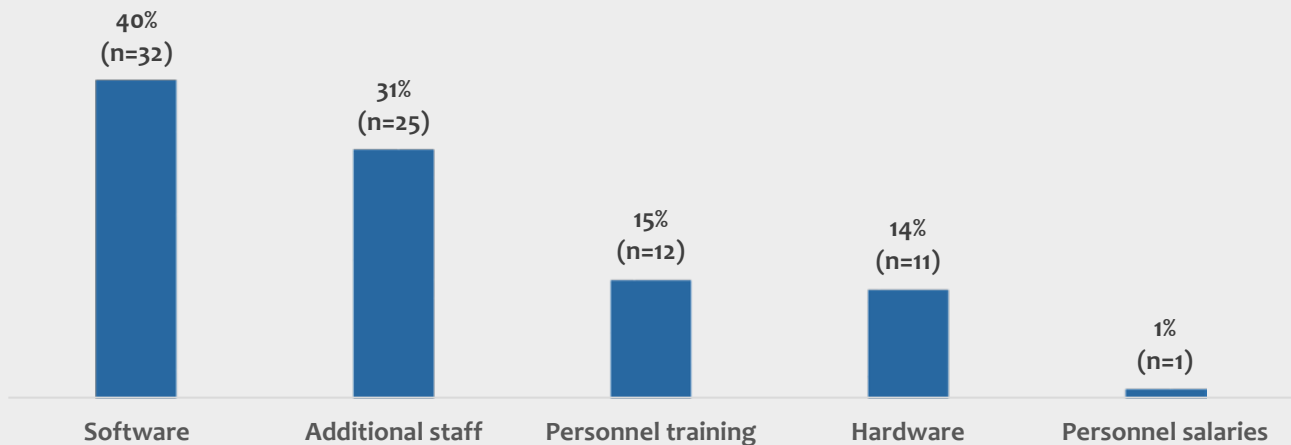
Tracking Capabilities

A little over a third of respondents (38%) reported that their agencies had access to data systems that allow the tracking of offenders over time.
Thirty-six percent (36%) of respondents reported that their data systems included arrest history, 21% reported systems that included jail data, and 16% reported systems that included court data.

"Timely access to accurate information can enable successful strategies for lowering the prison populations, reduce recidivism, lower the costs of supervision, and manage the risks of dangerous offenders at key points in the decision-making process. Corrections, law enforcement agencies, courts, and community-based service providers have much to gain from sharing offender information they have at their disposal."[34]

Figure 22: Types of Available Data Tracking Systems (n=86)
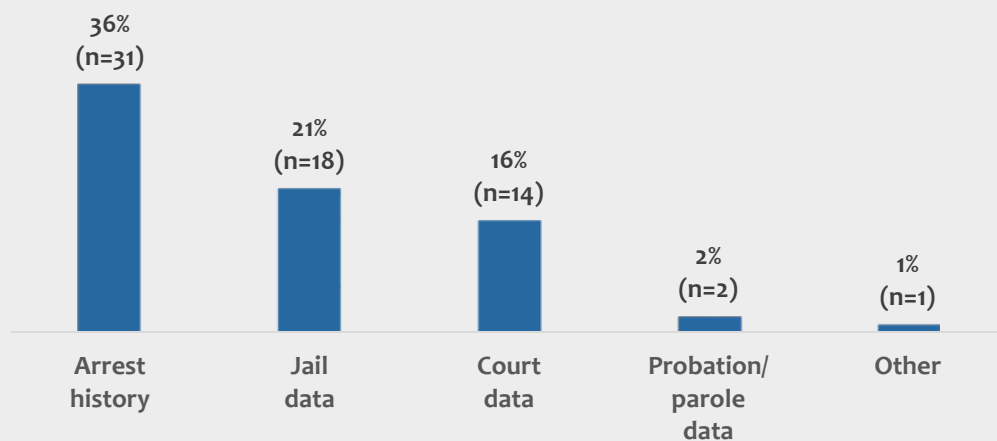
References

1. Carter, J. (2013.) *Criminal justice: Recent scholarship: Intelligence-led policing: A policing innovation.* El Paso, TX: LFB Scholarly Publishing LLC.

2. Law Enforcement Forecasting Group (LEFG) (2012). *Increasing Analytic Capacity of State and Local Law Enforcement Agencies: Moving Beyond Data Analysis to Create a Vision for Change.*

3. Bureau of Justice Assistance, US Dept. of Justice, Office of Justice Programs. (2012*). Reducing Crime through intelligence-led policing.*

4. Global Justice Information Sharing Initiative. (2003). *The National criminal intelligence sharing plan.*

5. See endnote 1.

6. http://www.snapsurveys.com/

7. Some of these completions were partial completions; not every respondent completed every question.

8. Wagner, L. W. (2005). Use of data in police departments: A survey of police chiefs and data analysts. Washington, DC: Justice Research and Statistics Association.

9. These agencies including the Maine State Police, Maine Warden Service, and the Computer Crimes Task Force.

10. Reaves, B. A. (2015). *Local police departments, 2013: personnel, policies, and practices* (No. NCJ 248677). US Department of Justice, Office of Justice Programs, Bureau of Justice Assistance, Washington, DC.

11. There were too few large agencies (having more than 30 officers) to compare here.

12. Robert, R., Rosenfeld, R., & Borissova, N. (2010). *Improving Crime Data Project.*

13. See endnote 2.

14. Peterson, M. (2005). *Intelligence-led policing: The new intelligence architecture.* Washington DC: US Department of Justice.

15. It is important to note that respondents were only eligible to select a data type here if they did not report that they were *currently* using that type of data. Eligibility filters such as this one result in a different denominator for each data type which means that percentages based on these differing denominators should be compared with caution.

16. International Association of Chiefs of Police. (2012). *Police-corrections partnerships collaborating for strategic crime control.*

17. LexisNexis® Risk Solutions. (2014) *Survey of law enforcement personnel and their use of social media,* p. 3. www.lexisnexis.com/investigations

18. See endnote 15.

[19] Giacomantonio, C., Sutherland, A., Boyle, A., Shepherd, J., Kruithof, K., & Davies, M. (2014). Injury surveillance: Using A&E data for crime reduction. *Guidance for police analysts and practitioners.* Ryton-on-Dunsmore: College of Policing.

[20] Promotion decisions and performance reviews (small, 76%; medium, 93%), Determining crime patters and/or trends (small, 84%; medium, 94%), responses to inquiries (small, 73%; medium, 90%), and COMPSTAT-like processes (small, 73%; medium, 36%)

[21] There were too few large agencies (having more than 30 officers) to compare here.

[22] Justice Research and Statistics Association. (2016). What is NIBRS? Retrieved from http://www.jrsa.org/ibrrc/background-status/what-is-nibrs.html

[23] There were too few large agencies (having more than 30 officers) to compare here.

[24] State of Maine, Department of Public Safety. (2016). RFP #201601003, Uniform Crime Reporting/National Incident Based Reporting System (UCR/NIBRS).

[25] These reasons included *unfamiliarity with NIBRS, satisfaction with UCR, time to convert to the system,* and *federal requirements for universities and colleges to report UCR data for annual security reports.*

[26] Spillman Technologies and IMC are data software products tailored specifically for law enforcement agencies.

[27] See endnote 2 (page 15).

[28] See endnote 14 (page 3).

[29] Matthies, C., Chiu, T. (2014). *Putting a value on crime analysts: Considerations for law enforcement Executives.* New York: Vera Institute of Justice.

[30] See endnote 2 (page 7).

[31] Koper, C. S., Taylor, B. G., & Kubu, B. E. (2009, January). *Law enforcement technology needs assessment: Future technologies to address the operational needs of law enforcement.* Washington, DC: Police Executive Research Forum.

[32] See endnote 31 (page 32).

[33] McCue, C., & Parker, A. (2003). Connecting the dots: Data mining and predictive analytics in law enforcement and intelligence analysis. The Police Chief.

[34] Integrated Justice Information Systems (IJIS) Institute. *Corrections initiatives.* Retrieved from http://www.ijis.org/?page=Corrections

Survey of Maine Law Enforcement Agencies Regarding Their Use of Data

1. **Describe your jurisdiction:**
   Region: ☐ urban   ☐ rural   ☐ suburban
   Level: ☐ town/city   ☐ county
   County: _____
   Number of officers in agency: _____

2. **Does your agency have a website?** ☐ yes ☐ no
   If yes, are crime statistics provided on the website? ☐ yes ☐ no

3. **Does your agency have an automated record management system (RMS)?** ☐ yes ☐ no

4. **Which of the following criminal justice data do you currently use in managing your agency?**
   (check all that apply)
☐ calls for service	☐ police pursuits	☐ gunshot sensor data
☐ incident report data	☐ disposition data	☐ stingray data
☐ traffic stop data	☐ court caseloads	☐ license plate scanner data
☐ clearance rates	☐ corrections data	☐ UAVs/drones (footage)
☐ drug/gun seizure data	☐ cost data	☐ body camera (footage, audio)
☐ state crime publications	☐ drug use survey data	
☐ arrest data	☐ victimization survey rates	
☐ "hot spots" data	☐ recidivism rates	

   ☐ other (*please specify*): _____

5. **Which of the following non-criminal justice data do you currently use in managing your agency?**
   (check all that apply)
☐ emergency room data	☐ treatment program data	☐ code compliance data
☐ medical examiner data	☐ education data	☐ energy data
☐ census data	☐ health data	☐ social media data

   ☐ other (*please specify*): _____

6. **If not currently used, which of the following criminal justice data would be useful in managing your agency, if available?**
   (check all that apply)
☐ calls for service	☐ police pursuits	☐ gunshot sensor data
☐ incident report data	☐ disposition data	☐ stingray data
☐ traffic stop data	☐ court caseloads	☐ license plate scanner data
☐ clearance rates	☐ corrections data	☐ UAVs/drones (footage)
☐ drug/gun seizure data	☐ cost data	☐ body camera (footage, audio)
☐ state crime publications	☐ drug use survey data	
☐ arrest data	☐ victimization survey rates	
☐ "hot spots" data	☐ recidivism rates	

   ☐ other (*please specify*): _____

7. **If not currently used, which of the following non-criminal justice data would be useful in managing your agency, if available?**
   (check all that apply)

☐ emergency room data	☐ treatment program data	☐ code compliance data
☐ medical examiner data	☐ education data	☐ energy data
☐ census data	☐ health data	☐ social media data

   ☐ other (*please specify*): _____

8. **How often are data and statistical indicators used in your agency for:**

   budgeting decisions?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   assessment of overall department performance?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   promotion decisions and performance reviews?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   policy decisions and evaluations?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   program planning?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   deployment and other tactical decisions?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   determining crime patterns and/or trends?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   crime mapping?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   responses to inquiries?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   COMPSTAT-type processes?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   other (*please specify*)?
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

   _____
   ☐ always   ☐ frequently   ☐ sometimes   ☐ seldom   ☐ never

9. **Of the following possible changes, rank the** <u>top three</u> **that you think would be most helpful in increasing the use of data and statistics for decision making in your agency (***1 = most important***).**

   ___ Improved data entry
   ___ Improved data quality
   ___ Increased analysis capacity (e.g., more analysts, improved hardware and software)
   ___ Improved ability to extract data from RMS
   ___ Other (*specify*):_____

   ___ Greater support from management for analysis
   ___ Increased cooperation of other agencies
   ___ Increased systems integration among law enforcement agencies

10. **Does your agency collect and report incident-based (NIBRS) data?** ☐ yes   ☐ no
    If no:
    ♦ Has your agency ever reported NIBRS-compatible data? ☐ yes ☐ no ☐ unsure/don't know
    ♦ Does your agency plan to report NIBRS-compatible data?
    ☐ within the next year   ☐ within next 3 years   ☐ no definite plan   ☐ never ☐ unsure/don't know

11. **If your agency does not report NIBRS data and has no plan to do so, what are the reason(s) for this?** (*check all that apply*)

☐ cost

☐ NIBRS more useful for national or macro-level analyses than for local strategic analysis and planning

☐ possible "increases" in local crime statistics due to shift from UCR Summary to NIBRS and related changes in how/what data are collected

☐ doubtful commitment of state resources and training to local agencies for continued implementation

☐ conflicting definitions of statutes and offenses on different government levels

☐ other (*please specify:*) _____

12. **Is your department currently involved in a multi-agency effort to share/integrate data?** ☐ yes ☐ no
    If yes:

    ♦ with whom? _____

    ♦ how valuable would you say this effort is? ☐ very valuable ☐ somewhat valuable ☐ not very valuable

    ♦ what is the position/job title of the person who represents your department in this multiagency effort?
    _____

13. **What proportion of your agency's overall budget would you estimate goes to support data collection and analysis functions?** _____ %

14. **How often do community members (e.g., local government, community groups, and media) ask for data or statistics from your department?**

    ☐ 3 or more times a week   ☐ 1–2 times a week   ☐ 1–2 times a month   ☐ 1–2 times a year   ☐ never

15. **Does your agency have a crime analyst?** ☐ yes ☐ no

16. **Does your agency seek assistance in data analysis from outside agencies?** ☐ yes ☐ no
    If yes, which agencies? (*check all that apply*)

    ☐ universities/colleges   ☐ venders/suppliers

    ☐ Statistical Analysis Centers   ☐ state Uniform Crime Reporting Unit

    ☐ private consultants   ☐ other law enforcement agencies

    ☐ other (*please specify*): _____

17. **How up-to-date do you consider the technology used in your agency for data collection and reporting?**

    ☐ very up-to-date ☐ somewhat up-to-date   ☐ up-do-date   ☐ somewhat outdated   ☐ very outdated

18. **If you had more money for your technical capacities for data collection and reporting, on which area would you first spend it?**

    ☐ hardware   ☐ additional staff

    ☐ software   ☐ personnel training

    ☐ personnel salaries   ☐ other (*please specify*): _____

19. **Does your agency have access to a data system that allows the tracking of offenders over time?**

    ☐ yes ☐ no

    If yes, does this system include (*check all that apply*):

    ☐ arrest history   ☐ jail data

    ☐ court data   ☐ probation/parole data

    ☐ other (*please specify*): _____

About the Muskie School of Public Service

The Muskie School of Public Service is Maine's distinguished public policy school, combining an extensive applied research and technical assistance portfolio with rigorous undergraduate and graduate degree programs in geography-anthropology; policy, planning, and management (MPPM); and public health (MPH). The school is nationally recognized for applying innovative knowledge to critical issues in the fields of sustainable development and health and human service policy and management, and is home to the Cutler Institute for Health and Social Policy.

About the Cutler Institute for Health and Social Policy

The Cutler Institute for Health and Social Policy at the Muskie School of Public Service is dedicated to developing innovative, evidence-informed, and practical approaches to pressing health and social challenges faced by individuals, families, and communities.

About the Maine Statistical Analysis Center

The Maine Statistical Analysis Center (SAC) informs policy development and improvement of practice in Maine's criminal and juvenile justice systems. A partnership between the University of Southern Maine Muskie School of Public Service and the Maine Department of Corrections, SAC collaborates with numerous community-based and governmental agencies. SAC conducts applied research; evaluates programs and new initiatives; and provides technical assistance, consultation and organizational development services. The Maine Statistical Analysis Center is funded by the Bureau of Justice Statistics and supported by the Justice Research Statistics Association.

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Maine SAC Website: http://muskie.usm.maine.edu/justiceresearch

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http://muskie.maine.edu/justiceresearch/adult_research.html