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Collecting and Using Data for Prosecutorial Decisionmaking

Findings from 2018 National Survey of State Prosecutors' Offices

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Prosecutorial data collection, data use, and data-driven decisionmaking are subjects of emerging interest among prosecutors, other criminal justice stakeholders, advocates, and policymakers. How much data are prosecutors collecting? How are they using data (if at all), and how has that helped decisionmaking? What resources and infrastructure do prosecutors use, and what barriers prevent effective uses of data? In early 2018, the Urban Institute surveyed prosecutors' offices across the country to seek answers to these questions. Elected prosecutors and staff members responded from 158 offices representing jurisdictions of all sizes, from sparsely populated rural parts of the country to urban areas with more than a million residents.

Data can help prosecutors manage their offices efficiently and measure progress toward goals. Data can also help increase transparency about prosecutorial decisionmaking, the constraints prosecutors navigate, and how their decisions link to broader justice and public safety outcomes (Frederick and Stemen 2012 a, 2012b).[1] Urban's survey asked respondents about seven foundational measures of prosecutorial case flow: the volume of cases coming into an office, the number of charges (at arrest and final charges), and what happens to the case (whether it is declined, dismissed, resolved by guilty plea, or resolved by trial). Survey results reveal that many prosecutors have an interest in collecting and using data and that many offices are using data to inform critical operational and case decisions. But barriers often stand in the way of widespread and systematic incorporation of data in prosecutorial decisionmaking.

- Almost all offices collect at least one foundational measure describing case flow, but fewer than half collect all seven.

- Most offices collect data on screening, alternative approaches, or sentencing; 47 percent collect data on pretrial release decisionmaking.

- Almost all offices (except small ones) have at least one electronic case management system and have staff that work on data; however, data accuracy and resource constraints pose significant barriers to greater use of data.

- Many prosecutors use data to manage their offices and outcomes, but systematic approaches for tracking compliance with office policies guiding decisions or for tracking emerging trends within the data are uncommon.

- Higher levels of data collection are associated with a greater reported use of data.

Urban researchers recommend eight steps prosecutors' offices can take to increase their collection and use of data in decisionmaking:

1. Assess if your office is a low, medium, or high data collector.

2. Ensure your office is collecting foundational information that describes case flow (e.g., number of cases referred or number of cases dismissed).

3. Ensure your office is collecting relevant case details (e.g., number of cases referred by offense type or number of cases dismissed by defendant characteristics).

4. Consider collecting at least one metric at each stage of the decisionmaking process (screening/charging, pretrial release, alternatives, and sentencing), starting with metrics that are particularly relevant for your jurisdiction.

5. Equip and train staff to collect and analyze data; take advantage of outside resources where possible.

6. Strengthen technology infrastructure to improve data collection and use.

7. Learn from peers to implement innovative approaches, such as dashboards, to identify and respond to changes in trends and operational metrics.

8. Solicit information from, and share findings with, your local community.

Background

Information about prosecutorial decisionmaking is essential to understanding justice, effectiveness, and efficiency in our criminal justice system. Prosecutors have high levels of discretion from the point of referral to sentencing. However, limited data are available to identify, understand, and evaluate the decisions that prosecutors make at key points in case processing. The conclusions that can be drawn from existing research on prosecutorial decisionmaking are usually limited to a single office, decision point, or offense type, making it difficult to understand prosecutors' broader decisionmaking processes. Deeper knowledge of this information would allow prosecutors to improve management and results within their offices and enable their constituents to more accurately assess prosecutors' performance.

A better understanding of the decisions, constraints, and links to justice and safety outcomes would be an important outcome of more data use by prosecutors. For example, prosecutors aim to deliver justice and public safety, but there is no single, widely agreed-upon definition of prosecutorial success. Prosecutors are typically judged by blunt measures, like conviction rates, that can obscure the understanding of cases that do not end in conviction, such as successful diversions (Nugent-Borakove and Budzilowicz 2007).

Prosecutorial decisions are made based on both the legal factors of each case and a host of nonlegal factors, including the circumstances and constraints of case processing.[2] Factors such as the quality of law enforcement investigations, judges' behavior, and resource limitations may cause prosecutors to decline certain cases and reduce the time spent on others. Describing these constraints and how prosecutors operate within them is critical for communicating with constituents about decisionmaking.

Meanwhile, prosecutors often lack information that would help them track the outcomes of their decisions, such as recidivism results or whether similar cases result in similar outcomes. Prosecutors value their discretion to seek the truth in each case. However, they have also expressed concern that because people may hold very different attitudes about how to approach certain decisions or processes—like plea bargaining—similar cases may have very different outcomes (Ball and Weisberg 2014; Frederick and Stemen 2012b). Tracking whether prosecutors are meeting their own justice and safety goals could help balance their desire for consistency with the discretion they desire (Frederick and Stemen 2012b).

With support from the Laura and John Arnold Foundation, the Urban Institute surveyed prosecutors' offices nationwide about their capacity to collect and use data at key decision points. The survey aims to clarify both what data are needed for understanding prosecutorial decisionmaking and what prevents prosecutors from tracking these data.

This brief has four components. The methodology describes the approach of the survey and analysis. The key findings from the survey are then identified and described, with case studies from supplementary interviews. The brief also offers eight steps for increasing the collection and use of data for decisionmaking in prosecutors' offices. Five appendixes (A–E) are available online:[3] appendix A provides more information about the sampling methodology, appendix B includes each close-ended question in the survey along with aggregated responses, appendix C is the full survey instrument, appendix D is a tool for prosecutors' offices to self-assess their data collection, and appendix E provides the underlying analysis related to low, medium, and high collectors.

Methodology

Urban surveyed a wide range of prosecutors' offices across the country. Researchers contacted every office in larger jurisdictions and a sample of those in smaller jurisdictions. (In more technical terms, our sampling frame for this study consisted of a census of prosecutors' offices representing a population of 250,000 residents or more and a stratified random sample of offices representing a population of fewer than 250,000 residents.) Several data sources were compiled to identify the population of interest and

implement the sampling strategy. First, Urban identified 2,330 state prosecutors' offices surveyed in the Bureau of Justice Statistics' 2007 Survey of State Prosecutors' Offices (BJS 2012). To ensure that the sampled offices represented districts with a range of characteristics, the sample was stratified by three variables: percentage of nonwhite residents, percentage of residents with incomes below the poverty level, and the rural-urban continuum (a United States Department of Agriculture measure that categories counties by the size of their population and how close the county is to a metropolitan area).[4] See appendix A for more information about the sampling strategy.

After identifying the offices in the sample, Urban researchers emailed the survey to the elected official and, where possible, an additional contact in each prosecutors' office. A few surveys were sent solely to a member of the office who was not the elected prosecutor or were mailed in hard copy, at the office's request.

Outreach consisted of two phases. In the first, 682 offices were sent the full (long-form) survey, with 141 (21 percent) responding. In the second, offices that did not complete the full survey and did not actively decline to participate received a short form of the survey that included seven multiple choice questions taken verbatim from the long form. Four-hundred ninety offices were sent the short form of the survey, and 17 responded. Overall, 158 offices (23 percent) completed either the short or long form of the survey. Table 1 summarizes the sampling strategy, distribution of offices by population, and response rate for each group.

TABLE 1

Sampling Strategy and Response Rates by District Population

				Offices responding to:		Share responding to:	
District population	Sampling strategy	Total offices	Offices in sample	Long-form survey	Short-form survey only	Long-form survey	Any form of survey
1,000,000 or more (large)	Census	51	51	22	3	43%	49%
500,000–999,999 (medium-large)	Census	94	94	26	2	28%	30%
250,000–499,999[a] (medium)	Census	137	137	26	6	19%	23%
100,000–249,999 (medium-small)	Sample	338	201	32	3	16%	17%
99,999 or less (small)	Sample	1,710	199	35	3	18%	19%
Total	**N/A**	**2,330**	**682**	**141**	**17**	**21%**	**23%**

Source: Urban Institute, 2018 National Survey of State Prosecutors' Offices.

[a] One office's survey response in the 250,000–499,999 (medium) category represented only a subset of the district, the population of which fell into the 100,000–249,999 (medium-small) category. To most accurately represent this survey response, the office was reclassified as medium-small and was included in that category for all analyses as well as in appendix B.

Based on their survey responses, a small number of offices were contacted for follow-up interviews. The contacted offices spanned all five jurisdiction sizes listed in table 1. Five offices responded, representing all but the medium-small category (100,000–249,999 district population). Each consented to having their names and survey information shared in this brief. Urban researchers interviewed prosecutors and/or staff in each office, expanding on their responses to the survey questions. The information provided in the interviews is distilled in five case studies (see below and pages 9–14).

CASE STUDY 1

Eighth Judicial Circuit, Florida (population: 396,000)

Ten years ago, William Cervone decided it was time for his office to adopt a paperless system—and he hasn't looked back. "I now have empty space where I used to have a file room, and my lawyers no longer lug boxes of files over to the courthouse for hearing dates—they lug a laptop," he says. "I also no longer get frantic messages asking, 'Has anyone seen this file?'"

As state attorney for the Eighth Judicial Circuit, Cervone oversees the caseloads of approximately 50 lawyers across six counties. He uses his office's case management system to track the number of cases handled by his staff and the timeliness of filing decisions, alerting him to potential resource allocation issues and ensuring that cases don't stagnate. Besides helping him run an efficient office, these data tracking capabilities will serve Cervone well as his state implements a recent law requiring all Florida counties to report standardized criminal justice data into a statewide system. Though this transition will bring growing pains, it's further evidence that for prosecutors, the ability to collect data is becoming a more urgent need. According to Cervone, "It's the wave of the future—and you need to do it."

For Cervone, tracking what his office does is about being able to demonstrate success. Besides helping him justify state funding for his diversion programs by providing evidence that they are working, having data empowers him to define what success means. "People tend to think that prosecutors are all about convictions and putting people in prison, which is not remotely the case," he says. "If the appropriate result is dismissal of a case, that's what we can and should be doing." Having data allows him to demonstrate to other law enforcement agencies, the media, and the public that many of his cases are diverted or resolved through a plea bargain, not just dropped. On a personal level, he values having proof that he's accomplishing what he set out to do. "I want to know whether I'm bringing cases to some sort of successful conclusion," he says. "Otherwise, I'm just wasting my time."

Though his paperless office still stands out as a rarity, Cervone is confident that most prosecutors can reach the same point by approaching the transition methodically, implementing it first in their smallest division and gradually expanding. In some ways, he says, midsize offices like his actually have an advantage over larger offices when it comes to scaling up: though their budgets may be smaller, so are their staff—making it more feasible to equip everyone with the resources and training they need.

Findings

The survey revealed information in the following areas: (1) key measures of case flow, (2) components of prosecutorial decisionmaking, (3) how offices collect data and barriers to data collection efforts, and (4) use of data tracking for management and policy decisions. The findings below are organized around these areas.[5]
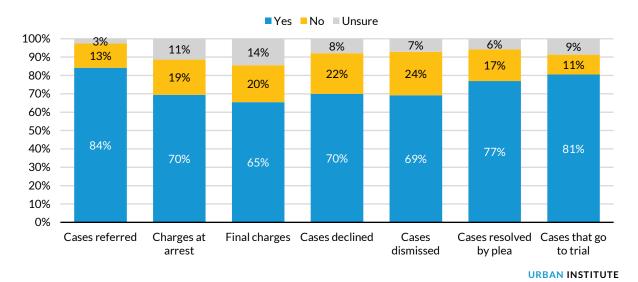
Finding 1: 94 Percent of Offices Are Collecting at Least One Foundational Measure Describing Basic Case Flow, but Only 41 Percent Are Collecting All Seven Measures Identified in the Survey

After reviewing the research literature, Urban researchers identified seven foundational measures crucial to tracking prosecutorial activities: (1) the number of cases coming into an office, (2) the number of charges at arrest, (3) the number of final charges, (4) the number of cases declined, (5) the number of cases dismissed, (6) the number of cases resolved by guilty plea, and (7) the number of cases resolved by trial.

For each foundational measure, between 65 and 84 percent of responding offices are collecting data, according to the survey data (figure 1). The most commonly collected foundational metric is the number of cases referred to the office, while the least common is the number of final charges (figure 1).[6]
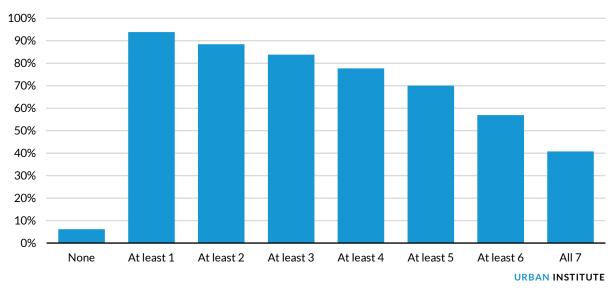
Almost all offices (94 percent) collect at least one foundational metric, and the vast majority (78 percent) collect more than half of them. However, only 41 percent of offices report that they collect all seven foundational metrics (figure 2).

FIGURE 1

Most Common Foundational Metrics Collected

Legend: ■ Yes ■ No ■ Unsure

Metric	Yes	No	Unsure
Cases referred	84%	13%	3%
Charges at arrest	70%	19%	11%
Final charges	65%	20%	14%
Cases declined	70%	22%	8%
Cases dismissed	69%	24%	7%
Cases resolved by plea	77%	17%	6%
Cases that go to trial	81%	11%	9%

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Source: Urban Institute, 2018 National Survey of State Prosecutors' Offices.

FIGURE 2
Number of Foundational Metrics Collected

Source: Urban Institute, 2018 National Survey of State Prosecutors' Offices.

Small offices generally have less foundational information available than the largest offices. Nearly two-thirds (62 percent) of large offices have data on all foundational metrics. Around half of medium-large offices (46 percent) and medium offices (57 percent) report that they collect all these data. In contrast, about a quarter (27 and 25 percent, respectively) of medium-small and small offices have data on all foundational information. As table 2 shows, fewer than half of small offices collect data on number of cases declined or dismissed.

TABLE 2
Foundational Metrics Collected by Office Size
The lowest share collecting each metric is shaded in gray; the highest is in blue

	Small	Medium-small	Medium	Medium-large	Large
Cases referred	71%	83%	90%	93%	88%
Charges at arrest	60%	70%	76%	69%	77%
Final charges	51%	58%	64%	79%	86%
Cases declined	49%	67%	84%	80%	82%
Cases dismissed	47%	58%	74%	85%	96%
Cases resolved by plea	57%	79%	80%	88%	91%
Cases that go to trial	57%	82%	84%	96%	95%

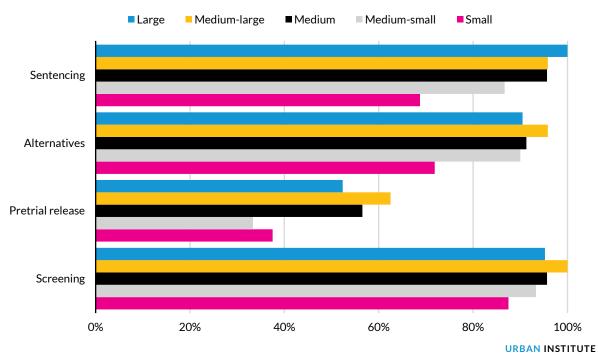**Source:** Urban Institute, 2018 National Survey of State Prosecutors' Offices.

For at least one decision point, the vast majority of offices track data by offense type (82 percent), whether the charges are misdemeanors or felonies (81 percent), and what the referring law enforcement agency was (72 percent). About two-thirds (64 percent) track by assigned prosecutor. Only 42 percent track by defendant characteristics, and only 31 percent track by victim characteristics.

Offices that collect the foundational metrics are also most likely to track data by each case characteristic. For example, almost all (98 percent) offices that collect all seven foundational metrics also track at least some data by offense type, compared with 82 percent of all reporting offices. Additionally, 51 percent of the offices that collect all seven metrics also track some data by victim characteristics, compared with 31 percent of the total reporting offices.

Finding 2: Most Offices Collect Data on Screening, Alternative Approaches, and Sentencing, but Fewer Than Half Collect Data on Pretrial Release Decisionmaking; Fewer Still Collect Data on Systemwide Impacts or Provide Information to the Public

Offices responded to questions across four steps of decisionmaking: screening and charging, pretrial release decisionmaking, alternative approaches, and plea bargaining and sentencing. The vast majority of offices collect at least one item from screening (94 percent), alternatives (87 percent), or sentencing (88 percent); however, pretrial release decisionmaking was much lower (47 percent). Fewer small offices collect items at each stage.

Share of Offices Collecting at Least One Metric at Each Decisionmaking Step by Office Size

Source: Urban Institute, 2018 National Survey of State Prosecutors' Offices.

Most offices have data on alternative approaches to traditional prosecution. Specifically, 74 percent have information on the number of cases diverted, 71 percent have data on the number of cases handled through alternative court, and 65 percent have data on the number of cases deferred.

However, 21 percent—less than one in four—collect information on the number of cases recommended for bail or other types of pretrial release.

Prosecutors are also collecting some data, although at lower rates than other items, on how their decisions affect systemwide metrics. For example, 23 percent of offices collect information on recidivism results. Additionally, 29 percent collect information on the number of cases where the prosecutor recommends pretrial supervision, 29 percent collect information on the number of defendants in pretrial detention, and 43 percent collect information on the number of cases recommended for incarceration or probation.

Lastly, half (50 percent) of offices encourage or solicit input from community groups or residents, and about a quarter (24 percent) publish analyses publicly. More than half (58 percent) of the medium-large offices share data analyses publicly, while only 6 percent of small offices do.

CASE STUDY 2
Labette County, Kansas (population: 20,000)

As the county attorney of Labette County, Kansas, Stephen Jones is attuned to what his constituents and law enforcement partners need from him. He knows, from personal experience and the stories he's heard from police, that people facing mental health challenges often cycle through the county jail instead of getting the treatment they need. His office is now working to institute a mental health diversion program—but without an estimate of how many defendants need it, Jones has struggled to make the case for funding. "If I ever went to write a grant, I'd need to be able to say how many people would be eligible for diversion, and how much funding we'd need to do it," he says. "For now, I feel like I'm blindly building something and hoping it will work."

For an office in a small county like Labette, the barriers to gathering and using data are daunting: Jones's staff is small and overworked, and after years of turnover, few have the training they need to operate the office's case management system. But Jones can imagine what he might be able to achieve with more data—like assessing whether diversion programs are making a lasting difference by reducing recidivism. "I tell the victims I work with all the time that if I knew what would work to prevent these crimes from ever happening again, I'd do it. But there's no way to know if you're not tracking it."

As a prosecutor, Jones recognizes that others in his field may not see the need for data, and some may even feel it conflicts with their duty to treat each case independently. But, he says, "When I think about whether to track something, I ask myself: will this help me improve as a prosecutor? Will it help me do what I was elected to do for my community? If so, it's of great value."

That's why, for the past six years, Jones has kept a color-coded Excel spreadsheet of diversions that have been offered, denied, and completed. Even without advanced software, he finds that this basic information helps him identify patterns and improve the way he operates. "It gives me the opportunity to look at what we're doing and ask, what can we do better? Are there things we need to change?" Jones accepts that resource limitations will always pose a barrier to collecting all the information he wants. But he hasn't let this stop him from doing what he can with the resources at his disposal, testing new ideas, and looking to other offices for inspiration about how to do even more.

Finding 3: Almost All Offices (Except Small Ones) Have at Least One Electronic Case Management System and Have Staff That Work on Data; Resource Constraints and Data Accuracy Are Significant Barriers to Greater Use of Data

Almost all offices report having at least one electronic case management system, except among the small offices, where 32 percent report they do not have one. In addition, three-quarters of offices report having access to some information from other criminal justice agencies. However, when asked where they primarily get their data for each stage of decisionmaking, most report getting it from electronic case management systems, and a smaller percentage report getting it from paper files. Even fewer report primarily getting their information from other agencies or some other form.

All large and medium-large offices report that staff spend some time on data collection, analysis, or research; 24 percent of medium offices, 39 percent of medium-small offices, and 52 percent of small offices say *no one* spends time on data. Across all offices, various people are involved in data collection or analysis. The most commonly referenced staff members are senior attorneys, at 47 percent; IT staff are the next most likely, at 35 percent. Other staff referenced are data analysts (19 percent), outside research partners (10 percent), and analyst teams (10 percent). Twenty-five percent of respondents note that other staff work on data collection, including paralegals, office managers, and legal assistants.

The most commonly cited barrier to data collection and use is the accuracy of the data, both at the front end (data entry) and the back end (produced analyses and reports). Some prosecutors and staff are hesitant to use data to drive decisions because of the concern about making decisions based on inaccurate data. Offices of all sizes share these concerns.

Offices often report challenges related to resource limitations including a lack of time, a lack of resources for data infrastructure, and a lack of staff (especially with the appropriate skills and expertise). In fact, about a quarter (26 percent) of offices say no staff time is spent on data collection or analysis. Although offices of all sizes mention limited resources as a barrier, the small offices place the most emphasis on resource constraints as a significant barrier. The small offices are also the most likely to express a desire for additional guidance or requirements about what types of data to collect.

Some offices of all sizes note that their main concern about data-driven decisionmaking is the inability of data to capture elements critical to prosecutorial practice. Many note that data fails to tell the "whole story"—excluding critical elements like the human aspect of a crime. Additionally, prosecutors and staff note that data analysis can contradict an individualized approach to prosecution. For certain participants, these data shortcomings were so extreme that they felt that data-driven decisionmaking conflicted with prosecutorial duties. Despite some offices expressing these concerns, many respondents report successfully using data to improve their prosecutorial practice, from better managing their office to producing more just outcomes. Some respondents emphasize the importance of data in doing their jobs and serving their constituents.

DeKalb County, Georgia (population: 753,000)

Under district attorney Sherry Boston, the DeKalb County District Attorney's Office is on the verge of adopting a new electronic case management system—and chief investigator Alan Traylor is eagerly awaiting the change. For years, his office has tracked extensive information on the cases they prosecute, from charging and pretrial release decisions to plea bargains and sentencing recommendations. Putting that information to use, however, has proved difficult. Before adopting their current case management system, nearly all information was recorded as text in paper files. Even after transitioning to an electronic system, answering certain questions still requires pulling one file at a time, and even generating basic reports involves printing and manually reviewing spreadsheets and PDFs. "The automation just isn't there," Traylor says.

To date, the DeKalb office has largely used its case management system to monitor the progress of cases and manage caseloads. The system provides a record of how long cases have been assigned to a given prosecutor and what stage they're in, helping identify backlogs and investigations that need to be accelerated. Still, Traylor wishes the system could tell him more. He notes, for instance, that there's no easy way to see how long a case has lingered at a given stage or whether it has recently been worked—information that would help him pinpoint bottlenecks and assign resources accordingly. He expects the new system will make all this monitoring possible.

Beyond questions of management, Traylor has broader questions about how his office processes cases and how they are resolved. He knows that if he could view all information across the life of a case and compare pretrial data to sentencing data, he could assess whether similar cases tend to have similar outcomes. Analyzing data on victim characteristics, meanwhile, would tell him whether case outcomes vary for victims of different demographic groups. For now, there's no way to get at these broader trends. "The data is there, but it's buried in paper files and would require extensive mining before we'd be able to identify any statistically significant patterns," he says. "It's still very anecdotal."

Even as his own office modernizes its system and works toward answering these questions, Traylor recognizes that not everyone in the field shares his interest in tracking more data. "Most people's eyes glaze over when you start talking about data, and so there hasn't necessarily been much of a push to look at these things more closely," he says. Still, he's optimistic that the demand for this information will grow as its benefits become more apparent, and he's willing to help pave the way for that change.

Finding 4: Many Prosecutors Use Data to Manage Their Offices and Outcomes, but Systematic Approaches for Tracking Either Compliance with Decisionmaking Guidelines or Emerging Trends within Data Are Uncommon

About three-quarters of prosecutors (72 percent) say they use data to manage the allocation of time or resources, and 65 percent say they use data to set policy or guidelines. Respondents report varied levels of data collection to support management and operations efforts, including tracking the reasons behind their decisions. Specifically, 84 percent track the reasons for dismissal of any/all charges, 60 percent track reasons for declinations, and 41 percent track the reasons for a bail recommendation. Offices are more likely to use electronic case management files to track reasons behind declination decisions, and they are most likely to use paper files to track reasons behind bail recommendations and dismissal

decisions. Regardless of the data collection format, some offices comment that these data are more difficult to analyze because prosecutors need to extract relevant information from open-ended text, rather than predetermined response options.

Three-quarters of offices (74 percent) collect information on caseload size, with 95 percent of the largest offices but just 40 percent of the smallest offices doing so. Caseload information is used to inform budget requests, staff allocation, and staff performance management. Few offices (13 percent) track time spent on case processing.

Thirty-seven percent of offices report using data to implement crime suppression strategies, and some offices reported specific, innovative examples of using data to more efficiently and effectively prosecute crimes. These included implementing and evaluating alternative programs, driving organizational change to address concerning offense trends, and better identifying cases for enhanced prosecution.

While most offices have guidance in place for decisionmaking, generally offices are not using data to track compliance with this guidance. At any key decisionmaking point, no more than a third of offices report collecting data on compliance. Only about a quarter (23 percent) of offices use a data dashboard to measure or assess staff performance, and less than half of even the large and medium-large offices use data dashboards or other management approaches that rely on data to track staff performance.

CASE STUDY 4

Travis County, Texas (population: 1.2 million)

In his nearly three decades in the Travis County District Attorney's Office, director of operations Gregg Cox has seen the office shift from relying entirely on paper files to becoming a statewide model for data collection and analysis. With the support of the Texas Conference of Urban Counties, Travis County partnered with three other counties in 2012 to design TechShare.Prosecutor, a case management system tailored to their collective needs. Since its launch in 2016, the system has also been adopted by a number of smaller counties, and Travis County has continued to hone its data collection and analysis capabilities under the leadership of district attorney Margaret Moore.

Cox says that having this system in place has been eye-opening, especially from a management perspective. "Any supervisor can log into any case from their desk and see what's going on, which helps them identify lawyers who may be struggling and need some guidance. It's given our supervisors much greater insight into the work being done by the people they oversee." Being able to track the progression of a plea negotiation, for instance, means that supervisors can assess the quality of plea offers being made by comparing initial offers to case outcomes. "If there's a huge mismatch, you realize you've got a problem," he says. Access to data has also offered crucial new insight into trends that were previously misunderstood. Cox explains, for example, that it was long assumed the office's high rate of pre-indictment dismissals stemmed from legally or factually insufficient cases. After analyzing the reasons behind those decisions, however, it became clear that many of those cases were actually successful diversions—a finding that prompted the office to allocate more resources to its diversion programs.

Having high-quality data has also enabled the office to address the concerns of its partners and other stakeholders. Darla Gay, the office's planning manager, explains that she spent months examining sexual assault case files to determine why many weren't being prosecuted—and ultimately found that a
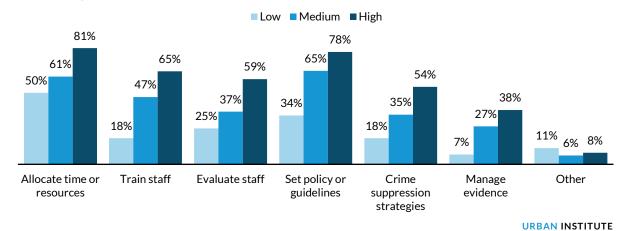
surprising number had stagnated due to issues related to victim engagement with the prosecution process. "Looking only at outcomes just doesn't tell the whole story. And there are stakeholders who are very interested in that story," says Gay. "Data is opening our eyes to the complexity of these cases and changing the narrative in our community about what we should be focusing on."

Of course, reaching this point has taken years of hard work and investment, and there are still resources that Cox and Gay wish they had—like a planning and research division with staff dedicated to data analysis. Even with a sophisticated system, Cox says, "it's a constant struggle reconciling differences in the data, getting various systems to communicate with each other, and getting people motivated to record data that's useful beyond what their own department needs." But Gay notes that simply tracking certain data points has helped communicate to staff that this is information that matters, and building this infrastructure has spurred demand for data as others increasingly see its value. Cumulatively, these changes—both large and small—have helped the Travis County office build on its success and develop a lasting culture of data collection.

Finding 5: Higher Levels of Data Collection Are Associated with a Greater Reported Use of Data

The survey respondents can be sorted into categories of low, medium, or high collectors based on whether they answer that they are affirmatively collecting data on the 29 questions in the survey instrument that directly addressed data collection (listed in appendix D). Low collectors collect 11 or fewer metrics, medium collectors collect between 12 and 18 metrics, and high collectors collect at least 19 metrics. Though low collectors tend to be smaller offices and high collectors tend to be larger ones, offices of all sizes are in every category, including a considerable number of respondents from small offices classified as medium and high collectors. A higher level of collecting is correlated with a greater reported use of data. High collectors are the most likely to use data for allocating time or resources, for training and evaluating staff, for setting policy or guidelines, for crime suppression strategies, and for managing evidence; the low collectors report the lowest percentages for those use categories (figure 4).

FIGURE 4

Relationship between Data Collection and Use

Source: Urban Institute, 2018 National Survey of State Prosecutors' Offices.

San Francisco, California (population: 884,000)

District attorney George Gascón has always believed in data. In his former career as a police chief, he found that having access to information on local crime trends could make all the difference when it came to making key decisions. By the time he was appointed San Francisco district attorney in 2011, he'd come to consider data analysis a core part of any law enforcement operation. "You really can't do this work without it," he insists. That's why Gascón was surprised to learn that his new office tracked very little data—and it was all in paper files. Just a few years later, his has become one of the most famously data-driven district attorney's offices in the country, known for implementing an innovative system he dubbed "DA Stat" in homage to the New York City Police Department's famous CompStat program.

Like many prosecutors, Gascón was first motivated to use data to understand his attorneys' workloads and manage his office efficiently. As the office's data capacity grew, his managing attorneys began tracking the types of crimes the office was processing, how long cases were taking, and their charging rate. Today, Gascón holds monthly meetings to review statistical reports that inform resource allocation decisions and help management measure unit-level performance.

For Gascón, there was never any doubt that data should also inform how his attorneys approach their cases. He drew inspiration from both CompStat and the Crime Strategies Unit (CSU) at the Manhattan District Attorney's Office, both of which use data to pinpoint and respond to the drivers of local crime trends. Gascón made the CSU model his own by pairing local data tracking with his internal management system, developing an integrated approach that helps him understand not just the challenges facing his jurisdiction, but also how his staff are handling them. The main benefit, he says, has been the ability to link individual cases and uncover local trends. He also notes that it has helped his team identify problems they didn't know they had, citing one instance in which the system revealed a single prostitution case to be part of a large trafficking network.

When asked what advice he has for offices looking to build their data capacity, Gascón says it's important to be intentional. "If a prosecutor doesn't have a vision or a focus, they won't have what it takes to create what they need," he says. He suggests starting small, advising offices to begin by reallocating existing funds to implement the early stages of data collection and demonstrate its value before approaching funders. He acknowledges that building the capacity for data analysis isn't easy, and some challenges never quite go away. "But that's no excuse not to do it," he says. "Every day you don't use data is a day you're not making the best decisions."

Recommended Steps to Expand Data Collection and Use in Decisionmaking

As reported above (finding 5), prosecutors' offices can be categorized into three groups based on how much they are currently collecting data (low, medium, and high collecting offices). Urban researchers analyzed responses to identify practices associated with each group in order to inform recommendations for offices looking to improve their collection of data (i.e., move from being a low collector to a medium collector, medium collector to a high collector, and so on). This analysis, in conjunction with interview data and a literature review, led to eight recommendations for offices aiming to increase their collection and use of data:

Step 1: Assess if Your Office Is a Low, Medium, or High Data Collector

Appendix D has a tool to determine whether your office falls within the low, medium, or high collector categories. The tool includes a checklist of metrics as well as general and category-specific recommendations for each group.

Step 2: Ensure Your Office Is Collecting Foundational Information That Describes Case Flow

The seven foundational measures that offices should track are

- cases referred,
- initial charges,
- final charges,
- cases declined,
- cases dismissed,
- cases resolved by plea, and
- cases that go to trial.

These foundational metrics are a good starting point for any office looking to start collecting data, especially for low collectors looking to become medium or high collectors. Medium and high collectors can add to the metrics they already collect and strive to track all seven.

Step 3: Ensure Your Office Is Collecting Relevant Case Details

In addition to the foundational metrics, offices should ensure they're collecting information on relevant case details, including

- offense type,
- misdemeanor/felony classification,
- referring law enforcement agency,
- assigned prosecutor,
- defendant characteristics, and
- victim characteristics.

Low collectors should prioritize documenting the offense type and misdemeanor/felony classification, while medium collectors should begin collecting defendant and victim characteristics. High collectors should strive to collect all six of these case details.

Step 4: Consider Collecting at Least One Metric at Each Stage of Decisionmaking

At each stage in the process (screening and charging, pretrial release decisionmaking, alternative approaches, and plea bargaining and sentencing), offices can start collecting one or two metrics that are relevant and meaningful to their own jurisdictions and that will help them effectively address local

problems. For example, jurisdictions experiencing an increase in their jail populations could choose to collect data on bail recommendations, and offices in jurisdictions with diversion programs could choose to track the number of referrals to the programs. Medium collectors can select one or two key points at which to expand their data collection capabilities. High collectors should strive to have comprehensive information at each of the four points.

Step 5: Equip and Train Staff to Collect and Analyze Data; Take Advantage of Outside Resources Where Possible

To ensure data are entered accurately and consistently, invest in resources such as staff training and technology to make data entry less burdensome. Low collectors can begin by giving current employees such as office managers, legal assistants, paralegals, and senior attorneys the tools they need to collect basic metrics. Medium and high collectors should further build staff capacity for data analysis and consider hiring staff or outside partners with data analysis expertise, such as university-affiliated research partners.

Step 6: Strengthen Technology Infrastructure to Improve Data Collection

Consider automating data entry and generation of reports. Pursue integrating systems with other agencies to improve the electronic transfer of information. Consider low-cost, electronic alternatives to a case management system when beginning to collect data. For example, some offices report keeping an Excel file to track data that are important to them, such as data related to diversion programs or trial outcomes.

Step 7: Learn from Peers to Implement Innovative Approaches, Such as Dashboards, to Track and Respond to Changes in Trends and Operational Metrics

Offices might be particularly interested in speaking with others that have moved to a higher level of collection; for example, a low collecting office might be interested in speaking with offices that have moved from being low collectors to medium collectors. Appendix E also provides additional information on common practices for each low, medium, and high collectors.

Step 8: Solicit Information from, and Share Findings with, Your Local Community

Low collectors will likely focus on expanding their data collection, but they could consider publishing information on foundational metrics as they begin tracking them. Medium collectors can supplement their metrics by soliciting input and information from the communities. High collectors should ensure they're soliciting information from and providing information to the community.

For more information on the underlying survey analysis of low, medium, and high collectors, see appendix E. For a tool to help your office assess and improve its data capabilities, see appendix D.

Conclusion

Across the country, prosecutors and other criminal justice system stakeholders are grappling with how to best use data to improve outcomes. The findings presented here demonstrate that many prosecutors' offices collect and use data throughout the case decisionmaking process, from screening to sentencing. And, many respondents express interest in and a desire to learn more about data collection and how it can be used to improve prosecutorial practices. Some offices have implemented innovative, data-driven initiatives to better manage their offices and address systemwide trends such as rising crime rates. Nevertheless, significant barriers stand in the way of broader collection and use of data. A lack of resources and concerns about data accuracy inhibit offices who want to pursue data collection from doing so. Further investigation into these barriers, as well as the development of innovative solutions to address them, will help expand the practice of data-driven decisionmaking in interested offices.

The analyses presented here demonstrate a relationship between data collection and use. Offices that want to realize the benefits associated with data use must begin by collecting relevant metrics. By increasing data collection efforts, and later using that data in decisionmaking, prosecutors' offices can better identify and respond to trends, demonstrate their successes, and link their decisions to safety and justice goals.

Notes

[1] See also Don Stemen and Bruce Frederick, "Rules, Resources, and Relationships: Contextual Constraints on Prosecutorial Decision Making," unpublished paper dated March 5, 2012, available at http://works.bepress.com/don_stemen/1/.

[2] Stemen and Frederick, "Rules, Resources, and Relationships."

[3] These appendixes are available at https://www.urban.org/research/publication/collecting-and-using-data-prosecutorial-decisionmaking.

[4] The data used for stratification came from "Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: April 1, 2010 to July 1, 2016," 2016 Population Estimates, American FactFinder, Census Bureau, accessed September 7, 2017, http://factfinder.census.gov; "Poverty Status in the Past 12 Months," 2011–2015 American Community Survey 5-Year Estimates, American FactFinder, Census Bureau, accessed September 7, 2017, http://factfinder.census.gov; and "Rural-Urban Continuum Codes," US Department of Agriculture, Economic Research Service, accessed September 7, 2017, https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation/#referencedate.

[5] Percentages for answers to single questions use the total number of respondents to that question as the denominator. Cross-question analysis uses the total number of offices responding to all single-response, non-logic questions (n = 130) as the denominator for all percentages. Appendix B lists the aggregated results for each survey question.

[6] Number of cases referred and number of cases dismissed by the prosecutor were included in the short form survey, which had an additional 17 respondents. Therefore, the number of responses for those two questions is greater than for the other five questions about foundational metrics. Appendix B has further information and details, including the number of responses received for each question.

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