HOW DATA CAN IMPROVE PROSECUTION, REDUCE JAIL POPULATIONS AND ADVANCE JUSTICE

By Lars Trautman

INTRODUCTION

The success or failure of our criminal justice system hinges in large part on the quality and capabilities of the prosecutors operating within it. If they wield the powers of their office with precision, restraint and competence, they have the potential to right wrongs and even redress inequitable outcomes created elsewhere in the system. On the other hand, if they are unable to live up to the burdens of the office, incarcerated populations can swell and undeserving individuals can be unnecessarily tarred with a criminal record.

Increasing prosecutorial capacity and effectiveness should therefore be of paramount concern, yet all too often, prosecutors must labor under far from ideal conditions. A typical prosecutor operates under a crushing caseload and in an information vacuum. She is expected to find effective and equitable justice for hundreds or thousands of cases a year, despite having little-to-no information on which prosecutorial recommendations have proven successful in the past or how her peers have treated similarly situated defendants. Likewise, her bosses may not only share her ignorance on prosecutorial performance and outcomes but must also consider how the average prosecution fits in with larger issues like community relations and how the office should respond to structural inequities such as unequal arrest rates.

These demands and pressures can be aggravated in many prosecutor’s offices by a continued reliance on paper files and gut-level decisions rather than digital information and statistically sound policies. Often, prosecutorial offices have neglected to develop strong data due to a lack of resources and buy-in from prosecutors. Whereas the costs of new data investments are easily tallied, the benefits can be more difficult to identify and measure. The problem is also exacerbated by the healthy dose of skepticism with which many prosecutors view data. One study, for example, found that line prosecutors—the individuals actually prosecuting cases—overwhelmingly remain wary of data. They believe that it will either highlight issues over which they have no control, or worse, be taken out of context to pillory them and make their jobs even harder.1

Given the incredible power of prosecutors and the plethora of problems afflicting our justice system, this reticence is a shortcoming we cannot afford to ignore. Accordingly, the present study will address how data can be harnessed as a tool to reveal the extent of, and then help mitigate, many of the challenges facing prosecutors in their pursuit of justice. It will highlight promising existing programs and strategies, the healthy dose of skepticism with which many prosecutors view data. One study, for example, found that line prosecutors—the individuals actually prosecuting cases—overwhelmingly remain wary of data. They believe that it will either highlight issues over which they have no control, or worse, be taken out of context to pillory them and make their jobs even harder.1

as well as suggest how these efforts could be expanded in the future for even greater gains. It will conclude with a short argument in favor of additional data investment.

PROSECUTOR-LED CRIMINAL JUSTICE REFORM

In many respects, our justice system often fails to live up to its name. Over the past few decades, its reach has expanded to previously unfathomable extents, now ensnaring nearly one out of every three American adults in some fashion. The roughly 70 million people who bear some sort of criminal record as a result face a potential lifetime of legal barriers, stigma and other collateral consequences of their justice system involvement. This includes the 2.3 million people incarcerated at any given moment; a number that makes the United States the world’s leading incarcerator. Perhaps even more striking, around one-fifth of these individuals languish in jail even with their presumption of innocence intact, as there are roughly 465,000 pretrial detainees who have yet to be convicted of whatever crime is alleged. This unfortunate state of affairs is compounded by disparate outcomes that disproportionately burden minorities and the poor.

Prosecutors hold much of the power in this system and, as a result, a considerable amount of the potential for reform rests in their hands. Particularly at the earlier stages of the criminal justice process, their reach and authority is unparalleled. They make charging decisions with little-to-no oversight and maintain strong influence over bail and sentencing outcomes. Accordingly, how they discharge these obligations is critical to the overall health and direction of the system.

Yet, this power is not unfettered and much of the potential of prosecutors to lead reform remains constrained by a combination of a lack of resources, mediocre information and structural pressures outside of their control. Thus, while most prosecutors strive for justice, these good intentions alone are rarely sufficient to achieve it. Even the most conscientious and reform-minded prosecutors will find themselves only marginally effective if they do not have the requisite information to guide reform or the tools to accomplish it. While no panacea, in many instances, data holds the potential to provide them with both.

CURRENT USE OF DATA

To the extent that one exists, the typical prosecutor’s office is a dispiritingly data-poor environment, as illustrated by a prominent Urban Institute survey. Although many utilize electronic case management systems, paper files endure as the primary way in which a significant number of offices collect and store many types of case-level data. Unsurprisingly, this makes aggregating and analyzing this kind of data quite difficult and as a result, a host of valuable data often goes uncollected or underutilized. Likewise, with little access to outside information such as recidivism results, the impact of many prosecutorial actions and outcomes remains invisible to the prosecutors themselves.

A handful of offices as well as researchers and nonprofit organizations have begun targeting these data gaps. The Manhattan District Attorney, for example, created a data and analytics unit in 2010 that helped move it away from a paper-driven system toward one that could actually analyze data in a meaningful way. Outside organizations such as Measures for Justice have partnered with a number of jurisdictions to collect data across the criminal justice system, including on prosecutorial actions, and to present it in an easily digestible format. Finally, researchers have embarked on projects to collect and analyze new types of data to try to reorient prosecutorial decision-making beyond the old thinking that fixated on convictions and sentence lengths. These efforts, however, represent only the tip of the iceberg in terms of what is possible.

WAYS DATA CAN IMPROVE PROSECUTORIAL OUTCOMES

Reveals Challenges, Improves Policy and Aids Personnel Management

Few offices are small enough that a lead prosecutor—the individual in charge of the office—can maintain reasonable visibility into the decisions and outcomes of every case, and even where this is possible, the human brain simply cannot catalogue that information well. Often, offices operate in the dark in terms of how frequently their prosecutors are making particular bail recommendations, the reasons such requests

were made and how judges ruled on them. Similarly, while offices generally have guidance on how prosecutors should be reaching these decisions, it is far less common to actually follow up with any kind of metrics on whether prosecutors are, in fact, following this guidance. This can cause lead prosecutors to have a rosier picture of prosecutorial practices than the facts support, allowing challenges to grow and fester.

Data is the only way that lead prosecutors can know what is actually being done by their line prosecutors or how the rest of the criminal justice system is responding to prosecutorial actions. It also allows them to assess which policies are being faithfully followed, as well as which are driving successful outcomes in front of judges. This feedback turns policymaking into a truly iterative process, which is critical for the effective use of top-down policy decisions to improve prosecutorial practices. It also forces the process to proceed with open eyes, based on verifiable figures rather than assumptions or suspicions about implementation rates or outcomes.

Equally important, without these kinds of numbers, it is almost impossible for prosecutorial leaders to know how any given prosecutor is behaving, which is to say whose decisions are worthy of praise and promotion, and whose suggest a need for remedial training or action. Unaided by robust data, lead prosecutors are largely forced to rely on a small sample of particularly notable cases or on blunt metrics like convictions and sentence length that do not truly represent prosecutorial performance and may encourage counterproductive behaviors. Better data collection allows lead prosecutors to reassert control over performance metrics, using them to measure and incentivize more-nuanced and productive prosecutorial conduct.

**Helps Balance and Reduce Caseloads**

One of the most pressing problems facing many prosecutors’ offices is simply how to begin to handle the press of potential cases they face. While much is made of prosecutorial discretion to pick and choose cases, for many offices, this is less about careful or painstaking judgment and more about the hurried triage of thousands of cases. Consider, for example, Cook County, Illinois where misdemeanor prosecutors have seen their average annual caseload hit highs at various points of 1,600 to almost 5,700 cases per year—well above the recommended number of 400. It is difficult to see how justice can be served with any regularity in such a situation, and indeed, research has suggested that defendants suffer under high prosecutorial caseloads.

In the absence of meaningful data, the prosecutorial charging policies that influence caseloads must tread one of two inefficient paths. One option is for every potential case to be assessed solely on its own merits (determining whether there should be charges and if, so, how severe) rather than in relation to the other potential cases that could be brought (determining whether, for example, the decision to pursue a shoplifting case might mean that an assault gets shortchanged). This approach sounds good in theory, appealing to prosecutors’ innate drive to pursue individualized justice, but it is hopelessly outmatched in a real world that suffers from a scarcity of resources. The other option is to trust each and every prosecutor to decide for himself how to prioritize different parts of a potential caseload. Without additional top-down guidance, this is a recipe for inconsistent decisions made by individuals with insight into only a small fragment of the wider picture.

However, data can add relativity to these decisions. It can reveal not simply how many of each charge is filed, but also the approximate labor required to prosecute it by examining case processing times; a crucial piece of information only rarely tallied by offices currently. Likewise, it can indicate which minor charges tend to be associated with more serious criminal behavior. Armed with this information, a prosecutor’s office could reorient its charging policies to allocate prosecutorial time most efficiently, favoring dismissal or other quicker solutions for low-level cases that drain a disproportionately high amount of resources or have little connection to more troublesome offenses.

Simply knowing how many of each charge is filed and how the office is disposing of them can be immensely helpful in reducing prosecutorial caseloads. For example, in Mecklenburg County, North Carolina, data showed that the charge declination rate was 30 percent across all charges but only three percent for drug cases. At the same time, case...
disposition data revealed that many of these drug cases were ultimately dismissed or referred to drug treatment. Recognizing that this represented wasted prosecutorial effort, as the same result was reached, just later in the criminal process—the lead prosecutor was able to shift resources to better identify these drug cases earlier on. As a result, the declination rate of drug charges rose to 13 percent, freeing up significant prosecutorial time.16

Supplementing the data so that it tracks charges by individual defendants can lead to further reductions in an office’s caseload. The Manhattan District Attorney, for example, used its datasets to create a ‘target list,’ which allowed it to focus its resources on a small number of people driving a disproportionate amount of the crime.17 Likewise, adding data on each offense’s location could identify charging hotspots and could raise important questions for prosecutors about why these particular neighborhoods were the source of so many charges and which prosecutorial policies could reduce the need for so many charges (and prosecutorial caseloads in the process).

With the assistance of advanced computer algorithms, data could even be operationalized to help line prosecutors make these charging decisions. Although still somewhat controversial, risk assessments have begun altering how judges make decisions. If found to be sound and useful in that arena, why not give prosecutors their own tools to assist with their own unique goals and decision points (such as charging)? While such tools cannot replace prosecutorial discretion, if properly constrained and calibrated, they could supplement it. For example, one group of researchers built an algorithm that could predict which individuals were at low risk of re-arrest following the dismissal of initial charges.18 In theory, information like this could help prosecutors determine when it might be safe to dismiss minor charges.

**Adds Context and Increases Consistency and Effectiveness**

One of the side effects of vesting a significant amount of authority in every line prosecutor is that they often end up with something approaching an overabundance of independence. Line prosecutors must make hundreds of decisions, usually quite quickly, which means little ability to consult with superiors or colleagues. At the same time, they generally operate with no data about how their decisions compare with their peers or criminal justice trends more broadly. This undermines the effectiveness of those decisions and makes it exceedingly difficult to ensure that defendants receive equal justice between prosecutors or even from any given one.

While offices often provide line prosecutors with guidelines on standard recommendations or policies to apply in typical cases, there are simply too many gradations to spell out guidance for every situation a line prosecutor might face. Likewise, these nonstandard cases are still too common for ‘consult a supervisor’ to be a reasonable course of action in many instances. Although veteran prosecutors may have handled enough cases to essentially create their own bell curve of case dispositions for most situations, more-junior prosecutors may have difficulty knowing how to react to cases as they stray from the more typical ones covered by official guidelines.

Data can provide context to these prosecutorial decisions. Offices could provide regular data breakdowns to each of their prosecutors, which highlight office-wide trends and figures on various decisions and outcomes. This information would serve as a measuring stick against which line prosecutors could gauge appropriate request ranges and better ensure that their decisions are more consistent with those of their colleagues. An office with particularly deep data expertise and ample resources could take this initiative to the next level by providing each line prosecutor with individualized case data, showing ranges, distributions and demographics for their own decisions. Line prosecutors could use this as a self-improvement tool, making it less likely that their pursuit of individualized justice in each case blinds them to what is occurring across cases.

For bail and sentencing, a prosecutor’s effectiveness is determined in large part by the judges they practice in front of or more simply, how judicial decisions match up to prosecutorial requests. Inevitably, prosecutors must take into account individual judicial preferences in crafting their recommendations. If a certain judge overwhelmingly sentences defendants to probation for a given type of case, a prosecutor would be better served spending her time deiving a strong probation recommendation rather than arguing for a jail sentence that will be dismissed out of hand. Likewise, a prosecutor may have to come armed with additional justifications for a bail request that falls outside of a judge’s usual range for a given offense.

Given this, it is particularly unfortunate that courts almost never collect, let alone make publicly available, records on judicial decisions. Instead, the public is left in the dark while prosecutorial knowledge is generally informed by individual experience and office word-of-mouth on judicial behavior. Prosecutors are privy to all judicial decisions, however, which means that they need not wait on the judges to gather this data. An office could aggregate this information and pro-

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16. Ibid.
vide metrics that describe judicial preferences in a manner that is easily digestible and distributable to line prosecutors. This would allow them to tailor their pitches to each judge’s individual preferences and nip in the bud any prosecutorial requests likely to be ill received.

A more ambitious project could also collect information on the prosecutorial requests themselves. Comparing top-line figures could reveal how favorable each judge tended to be toward prosecutorial requests, while line prosecutor-specific data could be even more valuable. For example, if a particular line prosecutor notices that his own recommendations are being adhered to at a significantly lower rate before a given judge than those of his colleagues, he may want to reassess how he frames his arguments for that judge.

**Closes the Gap Between Intentions and Outcomes**

Although it is important for prosecutors to convince judges to adhere to their recommendations, ultimate success is determined by subsequent defendant outcomes. Put differently, how closely do the actual results of a prosecutorial request align with the prosecutor’s rationale behind that request? Consider, for example, bails of $500 or less. When such a bail is requested by a prosecutor and set by the judge, does the defendant actually post that bail? Whatever the merits of the criticism that some high bails are requested with the intention of ensuring a defendant remains in custody, it is probably fair to assume that for these more modest requests, the prosecutor believes the defendant should be released, albeit with some financial incentive to return.

Yet, in many cases, that is not the result. Further, these bail results may be unknown to prosecutors since a line prosecutor can hardly keep a running statistical tally on bail results in her head and multiple prosecutors may handle a single case. Data is therefore necessary to reveal problems like this to line prosecutors and leaders alike and allow them to address the issue. For example, in Winnebago County, Wisconsin, unknown to the local District Attorney, from 2009-2013, in about 40 percent of cases in which a defendant failed to pay a monetary bail, the bail was $500 or less.19 With this information in hand, however, the Winnebago County District Attorney was able to prioritize lower-level cases more and begin working to achieve his office’s pretrial release goals.20

A similar problem afflicts probation requests: how can a prosecutor request reasonable conditions or probation lengths without knowing the attendant results? Just as prosecutors usually are not requesting purposefully unachievable bails, they also are not generally hoping a defendant fails on probation. In both instances, however, without the right information, a prosecutor’s attempts to secure a productive result may be stymied, to the frustration and detriment of not only prosecutors, but also defendants and the community. Improved feedback makes it easier to achieve the right result in the first instance and help improve decision-making over the long term.

**Helps Prosecutors Establish Community Trust and Buy-In**

Prosecutors are public servants whose success is determined in large part by their support within the community. At its most basic level, a significant enough loss of trust or backing by the public could lead to a lead prosecutor’s ouster in an election. But even beyond that most blunt of accountability measures, daily operations are reliant on strong community relations. It is exceedingly difficult, for instance, to prove many cases if witnesses do not come forward and testify or if the jury pool is distrustful of local prosecutors.

Data, once again, has a role to play in this relationship. For example, one poll found that 85 percent of voters—cutting across party registration, region, ethnicity, age and gender—favored prosecutors who believed in sharing data with the public.21 Naturally, collecting data is the first step to satisfying these constituencies. Informing the public through data releases can also be beneficial in times of crisis. The visceral nature of crime and high stakes of prosecution ensure that many prosecutorial decisions will be placed under a public microscope regardless of that office’s actions. Data can help clarify which cases are actually representative of prosecutorial performance and which are outliers, helping to reduce the odds that an unrepresentative case becomes the face of the office.

While there may be a fear that such a data revelation will simply thrust uncomfortable truths about our justice system into the limelight and leave prosecutors vulnerable as a result, the reality is usually more complicated. For example, while data from the San Francisco District Attorney’s Office did indeed confirm widespread racial and ethnic disparities, it also showed that nearly all of them were attributable to case characteristics determined before a prosecutor handled the case.22 Likewise, despite releasing data on inequitable racial

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19. “Failure to Pay Low Monetary Bail,” Measures for Justice. https://measuresforjustice.org/portal/exploration?l=W&d=m&n=W&i=199&n=m&f=1&amp;=m&amp;=Wid03.Wi499&amp;=t01&amp;=e81
and ethnic outcomes in 2016 and 2017; District Attorney Jeffrey Rosen still cruised to reelection in 2018, in part out of an expressed desire to address such injustices.

Facilitates a Prosecutorial Role in Correcting Systemic Injustices

Increasingly, the question asked about inequitable outcomes in our justice system is not whether they exist, but whose responsibility it is to remediate them. While much of the focus has centered on policing practices and harmful laws, the public has begun to evince a desire for prosecutors to do more to tackle this kind of injustice. Indeed, the issue has even started to insert itself in more lead prosecutor’s races. Many prosecutors, however, still struggle to see how their actions can affect these skewed systemic outcomes. The fact that many, if not most, inequities stem from police actions and other actors fuels a mistaken belief among prosecutors that they have neither an obligation nor a role to play in helping to alleviate these disparities. As a result, even prosecutors who wish to see a more just system may feel disempowered to address these particular ills themselves.

Data on criminal justice outcomes can disabuse prosecutors of this helplessness by revealing disparate impacts as well as the decision points that contribute to them. A less controversial starting point for prosecutors may be using this data to identify injustices that are caused by other actors, but which may nevertheless be susceptible to prosecutorial action, such as tailoring diversion programs to better account for over-policing neighborhoods, for example.

An office willing to take a harder look at the data—and itself—could use it to potentially discover prosecutorial practices that inadvertently exacerbate inequities, such as plea offer guidelines that require harsher offers for defendants with an arrest history, which hurt defendants from heavily policed areas. Prosecutors can then consider whether there is another way to achieve their aims that does not create such undesired side effects. Indeed, this was the result in Milwaukee, Wisconsin. Prosecutors there invested in a data project, which revealed that there was a racial disparity in drug paraphernalia charges. Further analysis showed, however, that the root cause was prosecutorial inexperience: namely, that junior prosecutors were placing an undue weight on crack pipes versus other paraphernalia. In response, Milwaukee’s lead prosecutor reoriented his office’s charging policy to correct this problem, and in the process, reduced the amount of cases filed.

Prosecutors also are not confined to inequitable racial or ethnic disparities; an analysis of the data may well reveal others. For example, San Francisco’s justice dashboard showed an interesting age-based gap that did not quite align with conventional knowledge on criminal activity and defendant age. The San Francisco District Attorney discovered that while defendants ages 18-25 and 30-39 had high rates of subsequent criminal activity, this was not true for those ages 25-30. The reentry success of the middle cohort suggested to authorities that their reentry programs and strategies were neglecting the younger and older group, and that they could reduce overall recidivism by recalibrating their reentry initiatives accordingly.

Holds Address an Ever-Expanding Prosecutorial Role

With our criminal justice system increasingly forced to address all manner of social ills, from mental health and substance abuse to homelessness and unemployment, the role of prosecutors has expanded well beyond that of simple investigator and criminal litigator. At the pretrial stage, they may act as de facto care coordinators, their requests also help to determine whether someone awaits trial in a jail cell, a hospital bed or with assisted outpatient treatment. Similar choices face prosecutors at sentencing. Yet, the availability or suitability of any given option may be well beyond the knowledge of a line prosecutor.

This overlap between criminal justice and social services systems has created a need for better information sharing and communication. Confidentiality issues and defendant privacy likely make the sharing of historic data on a defendant’s prior use of services undesirable to many parties. Instead, the focus for a prosecutor-minded data project should be the potential service options currently available to that defendant. This could include information about available organizations for each potential treatment or intervention category.

with up-to-date figures on open beds, entry requirements and procedures.

How often an office updates this information and how it disseminates it to its prosecutors could be tailored to reflect the depth of its resources and local partnerships. A more basic program could collect and circulate to line prosecutors relatively static data on the overall treatment capacity of local organizations and demographic details about defendants the office had previously referred to these programs. Stronger partnerships might facilitate daily updates from the outside organizations themselves on available bed numbers, as well as contact information of care coordinators at each organization able to text or talk with line prosecutors on short notice. A particularly ambitious initiative might mean a dashboard or app that displays real-time availabilities, provides easily navigable entrance requirements and even connects or facilitates communication with those providers.

Regardless of the level of investment, this information would make it easier for line prosecutors to consider and utilize these alternatives. The burden on prosecutors to lead these efforts could be reduced even further by sharing information and collaborating with the local defense bar and other courtroom actors on such a project. Less time spent discovering and assessing these alternatives would mean each line prosecutor could focus more on actual prosecution while lowering barriers to alternatives to incarceration would result in more defendants receiving care more helpful than a jail cell.

A recent pilot program at the San Francisco District Attorney’s Office exemplifies how time-saving prosecutorial initiatives can benefit prosecutors and defendants alike. Working in concert with the tech savvy, civically minded organization Code for America, the two partners developed an app that could automate and expedite criminal record expungement requests. This turned a time-intensive and burdensome process for prosecutors into one that could be accomplished at the click of a button. As a result, more individuals can receive expungement at a fraction of the time and cost.

**CONCLUSION**

Deciding how to allocate scarce resources to address the myriad challenges and obligations of a prosecutorial office is a herculean task. Given that prosecution is not a profession known for mathematical savvy or an affinity for numbers, it is understandable that data and analysis are not the first things that many prosecutors think of when faced with a problem. Indeed, the need to consider each case on its individual merits and dispense justice tailored to each defendant can make it even easier to ignore options that draw their power from the accumulation of information across many cases. Yet, prosecutors would be well served to fight this urge and embrace the use of data.

While data cannot solve every problem that prosecutors face—it cannot, for example, eliminate the pay gap between prosecutors and private attorneys that leads to retention headaches—it can help surmount many barriers and propel effective prosecution. It is also eminently customizable to the unique needs and resources of each office. Offices less familiar with data projects or with fewer resources can begin with smaller investments that seek to collect top-line figures in order to reveal the truth of the on-the-ground conditions their prosecutors face. Those with a greater ability to invest can gather more-nuanced metrics on prosecutorial decision-making and case details that allow for even deeper analysis. With the assistance of outside organizations and advanced technological solutions, the future holds yet more promise for prosecutorial data initiatives.

Ultimately, prosecutors in the 21st century have too many obligations and face too many challenges to rely solely on gut decisions and 20th century solutions. Certainly, digitizing files or creating a system that effectively catalogues information entails startup costs, but this investment can pay dividends as more effective policies lead to a better distribution of and return on prosecutorial resources. Whether prosecutors are seeking to change how the justice system works or just their own office, data should be a tool of first resort.

**ABOUT THE AUTHOR**

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