WHITE PAPER

Advancing the Use of Data in Prosecution

What We Measure Matters

Fair and Just Prosecution (FJP) brings together elected district attorneys as part of a network of like-minded leaders committed to change and innovation. FJP hopes to enable a new generation of prosecutive leaders to learn from best practices, respected experts, and innovative approaches aimed at promoting a justice system grounded in fairness, equity, compassion, and fiscal responsibility. If your office wants to learn more about this topic, we encourage you to contact us.*

SUMMARY

This FJP white paper offers an overview of the role of data in reform-minded prosecutors' offices. The paper discusses the value of strengthening data capacity, as well as common challenges and recommendations for offices as they commit to this vitally important undertaking.

THE NEED FOR ENHANCING DATA CAPACITY

The movement of reform-minded district attorneys¹ elected to office holds great promise for fairer, more effective, and more equitable practices in the criminal legal system. Though the movement is young and progress can take time, the impact of these leaders is visible in new policies that aim to reduce the use of incarceration, promote healing through restorative approaches, address long-standing racial and ethnic inequities, and hold law enforcement accountable for abuses of power.² Reformers always face higher standards – even while the status quo is given the benefit of the doubt – so changemakers must develop smart policies and demonstrate their value. But in most cases, the day-to-day work of implementing policy is carried out by line prosecutors, many of whom must adapt old habits and practices to align with their new leadership. For reform-minded prosecutors to realize their vision of reform and achieve lasting changes in practices and policies, they need new ways to measure their progress.

"I think one of the things we as a society need is a greater sense of ownership of the criminal justice system and a better understanding of it. The data can really start and generate conversation."

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¹ The terms "district attorney" or "DA" are used generally to refer to any chief local prosecutor, including State's Attorneys, Prosecuting Attorneys, and Attorneys General with local jurisdiction.

² See Krinsky, M.A. (2022), Change from Within: Reimagining the 21st-Century Prosecutor, The New Press, https://thenewpress.com/books/change-from-within.

An elected prosecutor's understanding of their office's work is only as good as the data they collect and analyze. Yet for too long, prosecutors' offices have been ill-equipped to collect and make use of data, measuring only the most basic things or simply not tracking much at all. If reforms are to take hold and become part of the office's fabric, data capacity and acumen need to improve.

Defining Success and Monitoring Progress

About 49 of every 50 criminal cases filed in the United States are handled by local prosecutors.³ The decisions they make hold enormous influence over the outcome of a case, including whether to charge a person accused of an offense, what to charge them with, and what dispositions to offer. These determinations are usually made not directly by an elected prosecutor, but by a line prosecutor.⁴

Reviewing the decisions each line attorney makes is impossible in practice, except in the smallest offices. So how does an elected prosecutor understand what their line attorneys are doing? How do they know that their vision and values – which are backed by the voters who elected them – are being carried out by the people handling the vast majority of cases?

These questions cannot be answered without data and metrics. Traditionally, the success of line prosecutors has been judged by their trial experience and record, the volume of cases they handle, their conviction rates, and the dispositions they secure. That mindset contributed to the explosion of mass incarceration from the 1970s through the 1990s. Shifting away from a volume-driven "tough-on-crime" approach to prosecution requires a new set of metrics to reset how we quantify success. Over the past decade, forward-thinking prosecutorial leaders, researchers, and advocates have done a great deal of work toward that end. But more work remains to develop measurements that align with a new vision for the criminal legal system.

TIP: Metrics guide performance – what we measure is what gets done

The elected prosecutor is responsible for ensuring that the metrics prioritized throughout the office are the ones most aligned with their vision. If line attorneys know they will be rewarded solely for closing cases guickly, for example, they might spend as little time as possible on a case and focus less on getting the fairest outcome. If they are evaluated by how many cases they divert or refer to services, or on crime survivor satisfaction or other metrics, they will respond to that scrutiny as well. In practice, a balanced approach with multiple metrics is necessary to incentivize line staff to appropriately consider varied - and sometimes competing priorities.

"We should not prosecute a case because we can, we should prosecute a case because we should; because it is for the greater good; because it makes sense. Using data often will give us the ability to determine whether we should prosecute a case or not."

³ Court Statistics Project (2023), Federal and State Caseload Trends, 2012–2021, https://www.courtstatistics.org/court-statistics/state-versus-federal-caseloads.

⁴ Line prosecutors, also referred to as assistant district attorneys or ADAs, are staff attorneys who handle the bulk of cases in most jurisdictions.

⁵ Rasmusen, E., Raghav, M., & Ramseyer, M. (2009), Convictions Versus Conviction Rates: The Prosecutor's Choice, American Law and Economics Review, 11(1), 47–78, https://academic.oup.com/aler/article-abstract/11/1/47/198922.

⁶ Prosecutorial Performance Indicators is a leader in this space, now working in 25 jurisdictions to construct and publish new metrics on prosecutors' work, https://prosecutorialperformanceindicators.org; see also Eisen, L.B., & Krinsky, M.A. (2021), The Necessity of Performance Measures for Prosecutors, in The Oxford Handbook of Prosecutors and Prosecution, Wright, R.F., Levine, K.L., & Gold, R.M. (Eds.), https://academic.oup.com/edited-volume/34239/chapter-abstract/290304056.

The Current Picture: An Uneven Landscape of Prosecutorial Data

A 2018 National Survey of State Prosecutors' Offices identified seven foundational measures of case flow, corresponding to key decision-making points for the prosecutor's office: cases referred, charges at arrest, final charges, cases declined, cases dismissed, cases resolved by plea, and cases that go to trial.⁷ The report highlighted several important findings:

- Nearly all offices were collecting data on at least one measure, but only two in five offices collected all seven.
- Most offices, except those in the smallest jurisdictions, had an electronic case management system and staff who worked on data, but almost all of them struggled with resource constraints and data accuracy.
- A majority of respondents said they use data in decisions to allocate resources and set policy or guidelines, but few used data to monitor their compliance with those guidelines.

Many reform-minded prosecutors have made major strides in building their data capacity in a short time. A few of these offices have large well-resourced teams conducting rigorous academic research in-house; some have a single individual building complex infrastructure and generating regular analysis for leadership. Many have a data analyst whose time is largely spent tracking down spreadsheets, cleaning messy data, and making do with few resources; others outsource these functions to universities or other technical assistance providers. Large offices, predictably, tend to collect more data than small ones. But due to high case volume, even some larger offices struggle to standardize data input.

The diversity of data capacity across jurisdictions reflects varying leadership priorities, institutional precedent, availability of in-house expertise, and funding constraints. Although there is no one-size-fits-all solution or endpoint for every office, it's clear that prosecutors need more resources to invest in data to fully understand the operations and impact of their offices' work.

WHAT ARE THE POSSIBILITIES? KEY OPPORTUNITIES FOR DATA USE IN PROSECUTORS' OFFICES

Reform-minded prosecutors have been at the forefront of pioneering data innovations for several years. Their success in leveraging data to propel a new vision of justice demonstrates the value of investing in this work. Although many offices are initially motivated by the need to make their case to the public and to correct misinformation, some have found enhanced data capacity and processes to be invaluable management tools.

External Use of Data: Increasing Transparency and Public Awareness

Data is a critical tool for reform-minded prosecutors to build trust and show that their policies are beneficial to the community. In most circumstances, a prosecutor's work is carried out behind closed doors with little or no outside scrutiny, and only high-profile violent crimes or police-involved killings draw public attention to their role. But for the reform-minded prosecutor, data can provide the community a look inside the "black box" of the office's work, showcasing policy successes or highlighting the need for a revised approach.

⁷ Olsen, R., Courtney, L., Warnberg, C., & Samuels, J. (2018), *Collecting and Using Data for Prosecutorial Decisionmaking*, Urban Institute, https://www.urban.org/sites/default/files/publication/99044/collecting_and_using_data_for_prosecutorial_decisionmaking_0.pdf.

Promoting transparency and community accountability

Simply releasing descriptive data on the office's core outputs can be an important first step toward transparency and accountability. Prosecutors don't typically release basic data about the number of cases referred by law enforcement and the number of felonies and misdemeanors filed, for instance, much less the number of cases deflected or diverted, the racial and ethnic demographics of defendants and crime survivors, or the number and length of prison sentences. Providing concrete numbers gives all stakeholders a common baseline, an important starting point for building trust and legitimacy.

The metrics shared publicly are also a clear signal of an office's priorities and definitions of success. Releasing the number of deflections and diversions, for example, is a strong indication that keeping people out of jail and prison whenever possible is a priority for the elected prosecutor.

Data can be used to promote transparency and accountability in several forms:

DASHBOARD TIP: Include user guides, term definitions, and other resources

The Multnomah County (Portland, OR) District Attorney's Office includes a page of helpful resources to accompany their dashboards. This informative page includes data tracking definitions, a user guide, and a criminal justice system map to familiarize users with the DA's role within the larger criminal legal system. It also includes a timeline of significant changes in policy, law, and/or procedure that affect how cases may be handled.

- 1. Open data: It is a growing practice for prosecutorial offices to release data to the public regularly. Though open data releases can be useful for publishing large volumes of data, they require a user with a high level of data literacy, motivation, and time to process the information involved. For this approach to be practical, data must be thoroughly cleaned and prepared in order to avoid misinterpretation.
- 2. Curated dashboards: Prosecutorial dashboards interactive online visualizations that display a wide array of data over time are a common way to release data to the public and allow users to explore trends and answer their own questions. The dashboards can make data much more accessible, but leave interpretation to the reader. They should not be seen as the only mechanism for transparency, but dashboards can help orient debates toward data and help the community feel invested in how the office defines success.
- 3. Data stories: Some offices publish semi-regular reports called "data stories" to update their community on progress in certain areas and invite engagement and feedback. The Philadelphia District Attorney's Office has published these short analyses on topics such as outcomes of preliminary hearings for homicide and nonfatal shooting cases, supporting LGBTQ+ crime survivors, and understanding clearance rates. Data stories show just a snapshot in time compared to dashboards or open data that are updated continuously, but they can have an important impact by providing a straightforward and digestible analysis of a specific topic.

"The District Attorney's Office Dashboard will offer data and statistics as part of our effort to replace fear-driven fictional narratives about crime and underserved communities with facts."

⁸ Philadelphia District Attorney's Office (2023), Data Stories, https://phillyda.org/tag/datastories/.

Enhancing the public's understanding of the prosecutor's role

Media reports often present the criminal legal system as onedimensional. When status quo law enforcement leaders and prosecutors are in lockstep, it is understandable if the public sees no distinction between the two, but it's especially important that the role of each one is made clear when viewpoints differ.

Prosecutors can use data to make clear their role in relation to law enforcement, courts, jails, and other agencies. Releasing referral or clearance data, for instance, helps the public understand that the prosecutor's office cannot address offenses that are not referred to them. In contrast, releasing data on how newly implemented bail policies have impacted pretrial detention rates can show the prosecutor's power to improve outcomes.

DASHBOARD TIP: Make dashboards user-friendly and interactive

The Ramsey County Attorney's Office maintains several dashboards with various measures people can filter using several variables (referral date, charge category, race/ethnicity, sex/gender). The information is displayed in charts along with a great deal of contextual details to help the viewer understand the data.9

Responding to critics and correcting the narrative

In some jurisdictions, the election of a reform-minded prosecutor has precipitated a drumbeat of criticism, with nearly every negative development concerning public safety blamed on the newly elected leader. Though these criticisms rarely have merit – and often pertain to something a prosecutor has no control over – they play into a misguided narrative that any departure from punitive approaches inevitably encourages crime.

Data can help counter these attacks and lay the groundwork for a more accurate understanding to emerge. If murders are rising as the new prosecutor takes office, for instance, the prosecutor can point to data showing that the increase began under the previous prosecutor (if that is the case) or emphasize that charging rates outpace clearance rates for violent crime (as is almost always the case) and point out that a DA cannot charge people whom law enforcement hasn't investigated and arrested.

Prosecutors can also use data to underscore other systemic challenges. In Multnomah County, Oregon, for example, DA Mike Schmidt releases weekly lists of cases affected by the lack of public defenders to emphasize the impact this has on due process.¹⁰

Of course, pointing to data is rarely enough to counter aggressive politically motivated narratives about crime. Even when data supports a prosecutor's argument, it can be extremely difficult to make nuanced points while rebutting opponents' emotionally charged arguments. Prosecutors need to understand and empathize with the fear their community may be feeling, and in these situations, data should be included as just one part of a larger communications plan that incorporates many types of messaging.

⁹ Ramsey County Attorney's Office (2023), *County Attorney Public Data*, https://www.ramseycounty.us/your-government/leadership/county-attorneys-office/county-attorneys-public-data.

¹⁰ Multnomah County District Attorney (2022), *DA Mike Schmidt Releases Weekly Cases Impacted by Public Defense Crisis*, https://www.mcda.us/index.php/news/da-mike-schmidt-releases-weekly-cases-impacted-by-public-defense-crisis-28.

CASE STUDY: Hacking 4 Justice workshops offer hands-on training with the Cook County (IL) State's Attorney's Office open datasets

Cook County State's Attorney Kim Foxx was one of the first leaders to prioritize data that the public can download and analyze.¹¹ To ensure that the public could understand and analyze the data, the office organized a workshop called Hacking 4 Justice. These workshops continue to educate community members on how to use data, bringing in volunteers to guide beginners in their efforts to download and analyze the data for their own purposes.¹² First held in 2018, the series resumed in 2023.

Prosecutors can also work to preempt attacks by using data to build constructive relationships with media, stakeholders, and the community through regular data-driven briefs. The Cook County State's Attorney's office, for instance, provides monthly data memos to elected officials that summarize incidents, arrests, and charges for offenses that occur in that official's jurisdiction. The memos consistently show that clearance rates lag behind charging rates, helping to clarify the role of the prosecutor and address potential criticism.

Over time, regularly releasing data and emphasizing it in public communications can enable the prosecutor to emerge as an alternative to the police as a source of criminal justice data. Some offices have found that journalists actively reach out to compare numbers they receive from law enforcement, giving prosecutors a useful opening to provide their viewpoint on the topic at hand and help ensure that the media has the right information.

Internal Use of Data: Management and Decision-making

Data can be used to run an office with more efficiency, fairness, compassion, and confidence. With strong data capacity, elected prosecutors and senior leadership can better understand how the office is operating and where change may be needed, while line prosecutors can gain insight into how their individual decisions fit into the broader work of the office.

Informing and driving policy changes

Reform-minded prosecutors need data to make the best decisions on where to prioritize their limited resources and how to change policy and practice tangibly. Policy change is never easy, and data, along with the prosecutor's values and vision, can help identify key areas of focus that may have the greatest return on investment.

¹¹ Data from the State's Attorney's Office is available for download from the Cook County Government Open Data portal at https://datacatalog.cookcountyil.gov.

¹² More information about these workshops is available at https://hacking4justice.org/.

CASE STUDY: Use of bail and bond data to improve adherence to policy (Fairfax County, VA)

"Data is a tool for us as well as the public."

— FAIRFAX COUNTY (VA) COMMONWEALTH'S ATTORNEY STEVE DESCANO

In October 2022, the Fairfax County Commonwealth's Attorney's Office released data on their bond data dashboard about prosecutors' decision-making in recommending pretrial detention and release. Commonwealth's Attorney Steve Descano then used this data to assess and improve his office's adherence to its bond policy, which is meant to ensure that release is recommended for most nonviolent offenses. The data showed that line prosecutors were recommending detention for nonviolent offenses more often than CA Descano believed was necessary to protect public safety. After more systematic re-training efforts on the policy, the office saw a major increase in releases for nonviolent misdemeanors and nonviolent felonies between Quarter 3 of 2022 and Quarter 1 of 2023.

Evaluating programs

Many offices interact with a variety of external partners who run deflection, diversion, treatment, probation, restorative justice, and other programs as they seek to reduce their reliance on incarceration and financial penalties. These programs come in many shapes and sizes, and like prosecutors' offices, external partners frequently lack the data resources and capacity to evaluate their work. As a result, offices may rely on these programs as alternatives to carceral sentences, but often have little way of knowing whether the programs are meeting their objectives.

Elected prosecutors can work with internal and external stakeholders to identify the outcomes they hope to see in each program – for example, higher employment rates, referrals to needed services, or reduced recidivism rates compared to cases traditionally prosecuted – and then work to find ways to capture that data.

Many reform-minded prosecutors implement new programs or expand existing ones early in their tenure. The evaluation of these reforms is especially important, both for communicating the progress made in advancing community safety and well-being and identifying ways to improve programming.

¹³ Grablick, C. (2022), Fairfax Prosecutors Pledged to End Cash Bail and Limit Pretrial Detention. What's Actually Happening?, DCist, https://dcist.com/story/22/10/27/fairfax-prosecutors-end-cash-bail-pretrial-detainment/.

¹⁴ Gathright, J. (2023), Fairfax Prosecutors Are Recommending Fewer Detentions for Non-Violent Offenses. Here's What That Means in Practice, DCist, https://dcist.com/story/23/01/31/steve-descano-fairfax-recommends-fewer-detentions/.

CASE STUDY: Evaluation research – Is this diversion program working?

Case 1: Researchers from the University of Wisconsin Oshkosh analyzed the outcomes of participants in the Winnebago County District Attorney's Misdemeanor Drug Diversion Program.¹⁵ Their analysis showed that recidivism is far lower for those who completed the program, with a 60% lower chance of reoffending per day.

Case 2: Researchers from the California Policy Lab compared youth randomly assigned to a restorative justice diversion program with a control group who faced standard felony prosecution in San Francisco. ¹⁶ Among participants, they saw a 44% reduction in likelihood of rearrest within six months relative to the control group, and the effectiveness impressively persisted three years after the program.

Addressing racial disparities

Racial disparities are ingrained in every part of our modern criminal legal system and have deep roots in slavery, Reconstruction, and Jim Crow laws. As ministers of justice, prosecutors must reckon not only with the systemic racism that has endured throughout the United States' history but also actively address how their offices may be perpetuating it. Understanding what needs attention inevitably starts with tracking race and ethnicity data.¹⁷

Some laws are all but explicit in their racist purpose, like the significantly harsher punishment for crack cocaine compared to the powder form, though they are the same drug. This disparity results in much lengthier sentences for Black people, who are more often convicted of crack cocaine offenses despite similar cocaine usage rates across races.

In addition to enforcing racially discriminatory laws, stakeholders in the criminal legal system have historically enforced policies intended as race-neutral but which have exacerbated harm to Black and brown people. For example, drug-free zone laws meant to discourage illegal drug activity around schools disproportionately impact high-density urban areas populated largely by people of color. Similarly, Black and Latino drivers are much more likely to be stopped and searched

"We need to say ['systemic racism'] out loud. ... There are so many points in the continuum where racism can enter – we need to collect data and then work on fixing those points."

¹⁵ Cotti, C.D. & Haley, M.R. (2014), Estimating the Effectiveness of a Misdemeanor Drug Diversion Program Using Propensity Score Matching and Survival Analyses, The Social Science Journal, 51(4), 638–644, https://www.sciencedirect.com/science/article/abs/pii/S0362331914000822.

¹⁶ Shem-Tov, Y., Raphael, S., & Skog, A. (2022), *The Impacts of the Make-It-Right Program on Recidivism*, California Policy Lab, https://www.capolicylab.org/wp-content/uploads/2022/05/Impacts-of-the-Make-it-Right-Program-on-Recidivism.pdf.

¹⁷ Davis, A.J., Chisholm, J., & Noble, D. (2019), *Race and Prosecution*, John Jay College, Institute for Innovation in Prosecution, https://static1.squarespace.com/static/5c4fbee5697a9849dae88a23/t/5c53598e1905f463fdfd471e/1548966286995/Executive+Session+-+Race+and+Prosecutors+FINAL+.pdf.

¹⁸ Porter, N.D., & Clemons, T. (2013), *Drug-Free Zone Laws: An Overview of State Policies*, The Sentencing Project, https://www.sentencingproject.org/app/uploads/2022/08/Drug-Free-Zone-Laws.pdf.

for non-public safety reasons than their white peers.¹⁹ Race and ethnicity data is essential to identifying the true implications of these policies, but it is often missing. Many jurisdictions do not even capture race and ethnicity data – or they track it using incomplete or inaccurate categories.

For example, in one county, researchers found while examining racial disparities that the prosecutor's case management system was not set up to record ethnicity data. Latino people – who make up 25% of the county population – were usually listed as white. The office was unaware of this shortcoming until they started looking at the data and were able to correct it with the help of their IT department.

It is important to note that race and ethnicity data is not handled uniformly across government bodies, even among federal agencies. The most common format, following the U.S. Census, is to record race (one or more of white; Black or African American; American Indian or Alaska Native; Asian, Native Hawaiian, or other Pacific Islander; and other race) and ethnicity (Hispanic/Latino or not Hispanic/Latino) separately. But a working group of federal agencies has recently proposed significant changes to this model, including combining race and ethnicity and adding another racial category.²⁰

Ensuring that racial and ethnic data are properly tracked is obviously only a starting point for prosecutors committed to alleviating systemic racism and the harm caused by the legal system. It is critical to use that data when communicating with the public about the state of the legal system and the work of a prosecutor's office. Whenever possible, research and reports should disaggregate data by race and ethnicity, emphasizing that the costs of the status quo are disproportionately borne by people of color – and how new policies aim to change that.

CASE STUDY: Reducing racial disparities in supervision practices in Philadelphia

In an effort to reduce the lengthy terms and alarmingly high rates of people on probation and parole, the Philadelphia District Attorney's Office implemented new supervision policies in 2018 and 2019 under DA Larry Krasner. Not only did data analysis show that the policies led to a decrease in median supervision length for both felony and misdemeanor negotiated plea deals, they also reduced the disparity in average supervision sentence between Black and white defendants by over 50%, from 11 months to about 5.2 months. These gains were accomplished without any increase in recidivism or re-charge rates.²¹

Improving performance management

When an office's data capabilities have sufficiently developed, the information generated and distilled can be a powerful tool for managing performance. Having easy access to each attorney's caseload, along with knowing the relative complexity of their cases, allows management to

¹⁹ Pierson, E., Simoiu, C., Overgoor, J., et al. (2020), A Large-Scale Analysis of Racial Disparities in Police Stops Across the United States, Nature Human Behaviour, 4, 736-745, https://www.nature.com/articles/s41562-020-0858-1.

²⁰ Orvis, K. (2023), Initial Proposals for Revising the Federal Race and Ethnicity Standards, The White House, https://www.whitehouse.gov/omb/briefing-room/2023/01/26/initial-proposals-for-revising-the-federal-race-and-ethnicity-standards/.

²¹ Philadelphia District Attorney's Office (2021), Ending Mass Supervision: Evaluating Reforms in the Philadelphia District Attorney's Office, https://data.philadao.com/Research.html#ending-mass-supervision-evaluating-reforms.

allocate resources more efficiently. Being able to compare case outcomes across attorneys, including use of diversion and alternatives to incarceration, can also give managers important measures of each attorney's effectiveness in achieving the office's goals.

CASE STUDY: Using internal dashboards to create a data culture within the office (King County, WA)

"Data is part of everything we do now."

— KING COUNTY PROSECUTING ATTORNEY'S OFFICE DATA ANALYTICS MANAGER AND SENIOR DEPUTY PROSECUTING ATTORNEY DAVID BAKER

Data dashboards can be just as important for daily office operations as they are for public transparency. The data lead in King County created internal dashboards used to track each attorney's filing decisions, types of cases, age of cases, and other case flow metrics.²² Instead of relying on anecdotes, attorneys can see their exact results while supervisors can see up-to-date information on active cases to aid in assignment and management.

It is important that attorneys find the dashboards and case management systems (CMS) useful to their daily work. The data lead in Seattle emphasized that it is essential to design a workflow for the CMS so that data is created through existing case management processes rather than requiring a separate step to input data. For example, when an attorney files charges and selects a charge code, the CMS automatically generates all the filing documents they need to submit to the court. It can auto-populate names of victims, defendants, charge and incident details; schedule a hearing; and draft letters to defendants or crime survivors. These capabilities generate data for management and save attorneys time, as they would otherwise have to input this information and create these documents manually.

Used along with other common methods like file audits and annual reviews, data can become a key tool for the busy elected prosecutor to understand what their office is doing on a macro level – and how they can better allocate resources to achieve their objectives.

Applying for funding

Competitive funding opportunities from the federal Bureau of Justice Assistance and similar agencies at the state level often require data on key metrics as part of the application process. When this data is easy to access and understand, it makes the application and reporting processes more efficient and requires less staff time. Ideally, expanding data capacity can create a virtuous cycle in which data is used to clearly demonstrate need, justify funding for important work, and show the effectiveness of that work, in turn expanding data capacity even further.

CHALLENGES AND OBSTACLES TO EFFECTIVE USE OF DATA

Each jurisdiction is on its own journey toward robust and meaningful data use. Here are some common obstacles offices face in their efforts to expand data capacity. The following section will introduce some recommendations to address these challenges and move forward.

²² See Appendix III for a screenshot of an internal dashboard used for management in the King County Prosecuting Attorney's Office.

Lack of Data Culture and Resistance to Data Tracking

Data literacy – the ability to understand and communicate about data – is not typically taught in law school. Staff attorneys may be indifferent or even resistant to using data in their work, believing that it distracts from the fact that each case is unique and deserves its own objective consideration. Further, the prospect of using that data to compare them with their peers can be viewed as threatening and met with skepticism. With these challenges in mind, executive management should make a concerted effort to demonstrate the value of a data-driven approach and how comparisons can improve office practice.

Lack of Resources and Investment

Although a great deal of progress has been made to center data and research in public discourse, few jurisdictions have chosen to devote sufficient resources to cultivate robust data capacity in prosecutors' offices.

With few exceptions, prosecutors' offices across the country offer attorneys relatively low salaries to manage large caseloads, making it difficult to hire and retain staff.²³ In such an environment, data is often seen as a luxury rather than a necessity, and budgets for information technology (IT) are usually only enough to keep equipment and systems up and running. If an office's funding body does not earmark funds for data infrastructure and staff, it can be difficult to justify those expenditures for what is seen as a longer-term and more uncertain investment than hiring another attorney to process cases.

CASE STUDY: Unlearning old ways with ongoing training (Chatham County, GA)

"We didn't know where our data entry practices were coming up short until we started trying to analyze the numbers. While it took time and investment to make the necessary changes to policies and processes, we're now in a place where we can get useful answers from our data that help us make better decisions to promote community safety and well-being."

— CHATHAM COUNTY DISTRICT ATTORNEY SHALENA COOK JONES

To address the backlog of cases from the COVID-19 pandemic, this prosecutor's office used American Rescue Plan Act funds to hire attorneys dedicated to moving cases through the system expeditiously. When they started to sort through the data they needed, they saw that it was often incomplete and inaccurate, and attorneys had little trust that it could be put to good use. Under the leadership of DA Shalena Cook Jones, the office created data policies and protocols and conducted training for staff who enter any kind of data. After one year of these dedicated efforts, the office is seeing improvements in their data quality.

Inadequate Staffing

As the previous sections indicate, prosecutors' offices face a wide array of challenges to accessing and drawing insights from the data they produce. Overcoming those challenges requires a

²³ Biener, A. (2021), *Prosecutor Workplace and Compensation Study*, Association of Prosecuting Attorneys, https://www.apainc.org/wp-content/uploads/2021/11/Lafayette-APA-Prosecutor-Workplace-Study-1.pdf.

broad set of abilities and knowledge that span technical skills, subject matter expertise, and communication. (The next section includes a deeper discussion of the attributes needed on a data team.) Unfortunately, in many offices, even those in large jurisdictions that employ hundreds of line attorneys, managing data and analytics is the responsibility of a single employee. Data is often only a part of that person's job, one priority among many operational or technical responsibilities. For instance, if an IT support employee is responsible for analysis, analysis is often seen as a secondary "when you get to it" set of duties on top of the critical task of keeping office technology running. Given the vast amount of work to be done, this is not an ideal arrangement.

Outdated and Inadequate Data Infrastructure

The data that is most valuable to prosecutors is often stored in court IT systems and internal case management systems (CMS) that are decades old and were not built with analysis in mind. This arrangement is workable, if not efficient, when the sole purpose of the system is to store and retrieve information about individual cases, and when the person who enters the data is the person who needs to understand it.

But when the office wants to aggregate data and look at broad trends, outdated infrastructure can make it difficult to extract the data needed to do even basic analyses. Old CMS software is often written in obsolete programming language and kept running by long-tenured IT staff. Offices commonly have to request that CMS providers run reports, which can take weeks and may be incomplete or require adjustments, making it hard to use data to answer important questions quickly. Transitioning to a new system is costly and can disrupt day-to-day work. Many offices still rely on paper files for much of their work, making the transition to a digital system another big hurdle.

Unstandardized Data Entry and Collection

Even if a CMS allows data to be exported relatively easily, the usefulness of that data depends on its uniformity and reliability. Case data is often entered by some combination of court clerical staff, the prosecutor's office's attorneys, and administrative staff. When an office is pressed for resources, the priority may be to close cases and move on to the next one without regard to preserving the details of previous cases.

This leads to problems with data consistency and standardization that are pervasive among prosecutors' offices as well as other criminal justice agencies. For example, when offices attempt to analyze case dismissals, many of them find that the reasons for dismissal are often categorized using vague terms like "in the interest of justice" that lack the specificity needed to synthesize the data and learn from it.

Free-text entry fields (those that allow the user to enter anything they like) pose another common problem in data analysis. Many of the most important aspects of a case – such as sentencing and disposition information – are often recorded in case notes entered in narrative form. For instance, a clerk might record a split sentence as "10 years in DOC and 5 years probation" or "10 in custody and 5 out" or "10 in / 5 out" – or any number of other ways. It is a time-consuming process to turn these blocks of text into data that is useful for analysis.

Another common problem occurs when there are too many options for disposition codes. One office had more than 330 disposition codes, 150 of which had never been selected during a two-year period. Many codes were bypassed for catchall categories like "insufficient evidence" or "improbability of conviction," terms that do not provide much information yet accounted

for a large portion of case dispositions. Without formal training, line prosecutors used the codes inconsistently. With assistance from Prosecutorial Performance Indicators, they formed a committee that addressed and cleaned up these codes.²⁴

Access to and Interoperability of External Data Sources

Prosecutors seeking data from other agencies – such as courts, law enforcement, and treatment providers – often find that they have similarly antiquated systems. In addition to the technical hurdles of extracting that data, some agencies are reluctant to share data if a reform-minded prosecutor's priorities are at odds with those of their own leadership.

To further complicate matters, agencies are often wary – perhaps overly so – of sharing their data with other agencies for legal reasons. The question of data ownership comes up again and again as agencies debate which pieces of their data they can share, with whom, and under what conditions. Data-sharing agreements among agencies can take months to negotiate and effectuate, sapping momentum and resources from everyone involved.

Even when data is shared, tracing a single case across multiple data sets is a tough technical challenge. Some states give each system-involved individual a state identification number that follows them throughout the legal process, but for most jurisdictions, tracking a person's path through the justice system and other government agencies is not possible at scale. It can be difficult just to follow one case from arrest to sentencing.

RECOMMENDATIONS FOR BUILDING AND ENHANCING DATA CAPACITY TO DRIVE CHANGE

While the challenges to modernizing prosecutors' offices are numerous and varied, there are now many examples of jurisdictions successfully moving this work forward and providing valuable lessons for others ready to take the next steps. The recommendations discussed below can help offices both large and small to build and enhance their data capacity as a way to help drive change and realize their vision of reform.

Build Internal Support

Making the case for data and analytic work within an office is a prerequisite to building capacity.²⁵ Although elected prosecutors do not need to manage these efforts directly, they must make

TIP: Use the organizational chart to signal that data is a priority

Upon taking office, the prosecutor in one county made a major organizational decision that highlighted her commitment to building a culture of data use in the office. She moved the data lead to report directly to her rather than to a specific division head, emphasizing the importance of using data throughout the entire organization.

"As our office has built out our data systems, we continue to discover new ways it helps us do our work more efficiently so we can better serve our community. Data has become absolutely essential to understanding what's happening throughout our office and ensuring that we are seeking the most fair and just outcomes."

²⁴ Appendix I provides an overview of the full audit process.

²⁵ The "Phase Two: Testing" section in the *Implementation Guide for Prosecutorial Performance Indicators* provides other excellent ideas for building internal support; see https://ppibuild.wpengine.com/wp-content/uploads/2020/09/2020-PPL-Implementation-Guide-FINAL-with-links.pdf.

clear that data is a priority and lend legitimacy and support to those who lead the data work.

It is safe to say that no prosecutor's office can expect a seamless transition to data-driven decisionmaking. When coming into an office that has not prioritized data, a reform-minded prosecutor will invariably find a patchwork of data systems and staff members with well-established processes that create imperfect – and often unusable – data.

To overcome these obstacles, an elected prosecutor should encourage staff to consider how data can help them in their day-to-day work. This can take many forms but should be tailored to the values that staff hold, like reducing racial disparities, promoting alternatives to incarceration, and improving communication with crime survivors.

Some concrete ways leadership can consistently emphasize the value of data and build internal support include these actions:

- Incorporate data into regular staff meetings and communications. The most important step an office can take is to put data in front of practitioners consistently and encourage them to make use of it and think critically about it. For example, the King County Prosecuting Attorney's Office makes data – such as attorney caseloads, work done, and work to be done - readily available and accessible to its leadership and practitioners, so that workloads can be equitably managed, successes recognized, and areas for improvement acted upon. Senior
 - leadership also regularly communicates with and invites data staff to meetings to answer data questions, provide data-related insights and perspective, and receive feedback. This can give the data staff ideas about how to answer new questions and improve processes – and builds trust in the data among other staff members.
- Ask staff attorneys to identify pain points regarding data in their work and identify how systems can be improved to address them. Regular check-ins with attorneys who use the CMS most can highlight practical deficiencies in the systems.
- Use quantitative metrics along with other measures in individual performance reviews. Quantitative data on case processing times, dispositions, and continuances requested can be an effective tool for assessing an attorney's performance. The King County office found that using these metrics helped the office determine whether attorneys were efficient and effective. Other measures might include frequency and use of diversion, deflection, and alternatives to incarceration.

Cite relevant internal data and/or academic research when making policy changes. Changing policy and process is often met with resistance, but incorporating an empirical case for the change – when done as part of a larger commitment to data – can help staff better understand the rationale behind those decisions.

There are many other ways to build a good data culture, including producing data visualizations,

policy memos

TIP: Include data and research in

When Washtenaw County (Ann Arbor, Michigan) Prosecuting Attorney Eli Savit released a policy directive on immigration issues, it included dozens of statistics, citations, cases, and examples of prior research that contextualized the changes.²⁶ This helped educate his staff, the media, and the broader public on the justification for the directive, building trust both internally and externally.

²⁶ Savit, E., & Burton-Harris, V. (2021), Policy Directive 2021–12: Policy Regarding Immigration and Immigration-Adjacent Issues, Washtenaw County Prosecutor's Office, https://www.washtenaw.org/DocumentCenter/ View/19692/Immigration-Policy.

engaging in long-term technology planning and replacement of legacy technologies, and accurately judging the quality of new technical hires.²⁷

Improve Data Collection and Develop Quality Assurance

When data entered into a CMS is not used for analytics, data entry standards are often discounted; once a case is closed, the record is rarely revisited, so those who enter data develop their own ways of doing things quickly. But when an office begins to aggregate that data, data standards must become a top priority; without them, data remains virtually useless.

Data quality assurance is an ongoing process. The following guidelines can help focus initial efforts, though these examples may not apply to every jurisdiction:

- Prioritize the highest-impact data points. Many offices find that basic data about case counts, charges, and dispositions are unreliable. Attempting to fix everything at once may be tempting but can lead to frustration and stalled progress. Start with a narrow focus on the most valuable data points.
- Develop a handbook for data entry standards. Instructions should be clear and specific, with screenshots and visual aids that make the directions easy to follow. Some jurisdictions create data dictionaries that define all of the relevant terms and why they were chosen.²⁸
- Hold training for data entry staff. Any staff member inputting data must be trained on expectations and standards, with clear delineation of responsibilities for entering information. New staff should always receive data training as part of their onboarding.
- **Perform regular data audits.** Data should be reviewed regularly at least quarterly to ensure that standards are being followed, correct common problems, and fill in gaps in training and documentation.

Make the Case for Funding Data Work

Prosecutors' offices usually have to make do with few resources as they begin to build their data capacity, assigning support staff or assistant attorneys the responsibilities of figuring out how to pull, clean, and communicate information stored in a case management system. Eventually, to get the most out of the data, it is immensely beneficial to have staff devoted solely to this work. Getting funding for these efforts can be challenging, so offices may find it useful to stress these arguments:

■ Emphasize operational efficiency and the real costs of antiquated systems. Give examples of how investments can help allocate staff time and resources more efficiently. In Fort Bend County, Texas, county IT staff helped lead the charge to adopt a CMS that offered sharing among prosecutors, courts, and other justice agencies. The DA's office provided critical guidance during that process, resulting in a system that saves countless hours in data entry and sharing data among agencies.

²⁷ Measures for Justice (2023), Signs of a Good Data Culture, https://measuresforjustice.org/wp-content/uploads/2023/04/Signs_of_Good_Data_Culture.pdf.

²⁸ For an example, see the data glossary published with each open data set provided by the Cook County State's Attorney's Office at https://www.cookcountystatesattorney.org/sites/default/files/files/documents/column_by_dataset_glossary_final_1.pdf.

- Show the need for transparency. Elected officials who make funding decisions, as well as public advocacy groups, often push for greater transparency from prosecutors, presenting a great opportunity to make the case jointly for funding data work. After the ACLU called for the Multnomah County District Attorney's Office to be more transparent, the office cited that demand in their next budget request, which led to funding for their first full-time data hires in 2021.
- Point to funding opportunities that require data. As previously mentioned, many federal and state grant applications require data that demonstrate need. An upfront investment in data capacity can pay off in the long run, since if awarded, these grants can help fund the data work needed for grant reporting and for future grant applications.

Find the Right People and Build a Capable Data Team

Working effectively with criminal justice data requires technical skills and subject matter expertise. Data staff must understand at least some criminal justice concepts, while attorneys need to understand at least some quantitative concepts. When possible, it is best to employ a person whose responsibilities are exclusively (or almost exclusively) within the realm of data analysis and who reports directly to the elected prosecutor.

A well-functioning data team needs to have three essential skill sets:

- 1. Criminal legal system expertise: An attorney is well positioned to understand how data relates to practice within an office. Subject matter expertise is critical to understand which questions to ask and what the answers might mean.
- 2. **Technical expertise:** Some form of technical capability is essential for those working directly with data, though advanced statistical training is not usually necessary.
 - IT skills are essential for keeping systems running and usable for day-to-day operations and to know where the data is stored and how to retrieve it. A county or other funding body often provides IT support.
 - **Data analysis** is required to work with large sets of data to visualize trends, draw conclusions, and understand the practical implications of findings.
 - Research skills are necessary to perform more sophisticated statistical tests, usually on older data, with the potential for publication. Academics or nonprofits that specialize in prosecution and related topics may be able to partner with offices to provide this type of research.
 - **Data engineering** can enable offices with greater resources and more advanced data capabilities to build their own infrastructure that facilitates easier access to data.
- 3. Project management: Organizational skills are critical to keeping data and research initiatives on track. With the many competing priorities in a prosecutor's office, data work can easily fall by the wayside unless someone is empowered to lead the work and is held accountable for its success.

Include Qualitative Research and Data

Although crucial, quantitative data alone rarely captures the full story. Prosecutors can achieve a deeper understanding of trends by using qualitative methods like stakeholder interviews, focus groups, surveys, document review, and case audits.

CASE STUDY: Deepened understanding through qualitative data

A multisite evaluation of prosecutor-led diversion programs by the National Institute of Justice used considerable qualitative data in their mixed-methods approach to provide a comprehensive picture of diversion programs.²⁹ The study included direct program observations, in-depth interviews with staff and other stakeholders, and focus groups with program participants. With some sites, they matched a comparison group of non-participants to diversion participants in a quasi-experimental impact evaluation to understand differences in outcomes.

Qualitative data can describe what is happening on a more granular level and why. The study described above was able to draw distinctions in program goals, mandates, processes, and frameworks. The authors described recidivism numbers, successes and failures, case outcomes, and costs. This breadth and depth produced essential data, not just for the individual programs, but for the field as a whole. Quantitative data can show us what is happening, but qualitative data can show us why.

Seek and Secure External Support

Prosecutors' offices have increasingly found that partnering with academic institutions and nonprofits can be a productive and mutually beneficial approach to understanding their data. Several national initiatives have sprouted up to support the development of data capacity in prosecutors' offices and lend hands-on assistance to offices with data analysis. Especially for offices with scarce resources, partnerships can move data capacity forward relatively quickly without draining budgets.

■ University partnerships: Academic researchers have taken a growing interest in research that examines ways to improve the criminal legal system. Academics are often seeking new data for their research, and the work of reform-minded prosecutors provides a unique opportunity to pursue new and interesting questions. Finding a university partner who is willing to assist with the grant application process (as well as more complex data analyses) can prove extremely helpful, especially for smaller offices.

Partnering productively with academics can initially be time-consuming as access and goals are negotiated, but many offices have found these partners to be an irreplaceable means of leveraging data.

²⁹ Rempel, M., Labriola, M., Hunt, P., et al. (2018), *NIJ's Multisite Evaluation of Prosecutor-Led Diversion Programs:* Strategies, *Impacts, and Cost-Effectiveness*, Center for Court Innovation, https://www.ojp.gov/pdffiles1/nij/grants/251665.pdf.

[&]quot;As prosecutors, the plea process is our biggest opportunity to use our discretion to create a more equitable system. ... We are proud to have invested in this data collection work, which has already shed new light on how to achieve public safety, fairness, and justice for our Durham community."

CASE STUDY: Developing a plea tracking data collection tool

The Wilson Center for Science and Justice at Duke Law partnered with the district attorneys' offices in Durham County, North Carolina, and Berkshire County, Massachusetts, to track plea negotiations.³⁰ Line attorneys in each office were asked to complete a survey about their plea negotiations after closing a case, and the Wilson Center performed all of the data analysis and reporting in consultation with leadership in the DAs' offices. This groundbreaking research has provided these offices with a new way to assess their effectiveness and fidelity to their values.

- Local legal stakeholders: Prosecutors do not work in isolation, so inviting other stakeholders such as the judiciary, defense bar, and service providers to collaborate on data initiatives can catalyze productive cooperation on shared goals. Partners can provide valuable perspective on developing realistic and meaningful quantitative metrics as well as insights into the interpretation of data.
- Research organizations: Many organizations provide technical assistance and research for criminal legal agencies. Some of these include individual academics, nonprofit organizations, and federal or other government partners.
- Data consultants: It is not practical for every office to hire for every necessary data skill set, so freelance data consultants can be valuable in filling gaps. Cleaning data, building reports, and automating processes can sometimes be handed off to consultants through a defined contract, allowing office staff to focus on what they are best at.

CONCLUSION

Data can be an extremely powerful tool as prosecutors work to build a fairer, more just criminal legal system. Regardless of where offices are in this process, nearly all of them can find value in their data and build on that as they develop and implement innovative policies and practices. The most important step to take is the next one.

Our hope is that this document will serve as a road map for offices to determine how far they've come in developing their data infrastructure and where they can go next. Like other government entities, prosecutors are largely playing catch-up when it comes to using data effectively, but we hope the lessons presented here can make the process smoother, wherever prosecutors may find themselves in this journey.

³⁰ A report on the first year of data from Durham County is available at https://wcsj.law.duke.edu/wp-content/uploads/2023/02/One-year-Durham-Plea-Tracker-Report.pdf.

[&]quot;For too long, the work of the criminal justice system has been largely a mystery. That lack of openness undermines the legitimacy of the criminal justice system. It is important for the public to know about the work of this office and our commitment to prosecute crime in a manner that is fair, equitable and just."

APPENDICES

Appendix I

CASE STUDY: A process for cleaning up disposition codes – from 330 codes to 48

One of the jurisdictions working with Prosecutorial Performance Indicators (PPI) wanted to use data to track and resolve cases more efficiently and precisely but realized that their disposition code system was antiquated and inadequate. An astonishing 300 codes had been used in fewer than 1% of cases.

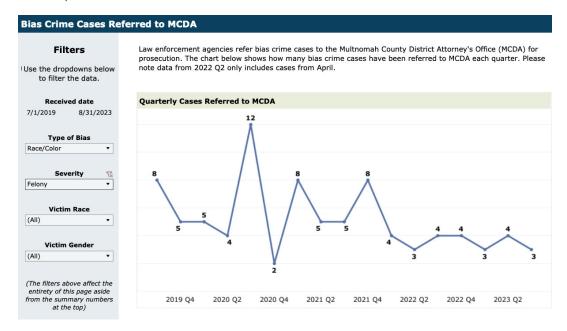
The office formed a committee that included IT staff, attorneys, and clerical staff, with assistance from Florida International University and PPI researchers. The committee's goals were to create a new set of clear, organized, and understandable disposition codes; a training procedure to educate assistant state attorneys; and a review process for adding new codes.

Committee process:

- 1. The committee analyzed case dispositions over a two-year period and looked at codes from other prosecutors' offices in Florida.
- 2. The committee created distinct categories for arrest warrant denials (AWD), dropped charges before filing (DN), and dropped counts after filing (NP).
- 3. The committee omitted codes that were not used specifically for dismissals (for example, probation modifications or terminations).
- 4. The committee analyzed each code and how it was being used.
- 5. The committee created a new list of 48 codes that incorporated the intentions of the former codes. Instead of the previous three-digit code, the new codes were alphanumeric. The letter portion represented the reason category (six total). The number separated the code within the category. The codes were given concise names and included a sentence describing each code.
 - E for evidentiary issues
 - T for time issues
 - P for prosecutorial discretion
 - L for legal reasons
 - D for issues related to the defendant
 - J for juvenile-specific issues
- 6. Each attorney received a one-pager that includes all codes and descriptions.
- 7. Training was provided to ensure consistency.
- 8. The office created a code council to review any new code requests.

Appendix II: External Dashboards

Multnomah County District Attorney's Bias Crimes Dashboard allows users to filter cases referred to their office by type of bias, severity, victim race, and victim gender. Charts are accompanied by short descriptions of the DA's role in these cases.



Source: Multnomah County District Attorney's Office

The landing page includes a list of other resources for bias crimes, as well as methodology and key definitions that show more information when hovering the cursor over a box.

Bias Response Hotline: https://www.doj.state.or.us/oregon-department-of-justice/bias-crimes/reporting-bias-to-the-hotline/

A dashboard from the Oregon Criminal Justice Commission (CJC) tracking calls to the statewide Bias Response Hotline can be found below:

CJC dashboard: https://www.oregon.gov/cjc/SAC/pages/bias.aspx

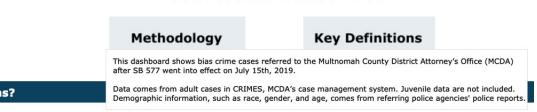
A dashboard from the Portland Police Bureau (PPB) tracking bias crime incidents referred to PPB can be found below:

PPB dashboard: https://www.portlandoregon.gov/police/77066

Statutory language describing bias crimes can be found below:

Bias Crime I: https://oregon.public.law/statutes/ors 166.165
Bias Crime II: https://oregon.public.law/statutes/ors 166.155

Hover over the text below for additional information



Source: Multnomah County District Attorney's Office

The Ramsey County Attorney's Office publishes several dashboards to explore, each with a detailed introduction on the landing page.

Adult Prosecution

Our adult prosecution team consists of pretrial, trial, and postconviction functions. Our Pretrial Justice division screens cases presented by law enforcement and determines whether charges are supported by the evidence and whether people are eligible for alternatives to justice system involvement in a way that addresses accountability while avoiding the barriers a conviction creates to housing, jobs, education and other needs. Our Trial division responds to adults accused of committing crimes by negotiating plea deals and trying cases in court to achieve justice on behalf of our community and victims impacted by the most serious crimes that occur in Ramsey County. And our Victims, Witness & Postconviction Justice division focuses on supporting victims and witnesses; ensuring postconviction justice through fair sentencings and mitigating collateral consequences of justice involvement for residents when appropriate; and helping rehabilitated residents to seal their records in court.

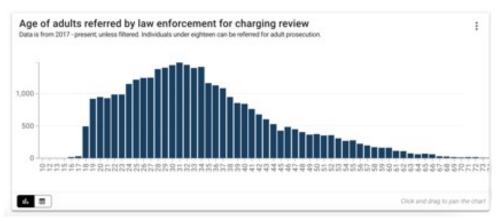
Adult Prosecution Dashboard

- Youth Justice and Wellness Data
- Ramsey County Child Support
- Performance Dashboard
- Employee Diversity Equity and Inclusion

Each chart is accompanied by a detailed explanation of the relevant elements of the criminal justice process and the county attorney's role.

Referral Data

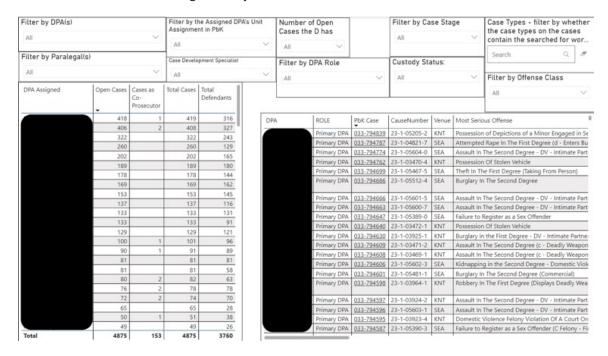
Referral data reflects incidents referred to us by law enforcement based on the charge they believe is supported by the evidence they present. If the case is charged by our office, the charge may or may not be the same as the referral charge. Referral data should not be confused with crime data; many crimes that are reported never get referred to a prosecuting attorney due to lack of available evidence.



Source: Ramsey County Attorney's Office

Appendix III: Internal Dashboards

Internal dashboards can give leadership a broad view of the activities of an office and be an invaluable tool for everyday management of workloads. The dashboard pictured below, provided by the King County Prosecuting Attorney's Office, depicts a live view of all the different attorneys' workloads. 31 Supervisors can filter to view specific attorneys, groups of attorneys, and many other things. If needed, they can also click on the underlined "PbK Case" to take them directly to that case in the office's case management system.



Source: King County (Seattle, WA) Prosecuting Attorney's Office



³¹ Individual attorney names have been redacted from the dashboard.