July 12, 2022

To: County Council

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Subject: Prosecutorial Decisions in the State's Attorney's Office

In Maryland, all Counties and the City of Baltimore have a State's Attorney whose primary responsibility is the investigation and prosecution of all criminal defendants. In Montgomery County, the State's Attorney's Office (SAO) consists of 82 attorneys and a staff of legal assistants responsible for[1]:

- Prosecuting criminal violations in the County;
- Educating the public on criminal justice issues;
- Training lawyers for future service;
- Addressing inequality and promoting fairness in the criminal justice system;
- Insuring access to the criminal justice system;
- Promoting professional relations with judges and attorneys; and
- Furthering the efficient use of criminal justice resources.

Each year, the SAO handles approximately 17,000 District Court cases and 1,300 – 1,500 Circuit Court cases.[2]

This OLO memorandum report responds to the County Council's interest in understanding how the SAO is implementing policies and procedures that promote racial equity and social justice. In particular, the Council wants to understand if there are significant differences by race or ethnicity that occur in prosecutorial decisions related to cases referred to the office. OLO was asked to examine variables associated with cases referred to the SAO by race and ethnicity to:

- Understand whether differences exist in the cases that the SAO accepted, refused, or diverted;
- Study how these variables interact depending upon the charge type (i.e., domestic abuse, DUI, drug possession, etc.); and

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[1] Mission statement on SAO website.

[2] The SAO does not handle any civil cases and only handles serious traffic cases. Correspondence with SAO; the District Court hears traffic, non-jury criminal matters, and limited civil cases, and the Circuit Court generally handles more serious criminal jury trials, and major civil cases. District Court Vs. Circuit Court In Maryland, The Murphy Law Firm and Maryland's Judicial System, Maryland Courts.

- Examine the outcome of cases filed in terms of length of pretrial detention, bail imposed, length of sentences, and probation decisions.

OLO notes that the current SAO database is not capable of the analyses required. Considering the absence of relevant data, this OLO report describes how the SAO collects data now and how data collection can be improved.

Major Findings

1. Currently, the Montgomery County SAO does not prioritize top-line data reporting[3], nor does it maintain performance measures, especially regarding differences in prosecutorial outcomes by race and/or ethnicity.

2. The SAO is unable to report data that makes comparisons between racial and/or ethnic groups in a consistent and transparent way because its data is housed in an outdated case management system that contains erroneous and inconsistent data. The SAO's data limitations include:
   - Information is stored across multiple tables and not easily merged;
   - Case data are often missing;
   - The accuracy of information is difficult to determine;
   - The database contains duplicate records;
   - The database holds legacy data that is inconsistent; and
   - Many data are not stored in fields that can be analyzed, such as PDFs.

3. According to best practices, prosecutor's offices should collect data at each important stage of the case process (e.g., charges at arrest, bail imposed, disposition decisions), as well as on all relevant case details (e.g., offense type and severity, defendant demographics).

4. Regularly collecting the data described in Finding 3 would allow for analysis of key metrics like differences in charge type, case filing decisions, pretrial detentions, diversions, and incarcerations by race and ethnicity.

5. The SAO has joined the Prosecutorial Performance Indicators (PPI) project to start developing data-driven performance indicators that can help identify racial and ethnic disparities in the outcomes of cases handled by the office.

6. The SAO is upgrading its current case management system, JustWare, to the new Karpel system, which should vastly improve its stored data and associated analysis.

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[3] Top-line reports highlight the most important details and insights from qualitative or quantitative research.

7. Other Maryland jurisdictions using Karpel note it has many advantages but emphasize that staff need sufficient training and must practice uniform data entry to make the most out of the system.

Scope of Memorandum

OLO has determined that the SAO's outdated database contains significant limitations, and any type of long-term demographic analysis would first require the data to be cleaned and reorganized. This process could take an inordinate amount of time as it requires extracting and merging hundreds of records stored across multiple tables, cleansing data of inaccuracies, and then filling in gaps in data.

Given these data issues, this OLO memorandum examines:

- How the SAO's current systems collect data;
- How the SAO's data project will help it collect the information it needs for better analysis; and
- What types of data the SAO should collect based on current research and what other jurisdictions in the country are collecting.

This memorandum is organized in the following sections:

- **Section 1** presents background information on the issue of disproportionate minority representation in the U.S. criminal justice system and the role that prosecutors' discretionary power can play in contributing to racial and ethnic disparities in criminal justice outcomes;

- **Section 2** describes the SAO's current data management processes and the limitations the office faces in analyzing case outcomes by race and ethnicity;

- **Section 3** provides an overview of the SAO's Prosecutorial Performance Indicators (PPI) data project and its plans for procuring and implementing a new case management system;

- **Section 4** reviews best practices in using data to inform prosecutorial decisions, including examples of how other prosecutor's offices regularly collect and analyze key performance indicators to measure racial bias in decision making; and

- **Section 5** presents OLO's findings and recommendations.

Methodology

To prepare this report, OLO gathered information through document reviews, data analysis, and interviews with the Vera Institute, Prosecutorial Performance Indicators, and multiple jurisdictions. OLO also received guidance and assistance from staff in SAO, the Montgomery County Department of Police, and the Maryland Courts Administrative Office.

1. Background on Racial Disparities in Prosecution

According to 2019 data from the U.S. Department of Justice, Bureau of Justice Statistics, Black American adults are incarcerated in state or federal prisons at more than five times the rate of White adults, and Hispanic/Latino adults are imprisoned at almost three times the rate.[4]

These racial disparities are also seen in Montgomery County as[5]:

- 17% of Montgomery County's population is Black, but Black people make up 55% of the County's incarcerated population;
- Similarly, Latino residents make up 17% of the total population, but 18% of the County's incarcerated; and
- By comparison, White people comprise almost half of the County's population, but make up only 27% of the incarcerated population.

Incarceration rates are the ultimate outcome of a long and complex criminal legal process that disproportionately involves Black and Hispanic/Latino residents. Prosecutors' discretionary power can play a significant role in contributing to the racial and ethnic disparities seen in criminal justice outcomes. The decisions prosecutors make during any point in a case – be it deciding whether to file or dismiss a case or to refer a defendant to a diversion program - "may result in unintended consequences harmful to members of certain racial groups."[6]

A prosecutor's ability to see and analyze how their practices impact criminal justice outcomes by race and ethnicity would therefore allow them to implement policy and procedural changes necessary to address racial inequities. However, many prosecutors lack the tools and resources needed to conduct such analyses, which require collecting a wide range of data on cases referred to their offices, including, among other things, information on case referrals, sentencing decisions, and defendant and victim demographics. Time and expertise are also needed to regularly mine and analyze this data into actionable performance metrics. A survey of prosecutor's offices conducted by the Urban Institute found that offices' often attribute data challenges to a "lack of time, a lack of resources for data infrastructure, and a lack of staff (especially with the appropriate skills and expertise)." In addition, many offices – especially smaller ones – desired guidance on what types of data to collect.[7]

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[4] Carson, Anne E., *Prisoners in 2019*, Bureau of Justice Statistics, U.S. Department of Justice, pg. 10 (October 2020).
[5] Prison Policy Initiative, Appendix A. Counties – ratios of overrepresentation, According to 2010 Census, Summary File 1, Table P1.
[6] A Prosecutor's Guide to Advancing Racial Equity, Vera Institute, pg. 5 (November 2014).
[7] Collecting and Using Data for Prosecutorial Decisionmaking, Urban Institute, pg. 10 (September 2018).

2. Review of SAO's Data and Limitations

This section discusses the limitations Montgomery County's SAO faces with its current data, describes how data flows through its office, and summarizes its current data management process.

A. Data Limitations

The SAO currently uses an electronic case management system called JustWare to manage its caseloads. Office staff report that while JustWare has served the office well in providing basic case management support, the system is not set up to easily collect and extract the type of data needed to measure performance or conduct a racial equity analysis. A review of sample data by OLO found that the SAO's database contains many missing data fields (detailed below in the SAO's Current Database section). Additionally, a criminology and criminal justice professor from the University of Maryland who is familiar with the SAO's database reports that any type of long-term demographic analysis will first require the office's data to be cleaned and reorganized. The SAO faces the following limitations to collecting and analyzing its data:

1. Information is stored across multiple tables and not easily merged.

JustWare is a relational database that represents data in tables. Each table holds information on a different aspect related to a case. For example, one table holds data on all charges while another holds data on all persons involved in cases. Analyzing this information would require extracting and merging hundreds of records stored across multiple tables, cleansing data of inaccuracies, and then filling in gaps in data; a process that could take an inordinate amount of time.

2. Case data are often missing.

Many case records in JustWare are missing data on important variables. For example, a charge disposition (which is the determination of the final arrangement of a case following judgment[8]) can be recorded in JustWare using twenty-five possible data values, yet that field is missing information 45% of the time.[9] Moreover, the database does not allow for certain data to be collected. For example, there is not adequate or accurate data on diversion, nor is there information on conditions of release (bail) or pretrial detention outcomes.

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[8] Maryland Courts Glossary of Court Terms
[9] Correspondence with Brian Johnson, University of Maryland.

3. Many data are inaccurate.

New cases are automatically populated into JustWare through a data feed that is connected to the Maryland Electronic Courts (MDEC) system.[10] Because charge information is managed and entered by court clerks, it can include inaccuracies that are beyond the SAO's control, such as misspellings, incorrect dates, or reversals of a defendant's first and last names. Moreover, court clerks receive this charge information from agencies like police departments or Maryland Court Commissioners' offices, who may themselves have committed data entry errors. For example, on the initial charge documents, data on a defendant's race is determined by the police officer who fills out the form rather than the defendant themselves. The defendant's demographic information is then entered into MDEC by a District Court Commissioner, presenting another opportunity for potential data errors.

4. The case management system contains duplicate records.

Data entry errors, like those described above, can sometimes lead to the creation of duplicate records. Even though JustWare analyzes each field of every new case to check if the record already exists within its system, a change to any single variable – for example, the misspelling of a reoffending person's name – will cause the system to create a new record. So, in this example, instead of a new charge being added to a defendant's pre-existing record, that defendant will now have multiple, unrelated records in the database. Additionally, SAO representatives note that when MDEC went live, it added duplicate cases to JustWare. SAO continues to resolve these duplications with the assistance of the MDEC vendor (Tyler), Judicial Information Systems, and Montgomery County's Integrated Justice Information System.

5. The case management system holds legacy data that is inconsistent.

Prior to the establishment of MDEC in Montgomery County in October 2021, Circuit Court data was stored on a 40-year-old legacy system. When this information moved to MDEC, some data were combined or lost due to differences in database infrastructure. Additionally, changes in the law led to the elimination of certain charging codes that had been used in the legacy system but were no longer relevant in MDEC. SAO representatives report this legacy data is inconsistent, and continually needs to be updated by staff.

6. Many data are not stored in fields that can be analyzed.

Each case record in JustWare contains a section called "Filing Cabinet" that holds case-related files in formats that are not searchable (e.g., zip files, PDF files, Word documents, and video files). These files contain supplemental information collected by the SAO like statements of charge, incident reports, and
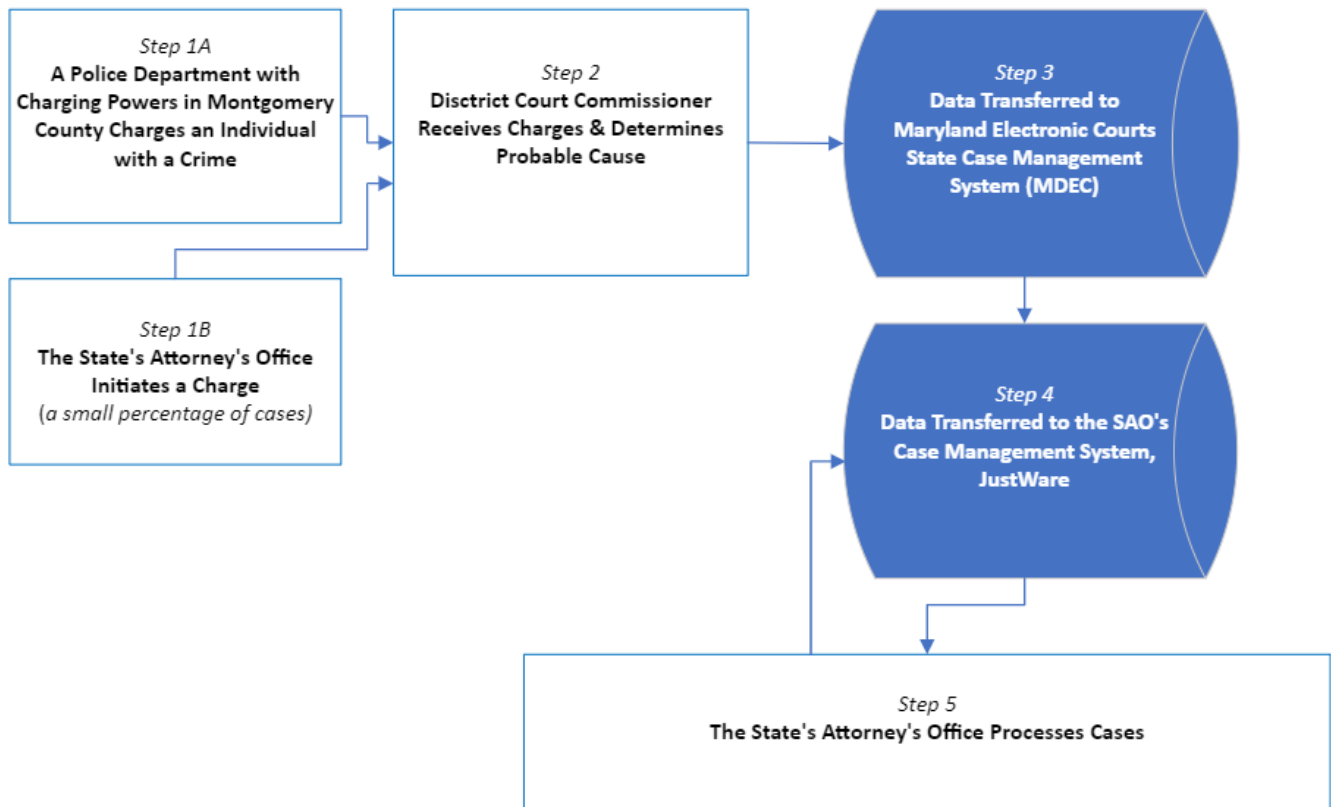
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[10] The Maryland Electronic Courts (MDEC) is an integrated electronic case management system for use by all the courts in the Maryland court system. MDEC allows courts to collect, store and process records electronically, and to access complete records as cases travel from District Court to Circuit Court and on to the appellate courts. MDEC shares data with Montgomery County's SAO (and other agencies) through a secure feed called JPortal. This data feed is one way, meaning the SAO can pull data from MDEC into their system but cannot send data back to MDEC.

criminal records, as well as evidentiary information created during a case's discovery process. These files contain important case information that, if searchable, could be used to analyze the SAO's prosecutorial decision making (e.g., data on the ethnicity and criminal history of defendants).

B. Data Flow

To illustrate how data flows into and through the State's Attorney's Office and areas where data limitations occur, the chart below outlines the prosecutorial data steps from when charges originate to when there is a potential sentence for a defendant.

Chart 1. Prosecutorial Data Flow Chart

Steps 1A & 1B: A Police Department with Charging Powers in the County Charges an Individual with a Crime or the State's Attorney's Office (SAO) Initiates a Charge.

1. A police department with charging powers in the County (e.g., Montgomery County Police Department, City of Rockville Police Department) issues a criminal or civil citation or fills out a Statement of Charges application.

2. SAO initiates charges for while collar investigations or the reopening of cold cases, but this rarely occurs - most cases are originated by police departments with charging powers. For homicides or charges involving teachers, SAO is involved in the charging process, but the police still initiate the charges.

Step 2: The District Court Commissioner Receives Charges & Determines Probable Cause

1. Reviews Statement of Charges when a police officer initiates charges.
2. Determines probable cause. If there is no probable cause, no data is transferred to the Maryland Electronic Courts State Case Management System (MDEC), and it will not become public.
3. Conducts initial appearance hearings for arrested individuals.
4. Determines eligibility of applicants for Office of Public Defender services.

Step 3: Data Transferred to the Maryland Electronic Courts State Case Management System (MDEC)

1. Data received or generated by the District Court Commissioner is made part of the court record and transferred to MDEC.

Step 4: Data Transferred to the SAO's Case Management System, JustWare

1. All applicable MDEC data is uploaded to JustWare through MDEC's JPortal data feed.
2. All case information is populated into data fields or individual files are uploaded into JustWare's Filing Cabinet.

Step 5: SAO Processes Cases; Data is Received and Entered into JustWare

1. JustWare only has read only view of data from MDEC and cannot correct errors.
2. Court administrative aides sort through Statements of Charges and pretrial reports; give packaged information to assigned teams (e.g., District Court cases are assigned to the District Court Screening Unit).
3. <u>SAO Assistant State's Attorneys (ASAs) perform the discovery phase for cases. ASAs can indict, reduce the charge to a misdemeanor, offer a plea deal, or drop the case (prosecutorial decision point).</u>
4. If the decision to indict moves forward, the case is brought before a grand jury. The SAO, defense attorney, or the court can make a referral and it could be decided that the defendant is diverted to drug court, mental health court, etc. However, the diversions are not accurately maintained in JustWare.
5. ASAs continually provide discovery for cases.
6. Cases are either resolved by way of plea or go to trial.

7. The defendant is given a sentence. ASAs fill out the sentencing guidelines in the Maryland Automated Guidelines System. However, only some attorneys download a PDF of the sentencing guidelines and put them in JustWare, leading to inconsistent sentencing data in SAO's database.

From these data flow steps, the next two sections focus on the case data in JustWare and how the existing data can be analyzed.

C. SAO's Current Database

The Maryland courts administer cases using Maryland Electronic Courts (MDEC), an integrated electronic case management system that allows courts to collect, store, and process records and to access complete records as cases travel from District Court to Circuit Court.[11] MDEC has three components: 1) JPortal, which shares case data with agencies through a secure data feed; 2) File and Serve, which allows attorneys and staff to electronically file and serve documents; and 3) MD Records Search, which gives attorneys access to documents and case records.

MDEC's JPortal data feed regularly auto populates new cases into the SAO's case management system, JustWare. The JPortal data feed is one way, meaning the SAO receives case data from MDEC, but cannot send any data back. The State Court is the owner of the data and SAO cannot edit or change it. Therefore, any activity that occurs once the SAO receives a case is only documented in JustWare and cannot be transferred back to MDEC to become part of the public case record. SAO representatives report there are approximately 900,000 case records currently in JustWare.

> The Maryland court system has two trail courts: the District Court, which hears traffic, non-jury criminal matters, and limited civil cases, and the Circuit Court, which generally handles more serious criminal jury trials, and major civil cases.[12] All cases – and electronic case records – originate in District Court before being transferred to Circuit Court, if appropriate. As such, District Court and Circuit Court cases are two different data sets in SAO's database.

SAO representatives also report that office staff use JustWare to manage caseloads and provide discovery electronically to defense attorneys.[13] They note that all office staff, including all 82 attorneys, can access and add information to JustWare. However, some staff members use the system differently than others and do not always input information consistently across the phases of a case. This

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[11] According to the Maryland Courts website

[12] District Court Vs. Circuit Court In Maryland, The Murphy Law Firm and Maryland's Judicial System, Maryland Courts.

[13] During discovery, prosecutors provide the defendant copies of materials and evidence that the prosecution intends to use at trial. This process continues from the time the case begins to the time of trial.

inconsistency in data hygiene – the collective processes an office adopts to ensure their data is clean (i.e., relatively error-free) – leads to inaccuracies in the SAO's case data.
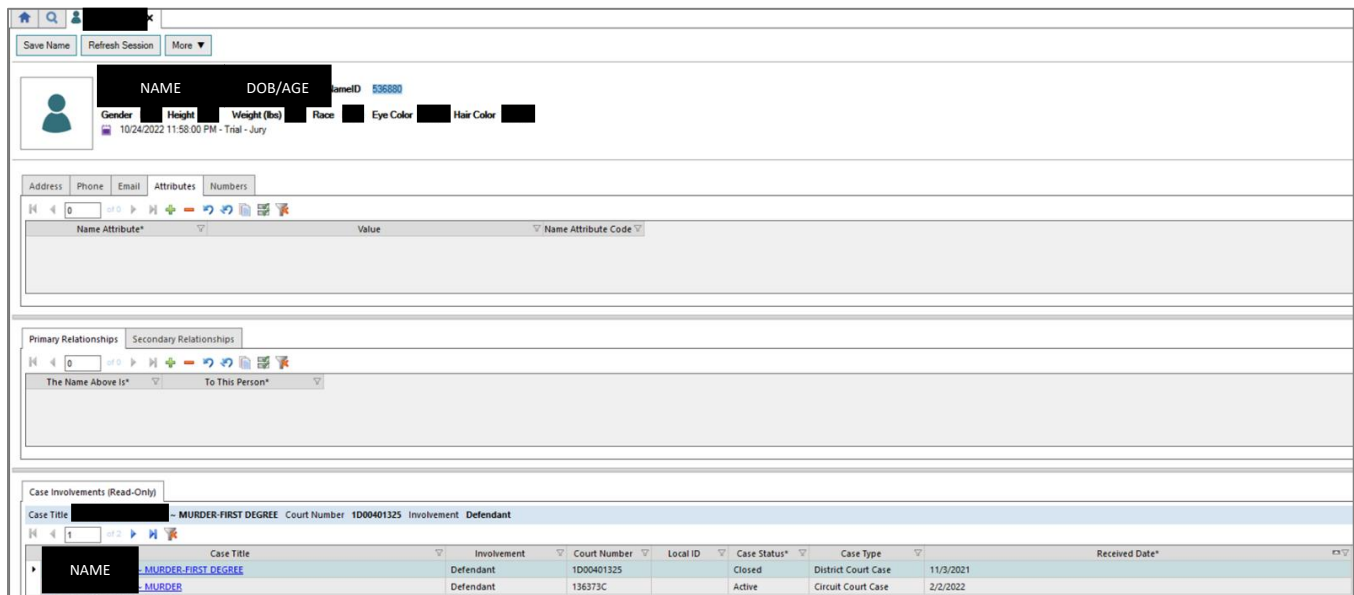
For example, when a District Court case is transferred to Circuit Court, staff must create a new Circuit Court case record in JustWare and associate it with a defendant record. In doing so, they must follow certain steps to ensure they do not overwrite the existing District Court case data in that defendant record. According to office representatives, sometimes staff members will execute this incorrectly and completely replace the existing District Court case data with new Circuit Court case data. In some instances, staff will create wholly new defendant records instead of associating a Circuit Court record with an existing defendant record, leading to duplicate defendant records in the database. Additionally, the data will create duplicate names if there are no numeric identifiers associated with a case record.

Defendant Records

As shown in Figure 1 below, every defendant record in JustWare includes the following data fields:

- Name;
- Birthdate;
- Age;
- NameID;
- Gender;

- Height (in centimeters);
- Weight (in pounds);
- Race;
- Eye Color; and
- Hair Color

Figure 1. Screenshot of JustWare Defendant Record

Personally identifiable information has been redacted

Source: SAO

Each defendant's record includes hyperlinks to associated District Court and, if relevant, Circuit Court case records. Clicking on either link takes the user to that case record.

Case Records

District and Circuit Court case records includes the following data fields:

- Case Type (District Court Case/Circuit Court Case, from dropdown menu)
- Case Status (Closed/Active, from dropdown menu)
- Status Date (from dropdown menu)
- Court Number
- Case ID
- Agency Added By (JIS-District Court Feed, etc., from dropdown menu)
- Received Date (from dropdown menu)
- Referring Agency (e.g., Montgomery County Police (Law))
- Number of charges
- Relevant flags/tags (e.g., Special Victims)

Events and Documents Tab

Case records also include an "Events and Documents" tab that contains a list of all events associated with the case. Table 1 below shows a sample of how case event data appears in a District Court case record. The table shows that each event type (column 1) can be associated with a location (column 2), an event start date and time (column 3), an event duration (column 4), an event end date and time (column 5), an event status (column 6), and a notes field (column 7).

Table 1. Sample List of Events in JustWare District Court Record

Type	Location	Start	Duration	End	Status	Notes
Closed		11/3/2021 4:23 PM	1 min	11/3/2021 4:24 PM		Case Status Date Change
PRE HEARING	R513	9/27/2019 10:00 AM	1 min	9/27/2019 10:01 AM		
Disposition-Forwarded to Circuit Court		9/26/2019 11:58 PM	1 min	9/26/2019 11:59 PM		2019/09/306LR1FORWARD TO CIRCUIT COURT , JUDGE 9M7

Source: SAO

Many of these fields, particularly those in the Location and Status columns, contain no data. Additionally, the duration of each of the three events are recorded as being one minute long. The probability that all three events would only last one minute seems unlikely, especially in the case of a pretrial, which is described in Table 1 as a "pre-hearing." Though pretrials can be short because they are held solely to confirm trail dates, SAO representatives confirm that time values in JustWare are not accurately entered. SAO representatives also note that some case record data fields, like the Notes field, are populated with multiple variables. When extracted as a report, these variables show up as one combined field that is labor intensive to parse.

Filing Cabinet Tab

Each case record also contains a section called "Filing Cabinet" that holds case-related files in formats that are not searchable (e.g., zip files, PDF files, Word documents, and video files). These files contain supplemental information collected by the SAO such as statements of charge, incident reports, and criminal records, as well as evidentiary information created during a case's discovery process. These files contain important and useful information that could be used to study trends in case outcomes, however their data cannot easily be extracted or analyzed.

D. Extracting Data for Analysis

JustWare is a relational database that represents case data in tables. Each table holds information on a different aspect related to a case. For example, in a "Case Info" table, each record includes, among other attributes, a case title, a case type code, a case status date, and a unique case ID. In a "Case Involved Persons" table, each record includes a person's name, demographic information, address, and case ID, but not the case information. The database uses a common attribute in each table to create a relationship between the tables. In this example the common attribute is the case ID. So, if an SAO staff member adds a new involved person – like a victim – to JustWare, the database can use the case ID from that table to look up the title and status of the case that person is associated with in the Case Info table.

These data tables can be extracted for analysis in Microsoft Excel, however, according to SAO representatives, the office does not currently use this data to report on any metrics or maintain performance measures. As described in the Data Limitations section above, the SAO's current data contain many inaccuracies. Moreover, because each table holds information on a different aspect of a case (i.e., Case Info, Case Involved Persons, Counts, Dispositions, etc.), analyzing long term trends would require a manual process of merging hundreds of records stored across multiple tables, cleansing that data of inaccuracies, and then filling in gaps caused by missing data.

To understand the extent of the SAO's data issues, OLO obtained a small data sample of eight case records from the office. Office representatives organized these data into four Microsoft Excel spreadsheets that present different information on the same cases. To provide OLO consistent information on the same eight cases, SAO staff had to search across multiple database tables to identify corresponding information and then consolidate the results into the four spreadsheets. For just eight records, this manual process took the SAO several weeks to complete. Furthermore, many of the case records have information missing from multiple fields.[14] These reports are summarized below:

Case Info Report

- The Case Info report contains descriptive information on a case, including its title, the date it was received, and its status (e.g., Closed).
- The report contains 41 data fields.
- Each record in the sample contains data in at least 22 out of 41 fields.
- Many fields in each record contain no data. On average, 29% of data fields in a record are empty.

Case Involved Persons Report

- The Case Involved Persons report contains defendant information, including demographics and defendant address.
- 19 fields are generated for each record in a Case Involved Persons report.
- These records are more complete than the previous report – all eight in the sample contain data in at least 13 of the 19 fields.
- On average, only 11% (2.1 out of 19) of the data fields in a record are empty. However, it should be noted that demographic variables on involved persons, like date of birth, age, race, and sex, are not always captured in JustWare records.

Counts Report

- The Counts report generates information on each count in a case record, such as a description of the offense, the offense severity (e.g., felony or misdemeanor), and the associated penalty.
- 39 data fields are included for each record in a Counts report.
- On average, each record in a Counts report has 42% of its data fields empty.

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[14] See Attachment 1 for a list of all data fields contained in each report.

Dispositions Report

- The Dispositions report contains data on the disposition decisions for each count, the date of disposition, and information on plea offers.

- This report includes 24 data fields.

- On average, 30% of the fields in each record contain no data. Some of the missing data in records include important variables like the charge disposition[15] itself.

Sentence Report

- The Sentence report contains information on the sentence assigned to each case as well as the sentence start and end date.

- 29 fields are generated from a Sentence report.

- The data contained in these records are the least complete – on average, 43% of the data fields in each record are empty.

- Information about the actual case sentence is found in the "SentenceNotes" field, which is an open-ended text field. Studies show when case management systems use open-ended text fields to store important variables rather than structured fields with a constrained set of choices, it increases the chance staff will enter data inconsistently.[16]

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[15] The charge disposition is the determination of the final arrangement of a case following judgment. Maryland Courts Glossary of Court Terms
[16] National Prosecutorial Dashboards: Lessons Learned, Themes and Categories for Consideration, Association of Prosecuting Attorneys, pg. 7 (October 2021)

3. The Prosecutorial Performance Indicators Project

On June 2, 2021, Montgomery County State's Attorney John McCarthy announced that the SAO would start a two-year, $500,000 study reviewing whether racial bias has a role in prosecutorial decisions, along with creating corresponding performance indicators.[17] The SAO chose the Prosecutorial Performance Indicators (PPI) Project to perform the study and identify indicators to measure prosecutorial performance. Previously, the SAO did not use performance metrics covering the department's prosecutions.[18]

A. Background

The PPI Project was created in October 2020 by criminologists from Florida International University and Loyola University at Chicago, with support from the John D. and Catherine T. MacArthur Foundation's Safety and Justice Challenge.[19] This project grew from an increased interest in reimagining public safety after incidents involving excessive use of force by police that led to widespread protests in 2020. The project's goal was to help prosecutor's offices move away from traditional measures focused on output, demand, and efficiency to indicators that "provide a timely shift towards priorities of safety, community well-being, justice, and fairness."[20]

PPI has created a website of resources for jurisdictions to use, including training videos, data from prosecutors' offices, and implementation guides. In addition, PPI provides consulting services to jurisdictions on creating performance indicators tailored to the jurisdiction, along with a comprehensive process for collecting the data used by the indicators.

There are a total of 55 performance indicators organized in nine objectives, with each objective aligned with one of three goals: Capacity and Efficiency; Community Safety & Well Being; and Fairness and Justice. The indicators – shown on the next page – measure inputs, outputs, activities, and prosecutorial offices' impacts.[21]

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[17] "Montgomery State's Attorney Hires Experts to Find Any Possible 'Blind Spots,' Racial Bias in Prosecutions, by Dan Morse, Washington Post, June 2, 2021.
[18] Interviews and emails with SAO.
[19] "Researchers Launch New Tool to Measure Success in Prosecutors' Offices," Press Release by Fair and Just Prosecution, October 1, 2020.
[20] Ibid.
[21] Implementation Guide for Prosecutorial Performance Indicators, Page 2

Table 2. Prosecutorial Performance Indicators, Their Objectives, and Goals

Capacity & Efficiency	Community Safety & Well Being	Fairness and Justice
Organizational & Staff Capacity	**Addressing Serious Crimes**	**Racial & Ethnic Differences**
1.1 Office Felony and Misdemeanor Caseloads	4.1 Violent Crime Prevention	7.1 Victimization of Racial/Ethnic Minorities
1.2 Felony Caseload Distribution	4.2 Acquittal for Violent Crimes	7.2 Case Dismissal Differences by Victim Race/Ethnicity
1.3 Leadership and Line Prosecutor Diversity	4.3 Violent Recidivism	7.3 Case Filing Differences by Defendant Race/Ethnicity
1.4 Staff Retention Rate	4.4 Felony Recidivism of Diversioners	7.4 Pretrial Detention Differences by Defendant Race/Ethnicity
1.5 Clerical and Paralegal Capacity	4.5 Escalation in Offending	7.5 Diversion Differences by Defendant Race/Ethnicity
1.6 Data and Analytic Capacity	4.6 Treating Serious Crime the Same Across Neighborhoods	7.6 Charging and Plea Offer Differences by Defendant Race/Ethnicity
	4.7 Addressing the Opioid Epidemic	7.7 Incarceration Differences by Defendant Race/Ethnicity
Time & Resource Prioritization	**Protecting & Serving Victims**	**Minimizing Unnecessary Punitiveness**
2.1 Ability to Identify Dismissible Cases at Filing	5.1 Victim Support Outreach	8.1 Avoiding Unnecessary Felony Charges at Filing
2.2 Strategic Case Rejections at Filing and Dismissal	5.2 Speedy Contact with Victims	8.2 Diversion as an Alternative to Incarceration
2.3 Prioritizing Cases with the Greatest Public Safety Returns	5.3 Avoiding Victim Coercion	8.3 Reducing Reliance on Pretrial Detention
2.4 Reserving Incarceration for Serious Offenders	5.4 Addressing Violent Victimization of Children	8.4 Avoiding Felony Incarceration When Possible
2.5 Accurate Diversion Decisions and Placements	5.5 Addressing Victimization of the Poor	8.5 Incarceration Triggered by Pretrial Detention of the Poor
	5.6 Addressing Sexual Assault Victimization	8.6 Discretion Over Guidelines to Avoid Excessive Penalties
		8.7 Disproportionate Punishment for the Poor
Timeliness of Case Processing	**Community Outreach & Engagement**	**Prosecutorial Ethics & Integrity**
3.1 Time to Felony Disposition	6.1 Accessibility of Prosecutor's Office	9.1 Procedural and Ethics Violations
3.2 Efficient Filing Decisions for Cases with Pretrial Detainees	6.2 Expanded Crime Reporting Opportunities	9.2 Dedication to Conviction Integrity
3.3 Time to Disposition for Pretrial Detainees	6.3 Engagement with Economically Diverse Communities	9.3 Commitment to Law Enforcement Accountability
3.4 Conforming to ABA Disposition Time Standards	6.4 Prosecutorial Participation in Community Events	9.4 Charging Integrity
3.5 Minimizing Delays in Case Processing by Limiting Continuances	6.5 Witness Cooperation	9.5 Discovery Compliance
3.6 Dismissal Timeliness	6.6 Responsiveness to Public Records Requests	

Source: Prosecutorial Performance Indicators

PPI explains how each individual indicator is measured, what data elements are needed to measure it, how often it should be measured, what the desired direction or outcome the data should take, and the rationale for measuring the indicator. Table 3 shows an example of indicator 7.2 "Case Dismissal Differences by Victim/Race Ethnicity," which is under the "Fairness and Justice" goal and the "Racial & Ethnic Differences" objective:

Table 3. Prosecutorial Performance Indicator 7.2 – Case Dismissal Differences by Victim Race/Ethnicity
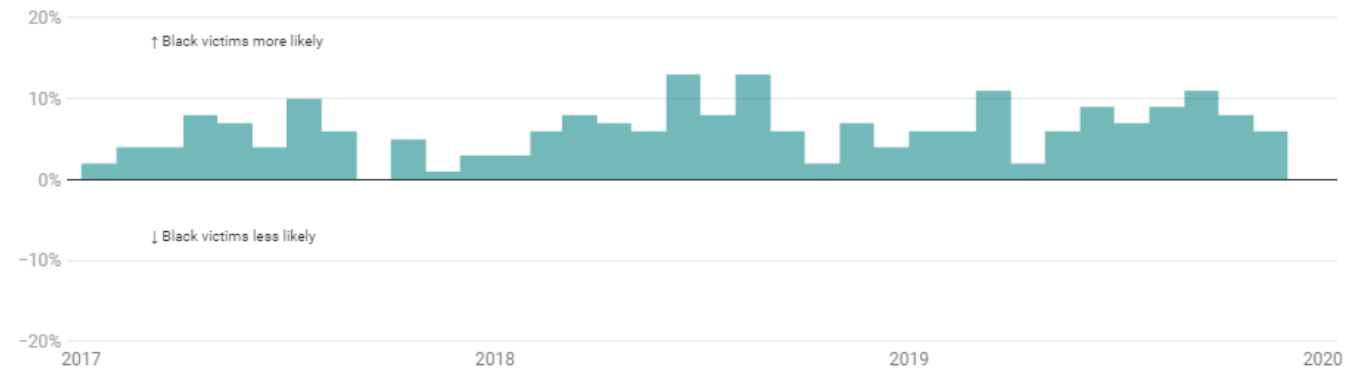
How it's measured	Percent of filed cases that were dismissed, broken down by: (a) Asian victims (b) Black victims (c) Hispanic victims (d) White victims
Data elements	1. Case filing decision 2. Case disposition type 3. Victim race/ethnicity 4. Date of case dismissal
Frequency	Monthly
Desired direction	Decrease in racial/ethnic differences
Rationale for measuring this indicator	Dismissal rates for cases with victims from different racial/ethnic groups should be similar. Higher dismissal rates for cases with Black and Hispanic victims may indicate that prosecutors are unable to engage minority victims, or that the system assigns unequal value to minority victims' experiences.

Source: Fairness and Justice Goal, Racial & Ethnic Differences Objective - Prosecutorial Performance Indicators

Furthermore, the PPI website provides visual examples of how prosecutor's offices can publicly report this data. The next page displays an example of how the data and indicator in Table 3 is used by a jurisdiction.

Figure 2. Case Dismissal Differences by Victim Race/Ethnicity (13th Judicial Circuit, Tampa, FL)

In December 2019, there was a **6 percentage point** difference in dismissal rates between cases involving Black and White victims, with cases involving Black victims more likely to be dismissed. In 2017, this difference was, on average, **5 percentage points**.

The bar chart represents the dismissal rate for cases with Black victims minus the dismissal rate for cases with White victims. The 2017 baseline was calculated as the average percentage difference in dismissal rates between cases with White and Black victims each month in 2017.

Source: State Attorney's Office for the 13th Judicial Circuit, Tampa.

Each jurisdiction the PPI project works with does not use all 55 indicators. The indicator use for each jurisdiction is based on the data that is available to and collected by the office. Typically, a jurisdiction uses 25-30 indicators.[22]

PPI's implementation plan uses a nine-step process that begins with identifying the cultural, political, and logistical challenges an office faces and ends with modifying policies to meet desired outcomes:

Phase	Step
Planning	1. Anticipating challenges 2. Staff capacity assessment 3. Data Assessment
Testing	4. Office-wide engagement 5. Piloting 6. Training
Application	7. Ongoing data collection 8. Diagnostics 9. Policy development

Source: Implementation Phases & Steps, Prosecutorial Performance Indicators

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[22] Interviews with SAO and PPI project consultants.

PPI originally piloted the program with prosecutors' offices in Jacksonville (FL), Tampa (FL), Milwaukee (WI), and Chicago (IL).[23] Besides Montgomery County, it is currently working with offices in Philadelphia (PA), Charleston (SC), Broward County (FL), Multnomah County (OR), Orange/Osceola County (FL), Lake County (IL), San Joaquin County (CA), New Orleans (LA), and in eight jurisdictions in Colorado.[24]

B. State's Attorney's Office Implementation of PPI

The SAO's PPI project started in January 2022 and is expected to take 18 months to complete. Leading the project for PPI is Melba Pearson, a civil rights and criminal law attorney from Florida International University. Dr. Brian Johnson, a criminology and criminal justice professor from the University of Maryland, is the local researcher who is partnering with PPI since he understands the political, legal, and community landscape in Montgomery County. In addition to being the project lead, Ms. Pearson's role is to gather community feedback on which indicators the SAO should adopt, and Mr. Johnson's role is to analyze the SAO's prosecutorial data.

The overall project goals include:

1. Analyze data from Circuit Court cases from 2017-2019[25];
2. Collect information from the community regarding data they are interested in seeing and understand community concerns;
3. Identify gaps in data that are currently being collected;
4. Set up a forward-facing web dashboard with applicable indicators for easy community access and increased transparency;
5. Write and publish a report after data has been analyzed; and
6. Help create internal policy changes to address any areas of concern the data analysis may uncover.

Table 4 on the next page summarizes each of the project components:

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[23] Partner Offices, by Prosecutorial Performance Indicators.
[24] Ibid and correspondence with PPI.
[25] Excluded 2020 cases due to the COVID-19 pandemic.

Table 4. Components of Montgomery County SAO's PPI Project

Project Component	Details
Data Collection	Quantitative Analysis • Received SAO data in January 2022. • Currently cleaning the data and filling gaps with data from outside sources, including defendant information on criminal records and ethnicity. • Data will then be analyzed to the extent possible based on identified indicators. Qualitative Analysis • Will conduct interviews with 20 randomly selected Assistant State's Attorneys (ASAs) in the office and conduct office-wide survey of ASAs . • Will analyze the collected information when determining indicators and potential policy changes.
Community Involvement & Outreach	• Will perform approximately three PPI-hosted listening tours with leaders from the community and understand what indicators are most important to stakeholders. • Will establish a community advisory board, comprising 12-15 community leaders from different parts of the County and representing diverse community interests. • Once established, the board will meet monthly to give input on the public-facing dashboard and relay questions and concerns from the community.
Report & Dashboard	• Will write a publicly available report on the data analysis, which will include the data collected from the case management system as well as data collected from ASA interviews and surveys. • Based on community input and available data, the consultant and the SAO IT staff will create a dashboard.

For an example of what a dashboard looks like, see Attachment 3, "State's Attorney's Office, Florida's Fourth Judicial Circuit Data Dashboard Example."

Although the new dashboard will tremendously increase SAO prosecutorial performance transparency, it cannot be accomplished with the current legacy JustWare case management system. To accomplish the data collection and analysis needed, the SAO will be implementing the "PROSECUTORbyKarpel" case management software system in conjunction with the PPI project.

C. Case Management System Upgrade

The SAO has been using the JustWare case management software system by Journal Technologies since 2010. JustWare initially served its purpose, including the ability to save case and name information, automating documents, and form generation.[26] However, the software system will no longer be supported[27] or updated,[28] and it is not equipped to perform the racial and ethnicity analysis requested by this report's original goal.[29]

With assistance from Technology and Enterprise Business Solutions, the SAO chose "PROSECUTORbyKarpel" (PbK) by Karpel Solutions case management software to address issues identified in the current legacy system. The move to PbK was approved in the FY23 operating budget, costing $1.1 million; in addition, there will be annual operating costs of $450,000 for "application and user hosting, software maintenance and support, cloud storage, and disaster recovery options."[30] SAO IT staff estimates that it will take approximately four months for contract approval, followed by six months of implementation – which will include the data transfer from JustWare[31] and staff training. The goal is to have the system go live in Spring 2023.

PbK is currently being used by State's Attorney's offices in nine Maryland Counties: Alleghany, Anne Arundel, Baltimore, Caroline, Cecil, Charles, Harford, Somerset, and Worcester.[32] OLO interviewed Anne Arundel and Baltimore Counties to get their perspectives on implementing and using the new software (summarized in Table 5 on the next page). Anne Arundel County was the first County to go live with PbK in 2015 and Baltimore County has been using PbK for the past four years.

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[26] JustWare Documentation, "What is JustWare?," by Journal Technologies
[27] FY23 Operating Budget: State's Attorney Office, by Susan J. Farag, Page 2, May 2, 2022
[28] Call to Journal Technologies' JustWare Support line. The current version, 6.3.3.11, is the last update to the software.
[29] Includes difficulty merging information across tables, duplicate records, and the inability to analyze stored documents such as PDFs, zip files, etc.
[30] FY23 Operating Budget: State's Attorney Office, by Susan J. Farag, Pages 2-3, May 2, 2022
[31] Could be longer if there are complications with the data transfer.
[32] Email with Karpel Solutions.

Table 5. Anne Arundel and Baltimore County SAO Perspectives on PROSECUTORbyKarpel

Data Fields	Karpel offers a massive amount of data fields that make analysis easy, with excellent tracking for demographics. However, the fields are only as good as the data being put in. Both Counties stressed it will be key for the County's SAO to enter the data on a consistent, uniform basis. To keep their data inputs consistent, both Anne Arundel and Baltimore Counties' SAO maintain a separate case intake team, which differs from Montgomery County's SAO (case intake done by attorneys and assistants).
File Readability	Karpel can read PDFs (for words that are searched) and populate fields in the system. Audio is not searchable and only the metadata attached to videos is searchable.
Flexibility & Updates	Minimal customization is available, but there is a new version every six months and patches (to fix errors) a few times a month. The maintenance and support from Karpel Solutions has been good; they are responsive and great at handling hurdles. There is no medium software[33] needed for PbK to connect to MDEC or other systems.
Training	Both Counties stressed that training is the most important component. The entire office needs to be consistent in entering information in order for reporting and performance analysis to work. Furthermore, the system can seem daunting at first because it contains so much information and data fields; users need to train themselves in where to look for information. The Baltimore County users said it has taken them **almost four years** to become comfortable using the system.

Highlighting the perspectives above, both jurisdictions heavily emphasized that for the software implementation to be successful, information must be uniformly entered by all staff and each staff member must receive sufficient training on using the expansive system.

Furthermore, both offices were excited to learn that Montgomery County will be using PbK since sharing information with other PbK systems is more efficient than between two different systems. Finally, Anne Arundel County's IT manager noted they have consistently been looking at other case management software upgrades for the past six years and have not found another competitor that can provide as much functionality as PbK.

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[33] Medium software is used when two software or data systems are not compatible with information/data flow. Therefore, additional software is needed so the two systems can "talk" to each other.

4. Recommended Data for Analysis and Best Practices

Research on using data to measure and inform prosecutorial decisions finds there is no one-size-fits-all solution for the types of data a prosecutor's office should collect. The choice of appropriate data points will depend on several factors, including an office's policy and/or management goals, the needs of its surrounding community and stakeholders, its technical ability to collect and manage data, and its available resources (i.e., time, money, staff).

To understand its specific data collection needs, Montgomery County's SAO must first undertake an internal process to identify which data elements will support its institutional goals. As described in Section 3 of this memo, the office began this work in January 2022 by partnering with the Prosecutorial Performance Indicators (PPI) Project who will work with the SAO to identify the right set of indicators to measure its prosecutorial performance.

A. Data Collected by Other Prosecutors' Offices

While each office will have unique data collection needs, studies recommend prosecutor's offices should, at a minimum, collect foundational information at each important stage of a criminal case. As The Vera Institute of Justice explains, collecting this basic information "is essential to determining how cases proceed through an office and whether bias is playing an unintended role in how they are handled."[34] A 2018 study by the Urban Institute also recommends that prosecutor's offices collect data on defendant characteristics such as demographics (e.g., race, ethnicity, geography) so they can measure fairness, equity, and disparities in outcomes throughout the case flow process.[35] The study surveyed 158 prosecutor's offices on how they collect and use data related to their cases and found that only a minority of offices regularly collect case detail data like defendant and victim characteristics, bail or pretrial release decisions, and the number of defendants in pretrial detention.

Case Process Data

As the research recommends, the SAO should, at a minimum, collect one-to-two pieces of data at each stage of its prosecutorial case process: at screening and charging, at pretrial release decision making, at alternative approaches, and at plea bargaining and sentencing. Table 6 compares the data points the SAO collects at each stage of its case process with data points collected by three other prosecutor's offices who each serve similarly sized jurisdictions[36] and who each completed the PPI program: the

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[34] A Prosecutor's Guide for Advancing Racial Equity, pg. 22.
[35] Collecting and Using Data for Prosecutorial Decisionmaking, pg. 15.
[36] The Office of the State Attorney, 4th Judicial Circuit serves 1.2 million residents and files approximately 35,000 cases annually; the Office of the State Attorney, 13th Judicial Circuit serves 1.4 million residents and files approximately 27,000 cases annually; the Milwaukee County District Attorney's Office serves 950,000 residents and files approximately 10,000 cases annually.

State Attorney's Offices of Florida's 4th and 13th Judicial Circuits, and the District Attorney's Office of Milwaukee County, Wisconsin.

Table 6. Data Collected at Each Stage in the Prosecutorial Case Process, by Jurisdiction

Case Process Data	Montgomery County, MD State's Attorney's Office	4th Judicial Circuit of Florida Office of State Attorney	13th Judicial Circuit of Florida Office of the State Attorney	Milwaukee County District Attorney
Case Referrals	✓	✓	✓	✓
Charges at Arrest	✓	✓	✓	
Case Filing Decisions	N/A	✓	✓	✓
Prefiling Charge Changes	✓*			
Pretrial Release	✓*			
Bail				
Disposition Type	✓*	✓	✓	✓
Plea/trial	✓	✓	✓	✓
Case Dismissal	✓	✓	✓	✓
Diversion		✓	✓	✓
Predisposition Charge Changes	✓*			
Sentencing	✓*	✓		✓
Non-Custodial		✓		
Time Served		✓		
Custodial		✓		✓
Recidivism			✓	

*Data accuracy issues

Source: SAO; State Attorney's Office of Florida's Fourth Judicial Circuit Data Dashboard; Office of the State Attorney Florida's 13th Judicial Circuit Data Dashboard; Milwaukee County District Attorney Data Dashboard

The table shows that while the SAO collects nine out of 16 listed data points, the five data points marked with asterisks include the following data accuracy issues:

- **Prefiling charge changes:** The SAO reports this information is likely inaccurate but could be manually confirmed by checking information stored in PDF indictment files.
- **Pretrial release:** Pretrial release information is stored in the "events" section of the database and are not easily extracted for analysis.
- **Disposition:** The SAO reports information on dispositions can be misleading because records are marked "Nolle Prosequi" (do not prosecute/dismiss), or "Guilty" by charge count, not by the overall case. Many cases that are marked Nolle Prosequi are in fact part of a plea deal containing Guilty counts. This important distinction would be lost in any aggregate analysis of the current data.

- **Predisposition charge changes:** The SAO emphasized that when charges are changed in a Circuit Court case, the changes will overwrite the existing original charge information if they are entered incorrectly into the database.[37] This prevents any comparisons of the charges at disposition with the original District Court charges.
- **Sentencing:** Sentencing data is recorded by the Courts into MDEC and auto populates into JustWare. Because of this, the SAO is unsure about the accuracy of sentencing data. The SAO's biggest concern is that sentence information is noted by count and may not show sentences for all counts in a case.

Additionally, the SAO does not collect Case Filing Decisions because procedurally, the office does not accept or reject cases. Charges are initiated and charged by the police and probable cause is determined by the District Court Commissioner. The SAO sees most cases post-charge. Cases are only transferred into JustWare when they are filed, or in other words, accepted. There is no data on rejected cases because they do not exist.[38]

Case Detail Data

Researchers also recommend that offices collect data on relevant case details – such as defendant characteristics and prior arrests/convictions – to help prosecutors understand the extent to which other contextual factors – like demographics or criminal history – may contribute to disparities in case outcomes. Table 7 on the next page again compares data collected by the SAO with data collected by three other jurisdictions, this time outlining the information each office collects on relevant case details. The table shows that while the SAO collects 11 out of 12 listed data points, accuracy issues exist with three data points:

- **Demographics:** The SAO's current database does not collect information on defendant ethnicity. Ethnicity data is often missing in the initial charge documents that come from the police department.
- **Criminal History:** The SAO reports that data on a defendant's criminal history is not collected as separate fields in its database but that some Circuit Court case records may include this information in PDF files.
- **Assigned Prosecutor:** This data is only recorded for Circuit Court cases, not for District Court cases.

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[37] SAO reports that District Court data in JustWare suffers from data accuracy issues. JustWare is a name-based case management system where new data replaces old data. All cases originate in District Court, but when a case is transferred to Circuit Court, SAO staff must follow certain steps to ensure they do not overwrite the existing District Court case data in that defendant record. This is not always done correctly, and often new data replaces old data.
[38] Correspondence with SAO.

Table 7. Case Detail Data Collected for All Cases, by Jurisdiction

Case Detail Data	Montgomery County, MD State's Attorney's Office	4th Judicial Circuit of Florida Office of State Attorney	13th Judicial Circuit of Florida Office of the State Attorney	Milwaukee County District Attorney
Case Referral Agency	✓			✓
Defendant Demographics	✓*	✓	✓	✓
Race	✓	✓	✓	✓
Ethnicity		✓	✓	✓
Gender	✓	✓	✓	✓
Age	✓	✓	✓	✓
Charge Information	✓	✓	✓	✓
Charge Type	✓	✓	✓	✓
Severity of Charge	✓	✓	✓	✓
Criminal History (prior charges/prior arrests/prior convictions)	^		✓	
Defense Counsel Type	✓			
Assigned Prosecutor	✓^			

*Data accuracy issues

^Contains partial information

Source: SAO; State Attorney's Office of Florida's Fourth Judicial Circuit Data Dashboard; Office of the State Attorney Florida's 13th Judicial Circuit Data Dashboard; Milwaukee County District Attorney Data Dashboard

This comparison shows that while the SAO can collect many of these data in its current database, the quality of the information is questionable. Additionally, the office does not currently use the data it has to report on any metrics or maintain performance measures for the office.

State Attorney's Office of Florida's 4th Judicial Circuit

There is a growing movement among prosecutor's offices to use the types of data described above to both improve their performance in areas like efficiency and public safety and to identify whether racial bias exists in case outcomes. Identifying key performance indicators (KPIs) "that are relevant and meaningful to their own jurisdictions"[39] will help offices effectively measure progress toward performance goals. Identifying KPIs that measure racial and ethnic differences in prosecutorial case processes are especially important since a prosecutor's discretion can play a significant role in reducing or worsening disparities in outcomes for minority defendants.

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[39] Collecting and Using Data for Prosecutorial Decisionmaking, pg. 15

Many prosecutor's offices across the country, including the County's SAO, are implementing the Prosecutorial Performance Indicators (PPI) Project to develop their own KPIs. PPI has outlined 55 indicators that prosecutors can use to measure performance.[40]

The State Attorney's Office of Florida's 4th Judicial Circuit[41] is a PPI pilot partner that is successfully implementing KPIs to measure several factors, including racial and ethnic bias related to cases handled by the office. The office regularly uses the metrics listed in Table 8 to measure nine objectives:[42]

Table 8. Key Performance Indicators Measured by State Attorney's Office, Florida's 4th Judicial Circuit

Objective	Metrics
Organizational and Staff Capacity	Volume of Cases; Cases Resolved Through Jury Trial; Leadership and Prosecutor Diversity; Staff Retention Rate; Clerical and Paralegal Capacity; and Data and Analytic Capacity
Time & Resource Prioritization	Identification of Dismissible Cases at Filing; Prioritizing Cases with the Greatest Public Safety Returns; and Law Enforcement Filing Partnership
Timeliness of Case Processing	Time to Felony Disposition; and Conforming to the American Bar Association Disposition Time Standards
Addressing Serious Crime	Gun Crime; Felony Recidivism of Diversioners; and Treating Crime the Same Across Neighborhoods
Protecting and Serving Victims	Addressing Violent Victimization of Children; Addressing Victimization of the Poor; and Addressing Sexual Assault Victimization
Community Outreach and Engagement	Accessibility of Prosecutor's Office; Community Engagement Meetings; and Witness Cooperation
Racial & Ethnic Differences	Victimization of Racial/Ethnic Minorities; Case Filing Differences by Defendant Race/Ethnicity; Pretrial Detention Differences by Defendant Race/Ethnicity; Diversion Differences by Defendant Race Ethnicity; Incarceration Differences by Defendant Race/Ethnicity
Maximizing Prosecutorial Fairness	Diversion as an Alternative to Incarceration; Improving Outcomes for Juveniles; Disproportionate Punishment for the Poor; Treating Crime the Same Across Neighborhoods; and Accurate Diversion Decisions
Prosecutorial Ethics and Integrity	Dedication to Conviction Integrity; and Commitment to Upholding the Law

Source: State Attorney's Office of Florida's Fourth Judicial Circuit Data Dashboard

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[40] See Section 3 for a list of all 55 PPI indicators.

[41] The 4th Judicial Circuit comprises Clay, Nassau, and Duval Counties (which includes the city of Jacksonville) and is home to 1.2 million residents. The office staffs 106 attorneys and files approximately 35,000 cases annually. PPI Project Partners.

[42] See Attachment 2 for a detailed list of the 4th Judicial Circuit's indicators and the data they use to measure them.

PPI provides its partner offices with a technical implementation guide that defines each metric by how it is measured, the data elements used to measure it, how often it should be measured, the desired direction the data should go (i.e., decrease or increase), and the rationale behind measuring this data.

For example, to measure whether differences in incarceration exist by defendant race and/or ethnicity in the cases it prosecutes, the State Attorney's Office of Florida's 4th Judicial Circuit calculates the median number of days defendants are incarcerated, separately for felonies and misdemeanors, broken down by a) Black defendants, b) Hispanic defendants, and c) White defendants.[43] To make this calculation, the office has specifically designed its case management system to regularly collect the following data elements:

- Type of sentence issued;
- Length of sentence issued;
- Disposition offense severity;
- Defendant race/ethnicity; and
- Date of disposition

B. Recommended Metrics and Potential Analysis

The case process and case detail data described in Tables 6 and 7 and the data collected by Florida's 4th Judicial Circuit SAO described in Table 8 can serve as models for the types of data the County's SAO can collect on its cases. If the SAO's database contained complete and accurate records with these data points it would allow OLO to analyze the following key metrics related to whether racial and ethnic differences exist in cases handled by the Office as requested by County Council:

- The volume of cases referred to the SAO by referring agency, by offense type and severity, and by defendant race and ethnicity;
- Pretrial detention differences (i.e., percent of defendants detained vs. released pretrial; bail imposed) by offense and by defendant race and ethnicity;
- Diversion differences by offense and by defendant race and ethnicity;
- Disposition differences (i.e., percent of cases that accept plea offers, go to trial, or are dismissed) by offense and by defendant race and ethnicity; and
- Incarceration differences (i.e., type and length of sentence issued) by offense and by defendant race and ethnicity.

The goal of the SAO's project with PPI – which is explained in Section 3 of this memo – is to improve their ability to collect, analyze, and share these types of data and performance metrics going forward.

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[43] State Attorney's Office of Florida's Fourth Judicial Circuit Data Dashboard

C. Data Considerations

Central to the discussion on data collection is the importance for a prosecutor's office to have an effective case management system (CMS) and office staff who are sufficiently trained to manage it. Studies recommend that an office's CMS be specifically designed so case data can be gathered and entered accurately. Additionally, data from the CMS should be easy to retrieve and analyze so it may be confidently used by decisionmakers to make changes and improvements to office policies and procedures.

As the SAO upgrades its CMS over the next year, OLO recommends it keep the following data considerations in mind:

- A new CMS should have structured fields with a constrained set of choices such as checkboxes, dropdown lists, and short text fields where only a specific set of possible values can be accepted. This will limit the types of data accuracy errors described in Section 2 that the SAO experiences with its current database software.[44]
- Notes fields, or other unstructured formats that are difficult to parse, should be used only to provide context and not to record important information that can be used for measurement such as sentence lengths or bail information.[45]
- The number of allowed values within fields should be comprehensive yet limited. This ensures staff will enter data consistently and will allow data to be systematically categorized for analysis.[46]
- Ensuring data is entered accurately requires that staff are trained in standard office data-entry protocols and are given sufficient time for data entry.
- Assigning dedicated staff to data entry and analysis, as other jurisdictions have done, can ensure data accuracy and provide regular management of the data feed to a forward-facing dashboard.

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[44] Collecting and Using Data for Prosecutorial Decisionmaking, pg. 7
[45] Ibid, pg. 7-8
[46] Ibid, pg. 7-8

5. Findings and Recommendations

This section summarizes the findings of this memorandum report and presents OLO's recommendations based on the findings.

A. Findings

1. The State's Attorney's Office has not prioritized top-line data reporting or performance measurement.

Currently, the SAO does not use the data it has to report on any metrics or maintain performance measures, especially regarding differences in prosecutorial outcomes by race and/or ethnicity. The limitations of the office's data (described in Finding 2) make it unlikely to be compiled for such analysis in its current form.

2. The SAO is unable to report data that makes comparisons between racial and/or ethnic groups in a consistent and transparent way because their data is housed in an outdated case management system that contains erroneous and inconsistent data.

In discussions with the State's Attorney and his staff, OLO found significant limitations with the SAO's case data that make it difficult to complete the type of demographic analysis requested by the Council. OLO confirmed these constraints with Brian Johnson, a professor of criminology and criminal justice at the University of Maryland, who is currently conducting a statistical analysis of the SAO's data and encountering the same limitations. These data constraints include:

- Information is stored across multiple tables and not easily merged;
- Case data are often missing;
- Many data are inaccurate;
- The database contains duplicate records;
- The database holds legacy data that is inconsistent; and
- Many data are not stored in fields that can be analyzed, such as PDFs.

3. The SAO's data entry practices are inconsistent, leading to inaccuracies in case data.

The SAO representatives note that all office staff can access and enter information into its database, but staff do not follow consistent data entry protocols. Some staff use the system differently than others and some forget to input information at various times during a case. This inconsistency in data hygiene practices leads to data errors and missing information.

4. **Best practice research suggests that the SAO should, at a minimum, collect one-to-two pieces of data at each stage of its prosecutorial case process as well as on all relevant case details, including:**
   - Number of cases referred to SAO;
   - Charges at arrest and charge changes;
   - Case filing decisions (e.g., cases accepted, declined, or diverted);
   - Pretrial decisions (pretrial detention, pretrial release, bail);
   - Disposition decisions (e.g., plea/trial, case dismissal, diversion);
   - Sentencing decisions (e.g., non-custodial, time served, custodial); and
   - Case details (collected for every case)
     - Case referral agency
     - Offense information (i.e., offense type, severity)
     - Defendant characteristics (e.g., race, ethnicity, gender, age)
     - Defendant criminal history (e.g., prior charges, arrests, and/or convictions)

5. **Regular collection of the case process and case detail data described in Finding 4 would allow for analysis of the following key metrics:**
   - The volume of cases referred to SAO by referring agency, by offense type and severity, and by defendant race and ethnicity;
   - Case filing differences (i.e., percent of cases filed vs. dismissed) by offense and by defendant race and ethnicity;
   - Pretrial detention differences (i.e., percent of defendants detained vs. released pretrial; bail imposed) by offense and by defendant race and ethnicity;
   - Diversion differences by offense and by defendant race and ethnicity;
   - Disposition differences (i.e., percent of cases that accept plea offers, go to trial, or are dismissed) by offense and by defendant race and ethnicity; and
   - Incarceration differences (i.e., type and length of sentence issued) by offense and by defendant race and ethnicity.

6. **The State Attorney's Office of Florida's 4th Judicial Circuit provides a good example of a jurisdiction that regularly analyzes key performance indicators to measure progress towards office goals, including identifying racial and ethnic differences in its case outcomes.**

The State Attorney's Office of Florida's 4th Judicial Circuit uses the Prosecutorial Performance Indicator project to identify what metrics to measure and why, how often to measure them, and the desired outcome they want to see from the data. The office collects case process and case detail data that allow it to measure several factors, including racial and ethnic differences in case filing decisions, diversions, and juvenile case outcomes.

7. **According to best practice research, a prosecutor's office should implement data hygiene practices and design its case management system so data can be collected and entered accurately.**

Studies recommend that office staff are trained in data-entry protocols to ensure data are consistently and correctly managed. Researchers also recommend that an office specifically design its case management system to limit data accuracy errors such as duplication of records, missing fields, inconsistent values, and unstructured data formats that are difficult to parse.

8. **Research finds that office staff require sufficient time and training to both manage data correctly (i.e., accurate data entry) and to conduct regular data analysis.**

Researchers emphasize that office staff require enough resources to implement regular data collection and analysis, including time, enough personnel with the appropriate skills and expertise, and sufficient data infrastructure within the office.

9. **The SAO is using the Prosecutorial Performance Indicators (PPI) model to develop data-driven performance indicators that can help identify racial and ethnic disparities in the outcomes of cases handled by the office.**

Independent from this OLO study, the SAO has hired PPI to analyze its current data to better understand its prosecutorial decision making and to improve its ability to collect, analyze, and share data going forward. The SAO is particularly interested in developing indicators that can identify any racial or ethnic disparities in prosecutorial outcomes. PPI's team includes a professor of criminology and criminal justice from the University of Maryland who is analyzing a sample from the SAO's database to identify trends in its current data that will inform the development of new performance measures. The project began in January 2022 and is expected to take 18 months.

10. **The SAO is upgrading its database to the Karpel case management system.**

The SAO has chosen the "PROSECUTORbyKarpel" (Karpel) case management system to replace its current JustWare system. The funding for the upgrade was approved in the FY23 operating budget, costing $1.1 million plus annual operating costs of $450,000. SAO representatives report the new system will address issues identified in the Office's current legacy system and should vastly improve its stored data and any associated reporting. The SAO expects the system will go live in Spring 2023.

11. Other jurisdictions in Maryland are using Karpel effectively but emphasize that successful implementation is only possible if staff enter data uniformly and receive sufficient training on how to use the system.

Representatives from both Anne Arundel and Baltimore Counties noted that Karpel is a powerful system that can take a few years for staff to become familiar with. They recommend that the SAO dedicate enough personnel and staff time for data intake and emphasized the need for staff to practice uniform data entry.

B. Recommendations

The Councilmembers may want to consider the following in their discussion with the State's Attorney's Office about obtaining the desired information regarding race and ethnicity:

1. Prioritize data collection at each important stage of a case, especially for race and ethnicity analysis.

2. Prioritize the development of key metrics. Based on those metrics incorporate the necessary tracking and reporting mechanisms into the new Karpel case management system.

3. Develop data hygiene protocols to ensure case data is accurate and standardized.

4. Ensure there is sufficient staff training and capacity to regularly collect and analyze data in the new Karpel case management system.

5. Once the data is accessible, request that the State's Attorney's Office report to Council every six months the key metrics outlined by OLO.

6. Acknowledgements

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Attachment 1. Data fields Contained in JustWare Reports

CaseInfo Report

- The Case Info report contains descriptive information on a case, including its title, the date it was received, and its status (e.g., Closed).
- The report contains 41 data fields.
- Every record in the sample contains data in 22 out of 41 fields (represented by bolded text).
- Many fields in each record contain no data. On average, 29% of data fields in a record are empty.

Case ID	Case Title	Local ID
Local ID Number Type Code	Local ID Number Type Description	**Case Type Code**
Case Type Desc	**Case Received Date**	**Case Status Code**
Case Status Description	**Case Status Master Code**	**Case Status Date**
Arrest Date	**Agency Add By Code**	**Agency Add By Desc**
Law Number	Law Number Type Code	Law Number Type Description
Court Number	**Court Number Type Code**	**Court Number Type Description**
Prosecutor Number	**Prosecutor Number Type Code**	**Prosecutor Number Type Description**
Defense Number	Defense Number Type Code	Defense Number Type Description
Misc. Number	Misc. Number Type Code	Misc. Number Type Description
Case Add By Name ID	**Case Add By Name Description**	**Case Add Date**
Case Mod By Name ID	Case Mod By Name Description	**Case Mod Date**
Owner Name ID	Location	Generate Case Title
Sealed	**Case Received Dt As Date**	

CaseInvPers Report

- The Case Involved Persons report contains defendant information, including demographics and defendant address.
- 19 fields are generated for each record in a Case Involved Persons report.
- These records are more complete than the previous report – all eight in the sample contain data in 13 of the 19 fields (in bolded text).

- On average, only 11% (2.1 out of 19) of the data fields in a record are empty.

CaseInvPersID	CaseInvPersNameID	CaseInvPersFullName2
CaseID	**InvolveTypeDesc**	**CaseTitle**
CourtNum	ProsNum	LawNum
DOBAsDate	Age	RaceDesc
SexDesc	**AddressTypeCode**	**AddressTypeDesc**
Address	**City**	**StateCode**
Zip		

Counts Report

- The Counts report generates information on each count in a case record, such as a description of the offense, the offense severity (e.g., felony or misdemeanor), and the associated penalty.
- 39 data fields are included for each record in a Counts report.
- On average, each record in a Counts report has 42% of its data fields empty.

CountID	CaseID	CountNum
CountIncidentDt	CountIncidentEndDt	Date
CountNotes	Notes2	CountTypeCode
CountTypeDesc	CountTypeMasterCode	ParentCountID
CountLeadNumber	CountLeadAgencyCode	**StatuteID**
CountAddByNameID	**CountAddDt**	**CountModDt**
CountModByNameID	**StatuteCode**	**StatuteDesc**
StatuteShortDesc	**StatuteCombined**	StatutePenaltyDesc
StatuteChargeID	StatuteCategoryCode	StatuteCategoryDesc
StatuteClassCode	StatuteClassDesc	StatuteSeverityCode
StatuteSeverityDesc	StatuteActiveDt	StatuteExpirationDt
StatuteSourceCode	StatuteSourceDesc	Class_Code
Sealed	StatuteActiveDtAsDate	StatuteExpirationDtAsDate

Dispositions Report

- The Dispositions report contains data on the disposition decisions for each count, the date of disposition, and information on plea offers.
- This report includes 24 data fields.
- On average, 30% of the fields in each record contain no data. Some of the missing data in records include important variables like the charge disposition[47] itself

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[47] The charge disposition is the determination of the final arrangement of a case following judgment. Maryland Courts Glossary of Court Terms

CaseInvPersID	CountInvPersID	EventID
CountID	**CountNum**	**StatuteID**
Plea	PleaDt	Dispo
DispoDt	**NameID**	**CaseID**
AddBy	**AddDt**	**ModBy**
ModDt	**AddByDesc**	**ModByDesc**
Type	TypeDesc	TypeMasterCode
Sealed	Notes	Notes2

Sentence Report

- The Sentence report contains information on the sentence assigned to each case as well as the sentence start and end date.
- 29 fields are generated from a Sentence report.
- The data contained in these records are the least complete – on average, 43% of the data fields in each record are empty.

EventID	CaseID	CountID
CountInvPersID	**CountInvPersNameID**	**SentenceDt**
SentenceEndDt	**SentenceTypeCode**	**SentenceTypeDesc**
SentenceLocationCode	SentenceLocationDes	SentenceStatusCode
SentenceStatusDesc	**SentenceNotes**	Title
Date	Amount1	Amount2
SentenceFromMin	SentenceFromDesc	SentenceToMin
SentenceToDesc	SentenceDurationDesc	**Sealed**
SentenceAddByNameID	**SentenceAddDt**	SentenceModByNameID
SentenceModDt	ParentEventID	

Attachment 2. Key Performance Indicators Collected and Measured by The State Attorney's Office of Florida's Fourth Judicial Circuit

Objective 1:   Organizational & Staff Capacity

Available Indicators	How it's measured	Data elements collected
Volume of Cases	(a) Total number of cases handled by the SAO (b) Cases handled broken down by type	Number of criminal cases referred to the State Attorney's Office
Cases Resolved Through Jury Trials	Number of jury trials conducted by prosecutors	Number of cases resolved through trial by jury
Leadership and Prosecutor Diversity	(a) Percent of prosecutors in leadership positions who are racial and ethnic minorities and/or females (b) Percent of prosecutors who are racial and ethnic minorities and/or females	1. Prosecutor gender 2. Prosecutor race/ethnicity 3. Prosecutor position (leadership or prosecutor) 4. List of prosecutors at the start of each year
Staff Retention Rate	(a) Percent of all legal staff who discontinued working in the office (b) Percent of all non-legal staff who discontinued working in the office	1. Name of each legal and non-legal staff member employed at the start of the quarter 2. Name of each legal and non-legal staff member employed at the end of the quarter
Clerical and Paralegal Capacity	Percent of staff who are solely in clerical, paralegal, or general support positions	1. Number of total staff at start of year 2. Number of clerical/paralegal/support staff at start of year
Data and Analytic Capacity	Number of non-clerical staff dedicated to IT/data analytics	Number of staff dedicated to IT/data analytics at start of year

Objective 2:   Time & Resource Prioritization

Available Indicators	How it's measured	Data elements collected
Identification of Dismissible Cases at Filing	(a) Percent of cases rejected at filing (b) Percent of cases dismissed after filing	1. Referral offense severity 2. Case filing decision 3. Case disposition type 4. Date of filing decision 5. Date of case disposition
Prioritizing Cases with the Greatest Public Safety Returns	Percent of cases filed that had a felony top charge	1. Filing offense severity 2. Case filing decision 3. Date of case filing
Law Enforcement Filing Partnership	Electronic Transmittal Filing Initiative Beaches Filing Initiative- Patrol and Investigative Beaches Filing Initiative- Arrest Warrants	Hours saved Overtime saved Dollars saved

Objective 3:   Timeliness of Case Processing

Available Indicators	How it's measured	Data elements collected
Time to Felony Disposition	(a) Average number of days from filing to disposition for felony cases (b) Median number of days from filing to disposition for felony cases	1. Filing offense severity 2. Date of case filing 3. Date of case disposition
Conforming to the American Bar Association Disposition Time Standards	Percent of filed cases disposed of within the Conforming to the American Bar Association Disposition Time Standards time standard.	1. Filing offense severity 2. Date of case filing 3. Date of case disposition

Objective 4:   Addressing Serious Crime

Available Indicators	How it's measured	Data elements collected
Gun Crime	Number of Gun Crimes referred for prosecution	1. Referral offense type 2. Date of case referral
Felony Recidivism of Diversioners	Number of felony cases filed in which defendant terminated a diversion program within previous 12 months	1. Filing offense severity 2. Case filing decision 3. Date of previous diversion termination 4. Date of case filing
Treating Crime the Same Across Neighborhoods	Percent of felony cases rejected or dismissed involving defendants from median household income ZIP codes in: (a) top quintile (b) bottom quintile	1. Filing offense severity 2. Case disposition type 3. Offense ZIP code 4. Crime rate of each ZIP code in jurisdiction 5. Date of case disposition

Objective 5:   Protecting and Serving Victims

Available Indicators	How it's measured	Data elements collected
Addressing Violent Victimization of Children	(a) Number of violent victimizations of children under 13 (b) Number of violent victimizations of children age 13-17	1. Referral offense type 2. Victim age 3. Date of case referral
Addressing Victimization of the Poor	Violent victimization rate in bottom quintile of median household income ZIP codes	1. Referral offense type 2. Victim ZIP code 3. Median household income of each ZIP code in jurisdiction 4. Population of each ZIP code in jurisdiction 5. Date of case referral
Addressing Sexual Assault Victimization	Percent of all sexual assault referrals that resulted in conviction	1. Referral offense type 2. Case disposition type 3. Date of case disposition

Objective 6:   Community Outreach and Engagement

Available Indicators	How it's measured	Data elements collected
Accessibility of Prosecutor's Office	Number of walk-ins to offices/community centers	Date of walk-in
Community Engagement Meetings	Number of community meetings held	Date of meeting
Witness Cooperation	Percent of all dismissed cases that resulted from a lack of witness cooperation	1. Case disposition type 2. Reason for case dismissal 3. Date of case disposition

Objective 7:   Racial & Ethnic Differences

Available Indicators	How it's measured	Data elements collected
Victimization of Racial/Ethnic Minorities	Percent of filed violent cases that involved Black or Hispanic victims	1. Filing offense type 2. Victim race/ethnicity 3. Date of case filing
Case Filing Differences by Defendant Race/Ethnicity	Percent of misdemeanor drug cases that were filed, broken down by: (a) Black defendants (b) Hispanic defendants (c) White defendants	1. Referral offense type 2. Referral offense severity 3. Defendant race/ethnicity 4. Case filing decision 5. Date of case filing decision
Incarceration Differences by Defendant Race/Ethnicity	Median number of days of incarceration, separately for felonies and misdemeanors, broken down by: (a) Black defendants (b) Hispanic defendants (c) White defendants	1. Type of sentence issued 2. Length of sentence issued 3. Disposition offense severity 4. Defendant race/ethnicity 5. Date of disposition

Objective 8:   Maximizing Prosecutorial Fairness

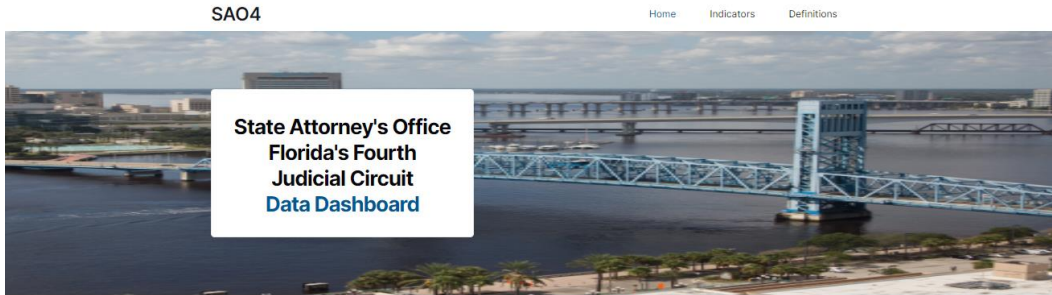| Available Indicators	How it's measured	Data elements collected
Diversion as an Alternative to Incarceration	(a) Number of cases that were diverted, separately by felonies and misdemeanors (b) Number of cases resulting in jail or prison, separately by felonies and misdemeanors	1. Case disposition type 2. Sentence type 3. Disposition offense severity 4. Date of case disposition
Improving Outcomes for Juveniles	(a) Number of Juvenile Civil Citations issued for low-level first-time offenders (b) Taxpayer savings for issuing Juvenile Civil Citation instead of an arrest	1. Number of Juvenile Civil Citations issued instead of an arrest 2. Taxpayer savings for issuing Juvenile Civil Citation instead of an arrest
Disproportionate Punishment for the Poor	Percent of filed cases that resulted in an incarceration sentence among defendants in (a) top quintile and (b) bottom quintile of median household income zip codes	1. Case filing decision 2. Sentence type 3. Defendant zip code 4. Median household income of each zip code in jurisdiction 5. Date of case disposition

Treating Crime the Same Across Neighborhoods	Percent of felony cases rejected or dismissed involving defendants from median household income ZIP codes in: (a) top quintile (b) bottom quintile	1. Filing offense severity 2. Case disposition type 3. Offense ZIP code 4. Crime rate of each ZIP code in jurisdiction 5. Date of case disposition
Accurate Diversion Decisions	Percent of all diversion terminations that were due to successful program completion	1. Case disposition type 2. Reason for diversion termination 3. Date of diversion termination

Objective 9:   Prosecutorial Ethics and Integrity

Available Indicators	How it's measured	Data elements collected
Dedication to Conviction Integrity	Number of conviction integrity investigations initiated	1. Initiation of conviction integrity investigation 2. Date of initiation 3. Exoneration status 4. Date of exoneration
Commitment to Upholding the Law	Number of cases with a U.S. Constitution 4th Amendment violation that were: (a) rejected at filing (b) dismissed after filing	1. Case filing decision 2. Reason for case rejection 3. Date of case filing 4. Case disposition type 5. Reason for case dismissal 6. Date of case disposition

Attachment 3. State's Attorney's Office, Florida's Fourth Judicial Circuit Data Dashboard Example

Home Screen

After Clicking on the "Racial & Ethnic Differences" Objectives

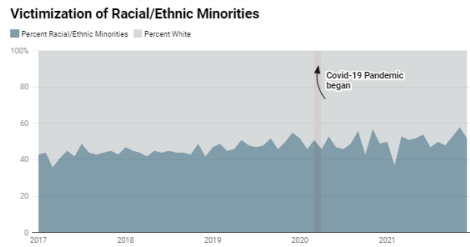SAO4   Home   Indicators   Definitions

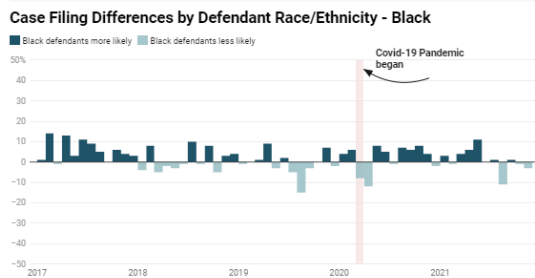# Racial & Ethnic Differences

Available Indicators

- Victimization of Racial/Ethnic Minorities
- Case Filing Differences by Defendant Race/Ethnicity
- Incarceration Differences by Defendant Race/Ethnicity

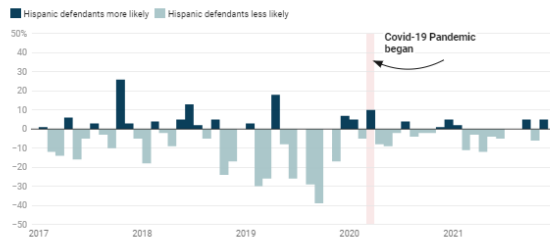| Victimization of Racial/Ethnic Minorities	
How it's measured	Percent of filed violent cases that involved Black or Hispanic victims
Data elements	1. Filing offense type 2. Victim race/ethnicity 3. Date of case filing
Frequency	Monthly
Rationale for measuring this indicator	Measuring prosecutorial outcomes across racial and ethnic groups is important to ensure the uniform treatment of cases. These indicators measure racial and ethnic disparities across the prosecutorial decision-making spectrum.

Victimization of Racial/Ethnic Minorities

The 2017 baseline was calculated as the average percent of referred cases in which a victim was a racial/ethnic minority each month in 2017.
Source: State Attorney's Office for the 4th Judicial Circuit, Jacksonville • Get the data

Case Filing Differences by Defendant Race/Ethnicity	
How it's measured	Percent of misdemeanor drug cases that were filed, broken down by: (a) Black defendants (b) Hispanic defendants (c) White defendants
Data elements	1. Referral offense type 2. Referral offense severity 3. Defendant race/ethnicity 4. Case filing decision 5. Date of case filing decision
Frequency	Monthly
Rationale for measuring this indicator	Measuring prosecutorial outcomes across racial and ethnic groups is important to ensure the uniform treatment of cases. These indicators measure racial and ethnic disparities across the prosecutorial decision-making spectrum.

Case Filing Differences by Defendant Race/Ethnicity - Black

The bar chart represents the filing rate for Black defendants minus the filing rate for White defendants. The 2017 baseline was calculated as the average percentage difference in filing rates between cases with White and Black defendants each month in 2017.
Source: State Attorney's Office for the 4th Judicial Circuit, Jacksonville • Get the data

Case Filing Differences by Defendant Race/Ethnicity - Hispanic

The bar chart represents the filing rate for Hispanic defendants minus the filing rate for White defendants. The 2017 baseline was calculated as the average percentage difference in filing rates between cases with White and Black defendants each month in 2017.
Source: State Attorney's Office for the 4th Judicial Circuit, Jacksonville • Get the data

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