

R-Ladies for JAT Datathon (2021)

R-Ladies Philadelphia

6/25/2021

About the 2021 RLadies Philly Datathon

The 2021 RLadies Philly datathon aimed to connect and enable R enthusiasts in the Philadelphia region (and beyond!) to learn and collaborate while also making a difference in the broader Philadelphia community. This year, we have partnered with the Judge Accountability Table (JAT) to explore judicial patterns in Philadelphia courts and better understand trends through data.

The [Judge Accountability Table \(JAT\)](#) is a coalition of organizations working toward a shared mission of holding judicial candidates and judges accountable to our community's vision of justice. The organizations of the JAT include: Reclaim Philadelphia, Project SAFE, LILAC, 215 People's Alliance, Philadelphia Community Bail Fund, Youth Art and Self-Empowerment Project, Amistad Law Project, Coalition to Abolish Death By Incarceration (CADBI), The Center for Carceral Communities, ICE out of Courts, Pennsylvania Student Power Network, Make The Road Pennsylvania, DecarceratePA, Black Lives Matter Philadelphia. For this datathon, JAT have made available a dataset of de-identified information related to public court dockets for defendants in Philadelphia County, PA. We hope that this datathon will further their efforts to:

- Explore and describe this rich, messy data more completely (not only by answering specific questions, but also by discovering what additional information would be required to be able to answer these questions)
- Understand best approaches to stratifying and analyzing data
- Understanding predictive factors in carceral outcomes

Timeline and Workflow

- **March 17, 2021, 6-8pm: Kickoff Meetup:**
 - [Link to Slides](#)
 - [Link to Recording](#)
- **April 28, 2021, 6-8pm: Conclusion Meetup:**
 - [Link to Slides](#)
 - [Link to Recording](#)

Teams

- **Team 1: Data Visualization:** Visualize judicial patterns at various levels of abstraction, and if possible, create an interactive dashboard.
- **Team 2: Defining and quantifying judge "harshness":** Conduct research and analyze data to propose metrics and a process for quantifying how harsh a judge is, considering that judges are presented with different kinds of cases (e.g., offense severity).

- **Team 3: Understanding Systemic Trends:** Examine how things have changed in the courts since [Larry Krasner](#) took office in January 2018.

Data

The dataset included public court docket information between 2010-2020.

About this report

This report is split into three chapters, each comprised of the final report from the three participating datathon teams.

JAT Interactive Dashboard

R-Ladies Philly Team 1

5/8/2021

Executive Summary

The docket data from Philadelphia courts are currently inaccessible to the average citizen who wants to learn more about patterns in sentencing and bail decisions in our courts. The data is complex and difficult to work with, even for data professionals. Therefore, we sought to provide a highly interactive web interface to allow the deep interrogation of this data.

Problem definition and dataset

Objective: Visualize judicial patterns at various levels of abstraction, and if possible, create an interactive dashboard

Data issues

The current dashboard provides access to the provided data. However, it is a work-in-progress that could be augmented by additional teams

Questions we considered, but were unable to answer

- Patterns in leveraging alternatives to prison sentences (e.g., rehabilitation programs)
- Patterns in probationary period lengths
- Relationship between bail amount and other variables
- Relationship between sentencing for cases that did vs did not go to trial
- Usability of the dashboard for target users; How well do the visualizations align to users' desired or needed visualizations?

Major challenges that we did not resolve

- Accounting for merged sentences in analyzing sentence lengths
- Accounting for which seat judges were appointed to
- Whether to consider each offense and sentence individually or at the docket level
- Some of the tabs in the dashboard are not as fast and responsive as we would have liked

Methods and Results

The outcomes of our team's efforts were the following:

- An interactive dashboard to explore the data and enable someone to dive into specific questions.
- Visualizations focused on
 - Sentencing patterns by judge and by race
 - Bail increases and decreases by judge
 - Bail patterns by season and other factors

The dashboard is currently hosted at a temporary location: https://awalsh.shinyapps.io/2021_datathon_dashboard/

Dashboard construction

The visualization dashboard was built with `{shiny}` and `{shinydashboard}`, with additional theming from `{shinydashboardPlus}`, `{shinywidgets}`, and others. The dashboard was partitioned first by the dataset which could be selected in the left-hand-side sidebar panel, and secondly by visualization of a particular relationship/question of interest in the tab panels.

Standardization of plots was achieved via the `{thematic}` package, which allowed a common theme to be set for all ggplots. In addition to shiny-driven reactivity, we also used the `{ggiraph}` package for surface-level interactivity such as highlighting and showing tooltips on hover. Some visualizations were accompanied by the full underlying data presented in a table, which filtered interactively using the `{reactable}` package with additional styling from the `{reactablefmtr}` package.

Data for the dashboard was pre-processed to a reasonable size, so all data was able to be hosted alongside the dashboard code on Github. To minimize data wrangling processes inside the dashboard instance, we strived for modularity such that the original data was split and each resulting dataset was used for a coherent set of research questions. This design also worked very nicely in incorporating individual contributions to the final dashboard.

The source code for the dashboard can be found on [GitHub](#).

Sentences

We created three different sections to visualize sentence length. These are represented by three tabs in the “Sentences” section of the dashboard.

Visualization of Sentence Length

This dataset included demographic information and various details about the committed crimes that might be of interest when comparing judges and the length of sentences. This section of the dashboard allows the user to determine which metadata is important to them and select which judges they would like to compare. Multiple user inputs allow the user to filter the dockets based on race, disposition method, grade of the offense, and to select for specific dockets based on an input keyword such as “Theft”, “Child”, “Auto”, or any other keyword of the user’s choice. The user also has the option of changing how the data is grouped, easing the comparison between judges based on whatever metadata might interest the user.

Keep in mind that this panel is done at the docket level, meaning that the sentence length on the y axis reflects the maximum sentence time for that docket and that the crime descriptions may have been combined to account for all offenses committed on the same docket.

Sentence by Judge and Offense

One question someone might be interested in is whether a single judge follows similar patterns as the “average” judge for a given type of offense. This section of the dashboard allows a user to explore this type of question with 3 user inputs. The output is two graphs and a table.

The user can select an offense from a pulldown menu with descriptions of the statutes (e.g., “simple assault”). Then the user can filter to only certain grades (all are selected by default) and select the judge of interest. Finally, the user can select to view a simplified plot where all the grades are considered together or you can stratify by the grade by checking the “Separate by Grade” option.

The first plot gives an overview of the sentence type (Probation, no further penalty, confinement, etc.). The second plot summarizes the sentence lengths (both confinement and probation). In both cases, the selected judge is plotted side by side with the information from all other judges aggregated together.

Keep in mind that the data used here is only for offenses that had an associated sentence/disposition. In other words, this analysis is at the “offense-level” and not the “docket-level”. This visualization does not consider other factors about the docket such as other offenses on the docket, the defendant’s record, or the disposition method. Finally, this approach will exclude occurrences of offenses where that specific offense was not associated with any sentence (but others on the docket were).

The input data for both this section was modified from the source data. First, the data was filtered to only offenses with a disposition. In other words, if the disposition (e.g., “Guilty”) was missing for a given offense on a given docket, it was removed. Second, the values for the offense descriptions (e.g., “retail theft-take mdse”) were cleaned to remove redundancy. The “statute_description” variable in the provided data was modified to be all lower case to remove duplicates caused by differences in cases (i.e., “Theft” is the same as “theft”). Then differences in spacing were adjusted to remove duplicates (i.e., two spaces is the same as one space). Conspiracy offenses (statute 18 Pa CS 903) needed special consideration. Conspiracies all have the same statute code, but they also have an “object offense”, that tells you that the defendant was conspiring to do. The grades should reflect these differences as well. Therefore, we wanted to keep the full statute description for these offenses.

Sentence Type by Race

The third tab under the Sentences section examines how for similar offense grade, there was a difference in the sentencing based on the defendant’s race. The percentages shown are the percentage of sentences for a given grade and race. The user can select the races to compare and then visualize the differences. For example, the below image shows that more serious crimes (felony grade, “F”) are more often sentenced with confinement and no probation as we expect. When comparing black defendants to white defendants, we

observe a pattern for misdemeanor crimes (grades of “M”). Black defendants are more often sentenced to confinement than probation than white defendants for some grades.

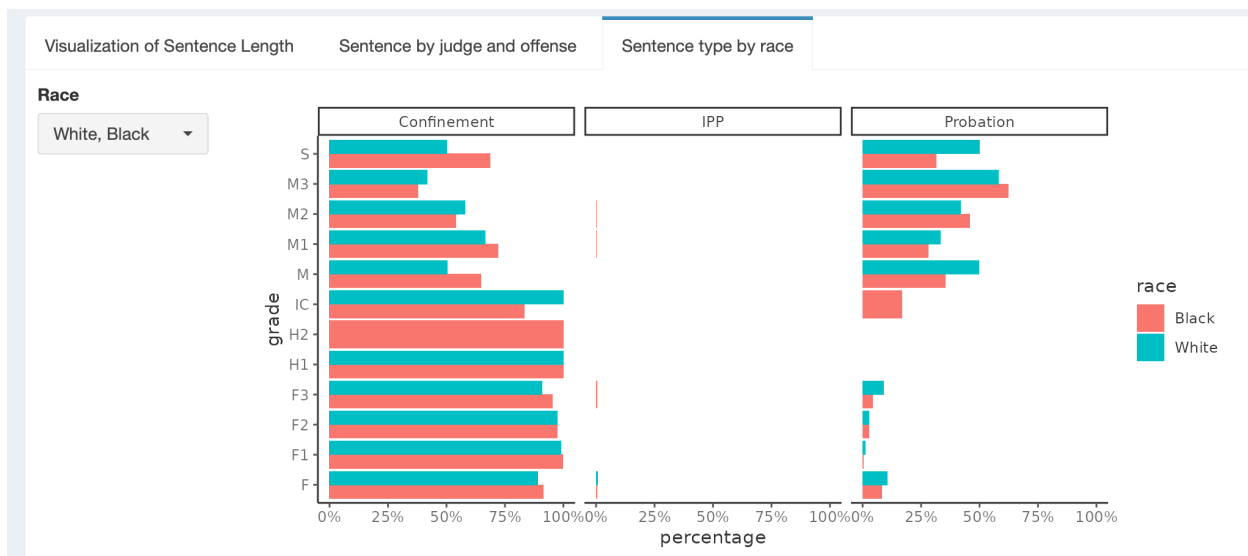


Figure 1: Screenshot of sentence type by race

Bail

Net Bail Amount Actions

The “Net Bail Amount Actions” tabs allow a user to view the number of times a judge increased or decreased bail overall.

The first interactive plot shows the cumulative total of bail increases and decreases by a given judge. Increases equal 1 while decreases equal -1. Judges that increase bail amounts more often than they decrease them have a positive value, while the opposite is true for judges that decrease bail amounts more often. The bar fill indicates the total number of bail changes (both increases and decreases). The table below the plot gives the total number of actions and the cumulative total.

The second tab and plot visualizes the same data, but allows the user to select and compare specific judges by name.

We observed that most judges overwhelmingly decreased bail with the judges with the highest number of total actions also tending to decrease bail the most number of times.

Bail Amount and Type

Many jails in the country have set bail schedules that will specify bail amounts for the most commonly committed crimes. Judges can lower or increase these bail amounts for offenders as well as set bail. In this analysis, we explored and analyzed judges’ behavior with bail over the last 20 years.

The “Bail” dataset was merged with datasets “Offenses and Dispositions” (variables selected from this dataset: description, defendant id & docket id) and “Defendant and Docket” (variables selected from this data set: gender, race, & docket id) by the “docket id” variable. The data was cleaned and manipulated for analysis.

Under the “Bail” tab of the dashboard, there is a category called “Bail Amount and Type” which contains three other bail categories to explore. The first category “Mean Bail Amount” shows a horizontal bar graph of the mean bail amount grouped by race and action type. Here you can select your judge of choice and depending on the year when data collection began for each judge you can select the years (in increments of 2 years) to explore the mean bail amounts over the last 20 years.

In the next tab called “Bail Actions,” we explore bail action types a bit further by looking at the number of times a judge had to perform an action type by race. Additionally, we were able to further explore individual action types by race and gender but this is not a feature enabled on the dashboard yet but can be in the future. Below is an example image (Example Bail Image 1.) that explores counts for bail increases and decreases by race for judge Rayford Means and the second image (Example Bail Image 2.) dives deeper and looks at counts for bail increases and decreases among black defendants only. In the future this analysis can be further explored by looking at the defendant description for each time bail was increased or decreased per defendant. This would be a very helpful visualization for analyzing biases for the different offenses and defendants.

The last category under “Bail Amount and Type” is “Bail by Season” which displays action type categories for a selected judge by season. These seasonal categories were created by categorizing months into their respective yearly seasons. This is helpful for visualizing any trends for action types throughout the year. This is particularly interesting to observe if holiday-filled seasons or warmer weather affect bail increases and decreases per judge.

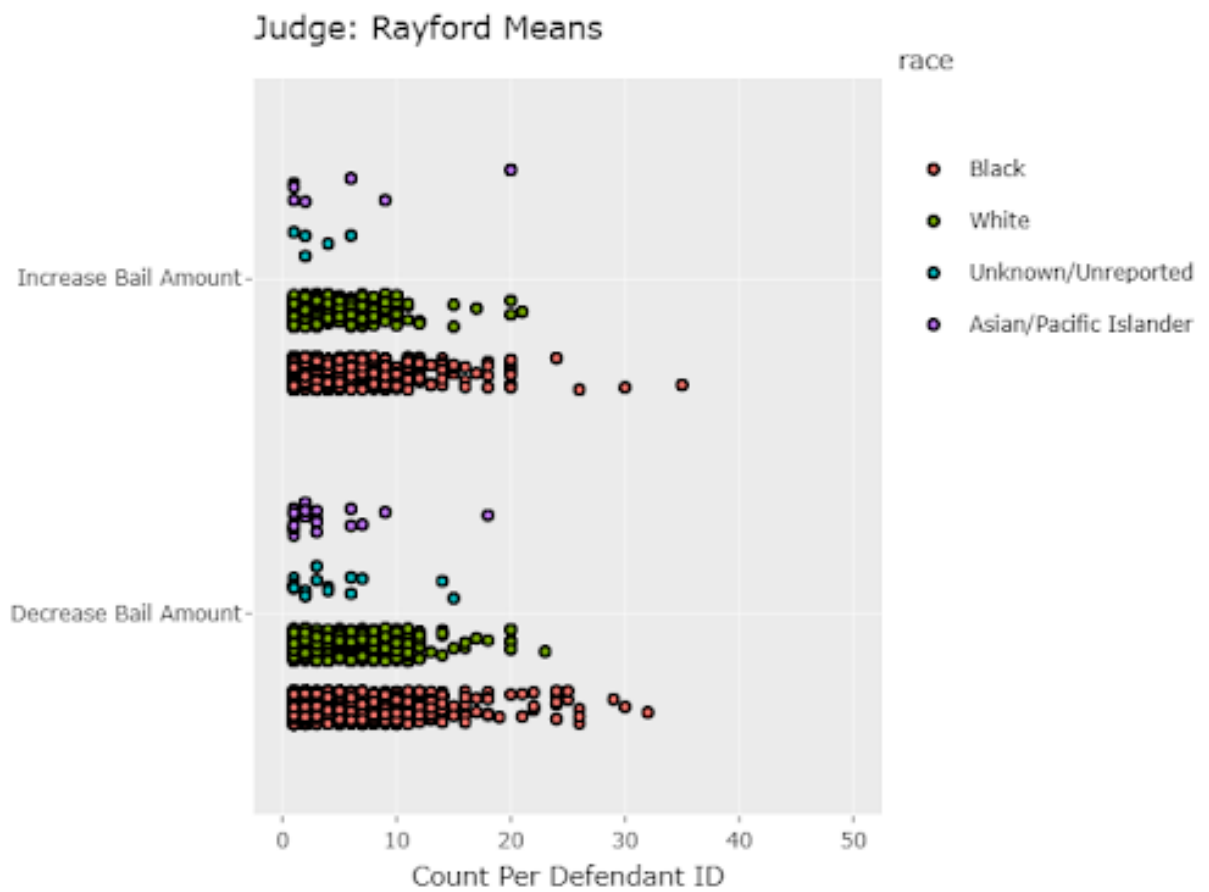


Figure 2: Example Bail Image 1.

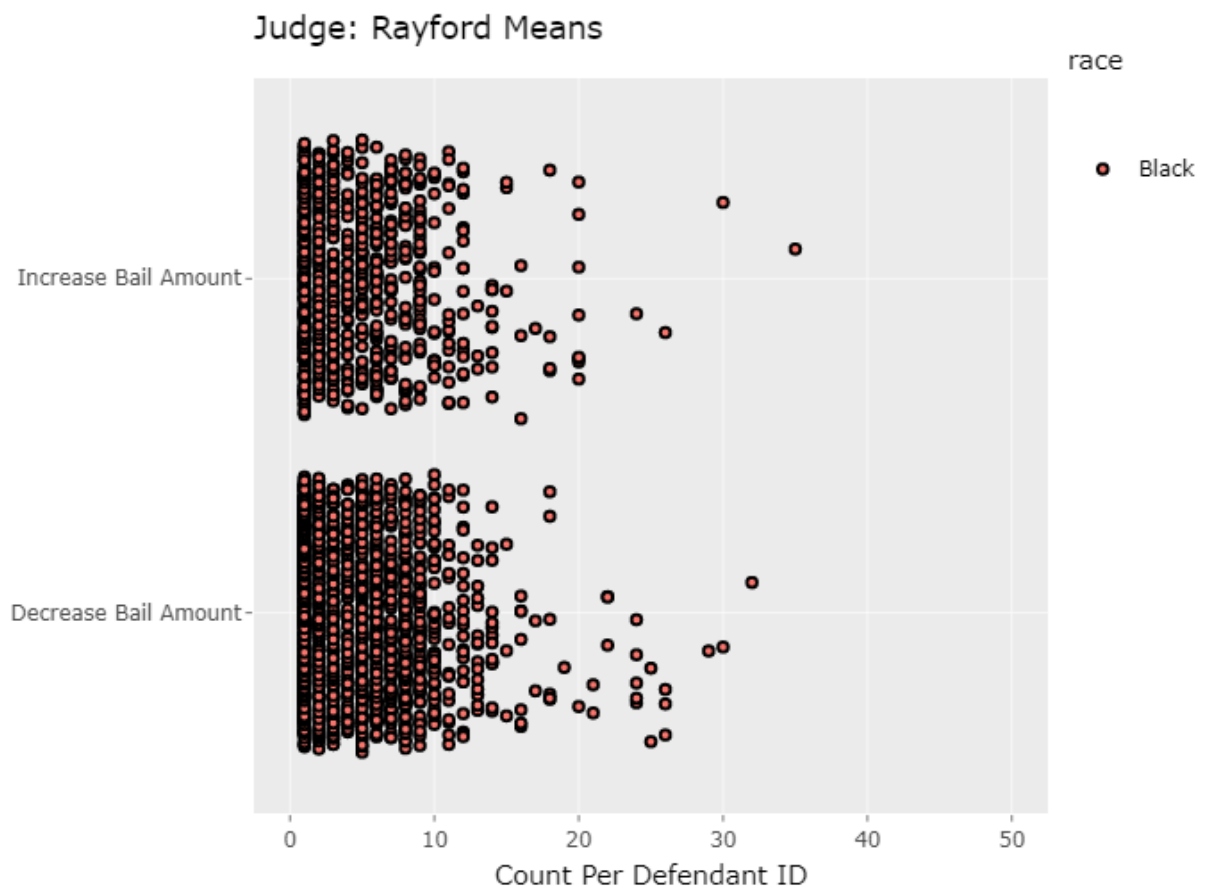


Figure 3: Example Bail Image 2.

Basic Judge Info

We added a third section to the dashboard, which is useful for new users who may not have any familiarity with individual judges or the types of cases adjudicated in Philadelphia courts.

The “Frequent Judges” tab allows one to identify the judges that appear on the most number of dockets for a selected time period. The data is displayed in a column chart as well as a table.

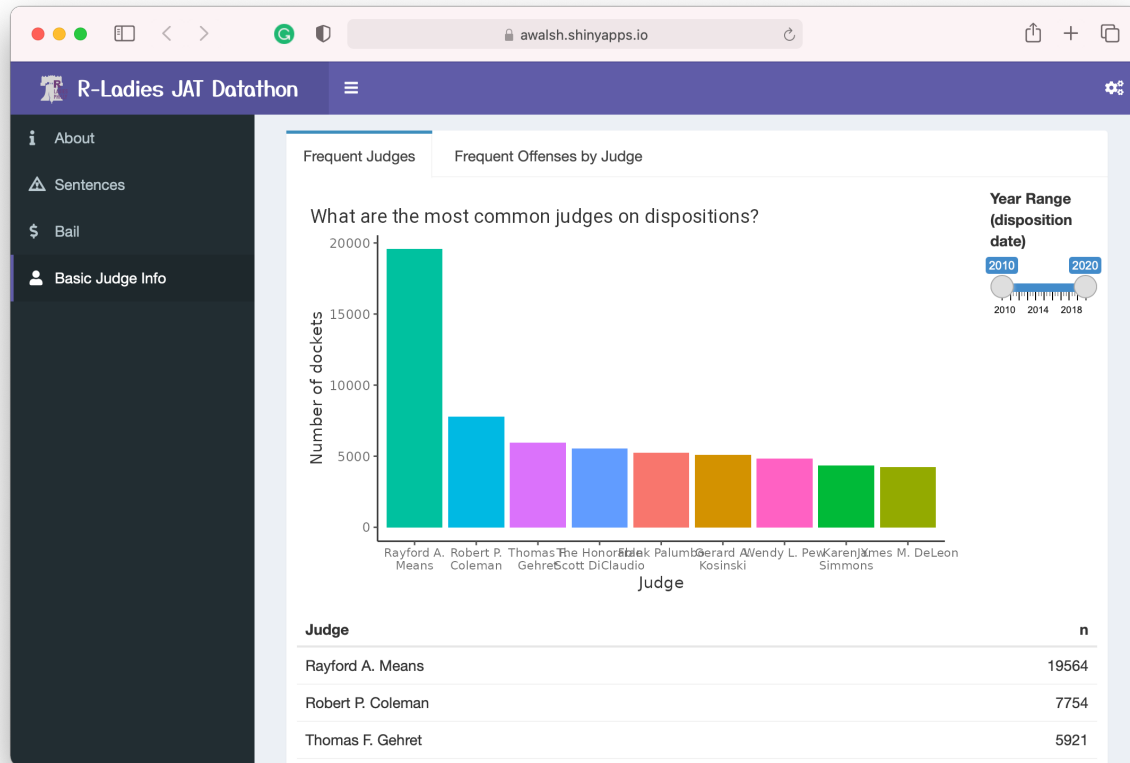
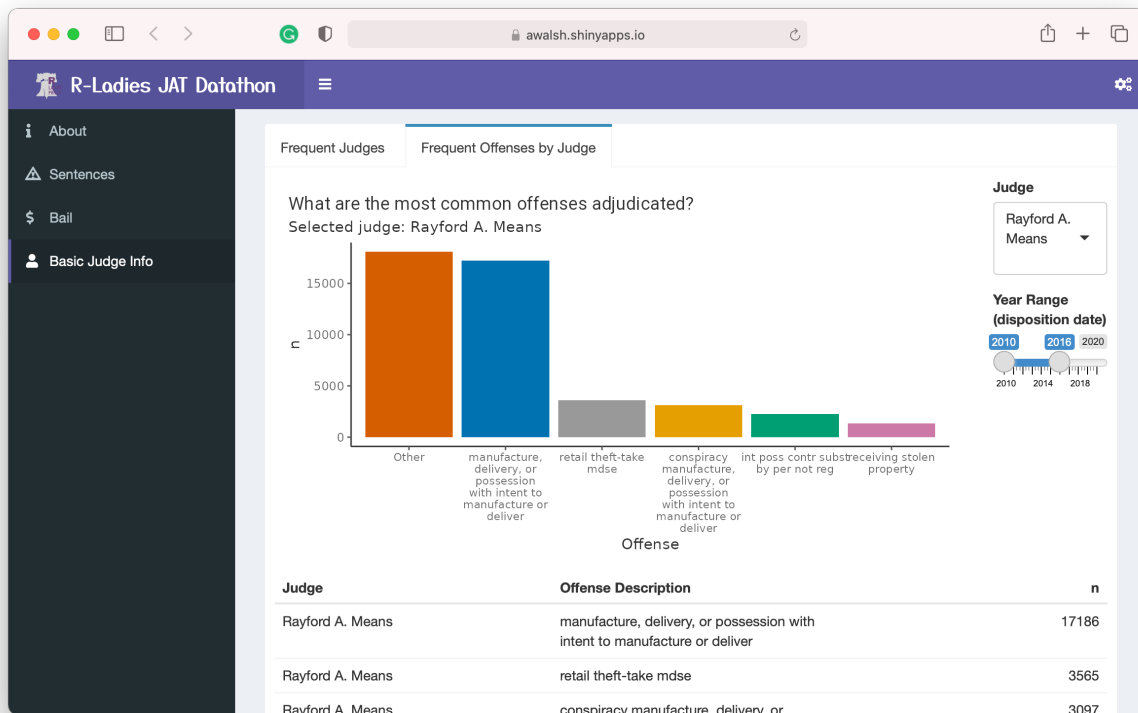


Figure 4: Screenshot of Frequent Judges Tab

The “Frequent Offenses by Judge” tab allows one to select a judge and a date range and then see the 5 most frequent offense descriptions for those inputs. All the remaining offenses are grouped into a 6th category called “Other”. The data is displayed in a column chart as well as a table.



The input data for both the above sections were modified from the source data. See the section above (Sentences by Judge and Offense) for full details.

Conclusions and Next Steps

We created a dashboard that has broad functionality and serves as a proof-of-concept for how judge data could be made more broadly accessible. However, this dashboard is a work-in-progress and could benefit from additional work.

The next steps would be the following:

- Receive feedback on any major changes that should be made to the dashboard before launching
- Identify a permanent web address to host the dashboard. This could be using the R-Ladies Philly account or a new domain could be purchased and the dashboard could live there. However, this would require annual monetary investment to maintain
- Solicit any new visualizations that could be added based on the work of teams 2 and 3. In particular, our team did not perform any rigorous modeling such as that performed by teams 2 and 3. That information would be valuable to help guide a user to understand better the patterns observed.

Our team also identified some longer-term objectives that could be incorporated in a future version of this project, should anyone want to take them on:

- Develop a detailed user guide for the dashboard to make it easier for a new user to successfully navigate the page
- Incorporate timely information from social media using judge's accounts or accounts that are commenting on judges
- Incorporate additional data, such as census information (income levels)
- Implement algorithms that follow the Pennsylvania sentencing guidelines and then compare each disposition to how well it follows (or does not) these guidelines
- Incorporate neighboring jurisdictions data
- Incorporate third-party research reports on related topics for additional reading and context

Team Contributors & Acknowledgements

June Choe is a PhD student in Linguistics at the University of Pennsylvania. He studies the mechanisms of human language acquisition and processing, and enjoys practicing data visualization with R in his free time.

Alison Moss is a PhD student at Thomas Jefferson University studying systems biology and neural control of the autonomic circuit governing hypertension development. She enjoys writing R code and R packages to aid in data visualization.

Sybil Andrieux, MS is a REDCap Administrator at Children's Hospital of Philadelphia. She enjoys learning and using R.

Alice Walsh, Ph.D. is a computational biologist at Bristol Myers Squibb and an organizer of R-Ladies Philly. She enjoys data cleaning, generating hypotheses from complex data, and mentoring others.

Kulbir Kaur

Roy Aizen

We would like to thank the other teams for their valuable help in understanding and cleaning the data. We would like to thank the R-Ladies organizers for creating this event and the infrastructure to complete the analysis. Finally, our sincerest thanks to the JAT team for providing the data and the extremely valuable guidance throughout the project.

Random Coefficient Models of Judge Harshness

2021 RLadies Philly/JAT Datathon

Team 2

June 27, 2021

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Executive Summary

- We examined whether some judges are harsher than others. Days of confinement were the metrics of judge harshness. Because judges are presented with different cases, linear regression was used to achieve fairer comparison among judges.
- Results suggest that there appear to be differences in harshness among judges.
- The models allow prediction of the average days of confinement by a judge, inferring whether one judge is harsher than another.
- Estimates from the model were used to categorize judge harshness into low, medium, and high.
- These results are preliminary as diagnostics of the regression models indicate that the models need to be further improved.

Contributors

Russ Lavery, Sheneé, Vera, Jessie Pluto, May Sophia, Alex Lesicko Adam Schlesinger, Jayeon Kim, Eamon Caddigan, Spandana Makeneni, Shanti Agung

Problem definition and dataset

Our team focused on the problem of judge harshness. We first attempted to quantify judge harshness. Among the challenges in quantifying judge harshness is that judges are presented with different cases. For example, some judges might work on cases laden with severe offenses, while others might be presented with cases of light offenses. We then sought to answer whether some judges are harsher than others.

We approached the problem in two ways: approach 1 and approach 2. Approach 1 is a visualization of sentencing patterns. Approach 2 is statistical modeling.

Team 2 created two detailed reports that are available online. This report is a higher-level summarization of the results. For detailed reports, please follow these links:

- Approach 1 is detailed in [kim_eda.Rmd](#)
- Approach 2 is detailed in [team2_report_modeling_approach.pdf](#)

Of the datasets that JAT provided, we used *defendant_docket_details.csv*, *offenses_dispositions_v3.csv*, and *defendant_docket_id.csv*. We used dockets filed in year 2010 to 2019. Our consideration for this time span was that year 2020 was such an unusual year, thus likely unusual behavior too, due to the pandemic. Further, we used cases that are completed. That is, the docket’s status is: “Closed” or “Adjudicated”. We excluded ongoing cases – that is, docket status is “Active” or “Inactive” – because sentencing information in these cases may not reflect the entire sentences once these cases are completed. The final dataset that we used to fit the model consists of 176,712 dockets and 186 judges.

Approach 1 used the *offenses_dispositions* data and limited the data to sentencing by judges who are currently serving in Philadelphia County. The list of active judges was pulled from Ballotpedia ([https://ballotpedia.org/Philadelphia_County,_Pennsylvania_\(Judicial\)](https://ballotpedia.org/Philadelphia_County,_Pennsylvania_(Judicial))).

Results

Please refer to the full reports linked above. These reports have extensive details on the modeling approach and visualizations of the results. Here are just two examples pulled from the team 2 results.

Which Judges Ordered Longer Sentences?

All boxplots showed Judge Coyle ordered longer than average sentences (Figure 1). Other judges like Judge Cunningham and Judge Bronson (especially for felonies) also tended to order longer than average sentences.



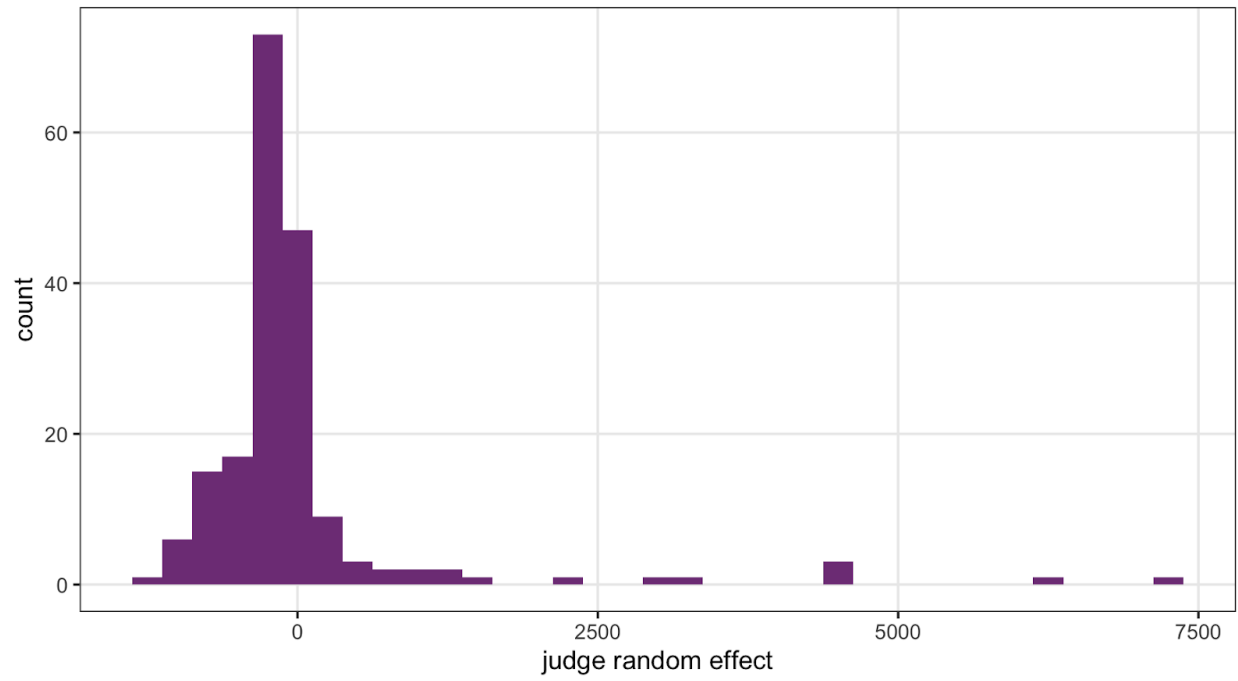
Figure 1: Sentences of one of the most common crimes

Random Coefficient Models

The random effects on intercept for each judge were estimated. Higher values indicate longer confinement sentences (which could indicate “harsher” judges). In the histogram below, we observe that some judges appear to be “harsher” than others (Figure 2).

Judge random effects on intercept

Outcome variable: Docket total days of confinement



Conclusions and Next Steps

Conclusions:

- Using days of confinement as measures of judge harshness, results suggest that there appear to be differences in harshness among judges.
- The random effects on intercepts and judge fixed effects allow prediction of the average days of confinement by a judge, thus inferring whether one judge is harsher than another.
- The random and fixed effects were used to categorize judge harshness into low, medium, and high.
- These results are preliminary as diagnostics of the regression models indicate that the models need to be further improved.

Several next steps that should be taken include:

- Examine issues noted in the *Data issues* section: repeated content of `description` and `statute_description`; issues with `sequence_number`, extreme values on the number of grade severity in a docket; issues with the birth date of some defendants; and issues with pairing of `defendant_id` and `docket_id`.
- Include additional terms in the model (e.g., interactions and/ or polynomial).
- Solve the outliers issues as pointed out by the diagnostics of the fitted models.
- Consider including additional explanatory variables, such as the location of the trials, attorney (e.g., public attorney, private attorney), and judge-related information.
- Implement generalized linear mixed models.



Exploring Changes During Larry Krasner's First Two Years

2021 Datathon

R-Ladies Philadelphia

Judge Accountability Table

May 12, 2021

"Power can wear a badge or a black robe, but it can also be nothing more than a courageous voice. Power can be any of us."

- Larry Krasner, For the People: A Story of Justice and Power

Team 3

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Executive Summary

In the first two years of Philadelphia District Attorney Larry Krasner's term, there was progress:

- Reduced racial disparities related to bail
- Reduced maximum sentencing for probation
- Decriminalized certain statutes

Main Contributors

As part of the R-Ladies Philadelphia 2021 Datathon collaborating with the Judge Accountability Table (JAT), Team 3 prepared this report over the course of 8 weeks.

Katrina Gutierrez, BA is a student in Georgia Tech's Masters of Science in Analytics program.

Nathan Kendsersky, BS is a PhD candidate in the Pharmacology Graduate Group at the University of Pennsylvania.

Trang Le, PhD is a postdoctoral researcher in the Computational Genetics lab, University of Pennsylvania.

Problem Definition & Datasets

Larry Krasner was elected as Philadelphia's District Attorney in November, 2017 and was sworn in January, 2018. He ran for office with a progressive platform, including promises to reform the bail system and reduce the prison population.¹ Our goal was to examine changes in the courts since Krasner took office.

We analyzed datasets of defendant demographics, bail actions, and sentencing outcomes, comparing the periods of 2 years prior (2016 through 2017) and 2 years after (2018 through 2019). This particular duration was long enough to capture any changes but also short enough to avoid additional factors that may contribute to biased findings (e.g. impact of the COVID-19 pandemic on crimes and society).

Data Challenges

- NA values in offense grade and outcome
- Order of the judges' actions for any specific bail was not available
- Lack of ethnicity data (i.e. Hispanic/Latino)
- No indication of concurrent vs. consecutive sentencing

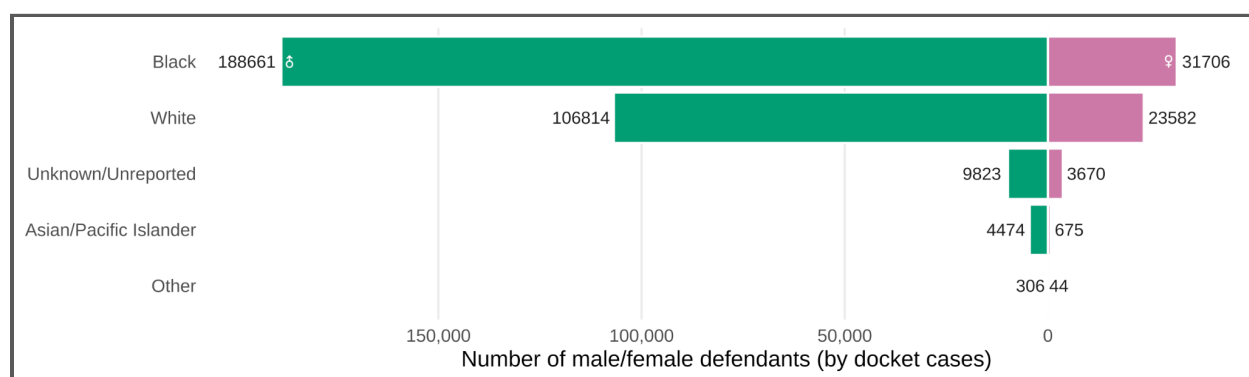
¹ "Platform." Larry Krasner for Philadelphia District Attorney. Accessed May 01, 2021.
<https://krasnerforda.com/platform>

Results

Most Defendants Were Black or White Men

Black and White defendants were the most represented in our data for all years, with arrests ranging from 1988 to 2020. For this dataset, the average arrest year was 2014 and defendants were about 33 years old on average when they were arrested. Male defendants were more represented than female defendants. Like mentioned previously, we did not have ethnicity data and could not determine which defendants were Hispanic or Latino.

Black Men Were the Most Represented in the Data



Krasner's 2018 Bail Reform Increased Rates of Release on Recognisance (ROR)

In February 2018, Krasner implemented a bail reform policy where his office would not seek cash bail for 25 eligible charges. Instead, his office would request that defendants be released on recognisance (ROR). While the DA's office can make these recommendations, the actual bail is up to the judge's discretion. Even so, ROR did increase for both felonies and misdemeanors after the policy.²

Previous research³ evaluating this reform found that:

- It did not increase recidivism or failure to appear (FTA) rates even though certain defendants did not have to pay bail.
- White defendants were overrepresented among eligible cases receiving ROR.

We wanted to explore racial disparities in ROR further and how they changed under Krasner's first two years in office. Due to limitations in the data, we explored trends for felonies and misdemeanors broadly because we could not identify all the cases eligible for the bail reform. We also chose to focus on disparities between Black and White defendants because they were the most represented in our dataset.

² Aurelie Ouss and Megan Stevenson. "Bail, Jail, and Pretrial Misconduct: The Influence of Prosecutors." *SSRN*. (2020): 2 & 8. <https://ssrn.com/abstract=3335138>

³ Ibid., 3 & 39.

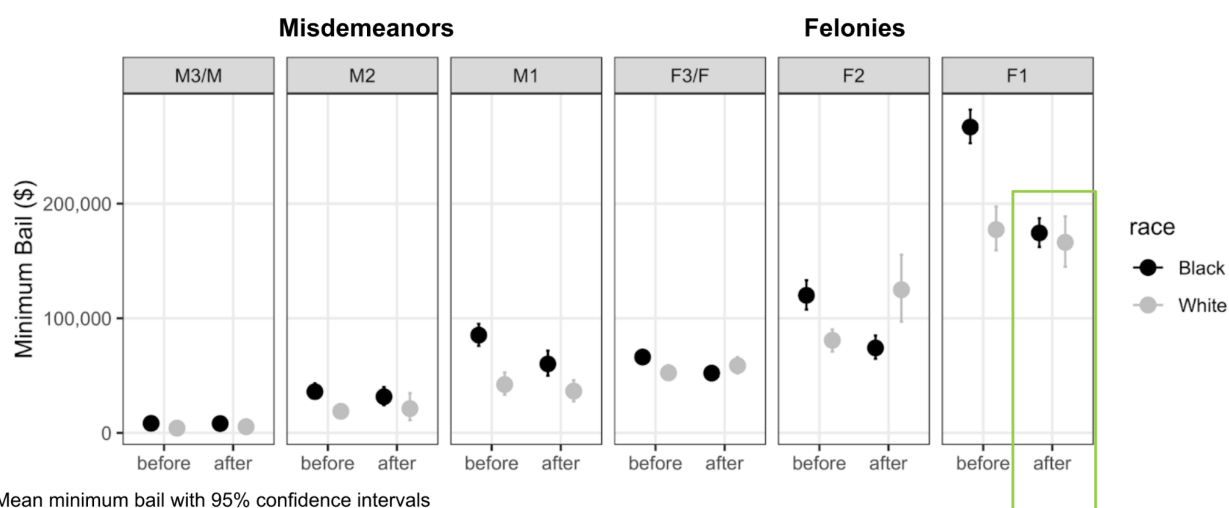
Black Defendants Tended to Have Lower Rates of ROR



On the graph to the left, the y-axis is a measure of disparity in rates of ROR between White and Black defendants. The larger the value or the higher the data point, the larger the disparity. We see that there was some progress in reducing disparities and first degree felonies (F1) had the biggest improvement.

Before Krasner took office, for every 100 White defendants receiving ROR, about 65 Black defendants received ROR. After he took office, for every 100 White defendants receiving ROR, about 72 Black defendants received ROR. The data indicates that Black defendants tended to have lower rates of ROR but that Krasner has slightly improved the situation.⁴

Racial Disparities in Minimum Bail Decreased for First Degree Felonies



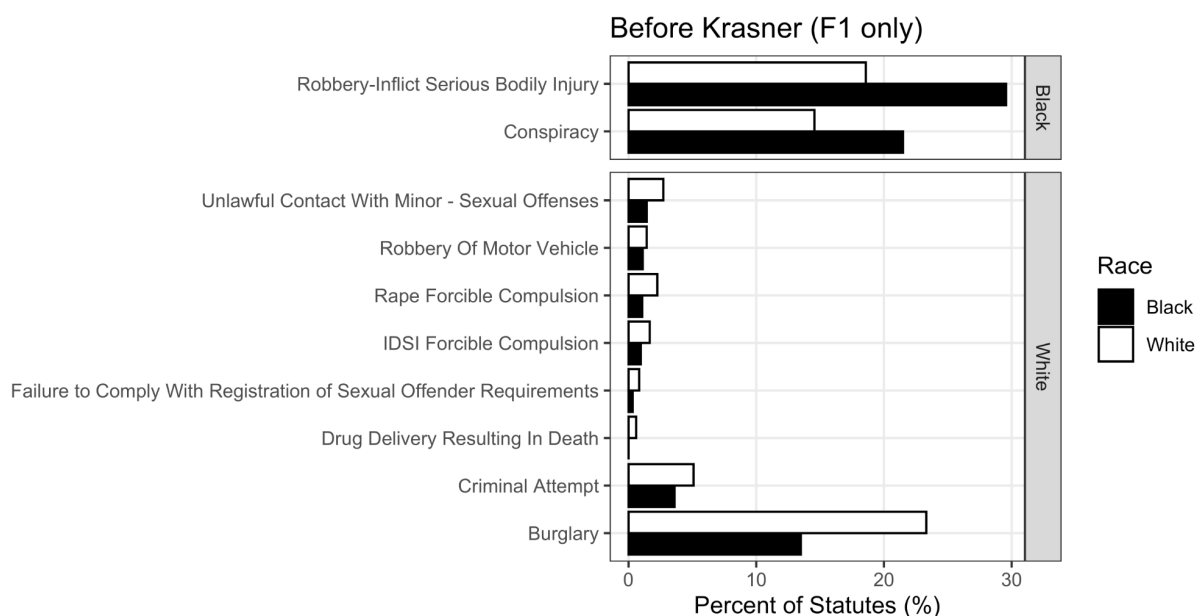
As illustrated in the graph above, the average minimum bail⁵ increased for more severe offense grades. The closer the black and grey dots are together in height for each period and offense grade, the smaller the disparity. The minimum bail set for first-degree felonies (F1) was more equitable between races after Larry Krasner took office. However, there was still inequity among first-degree misdemeanors (M1).

⁴ We performed a Cochran-Mantel-Haenszel test. Before, the estimated odds ratio was 0.65 (95% CI 0.62-0.68). After, the estimated odds ratio was 0.72 (95% CI 0.69-0.76). AUC (area under curve) was 0.709.

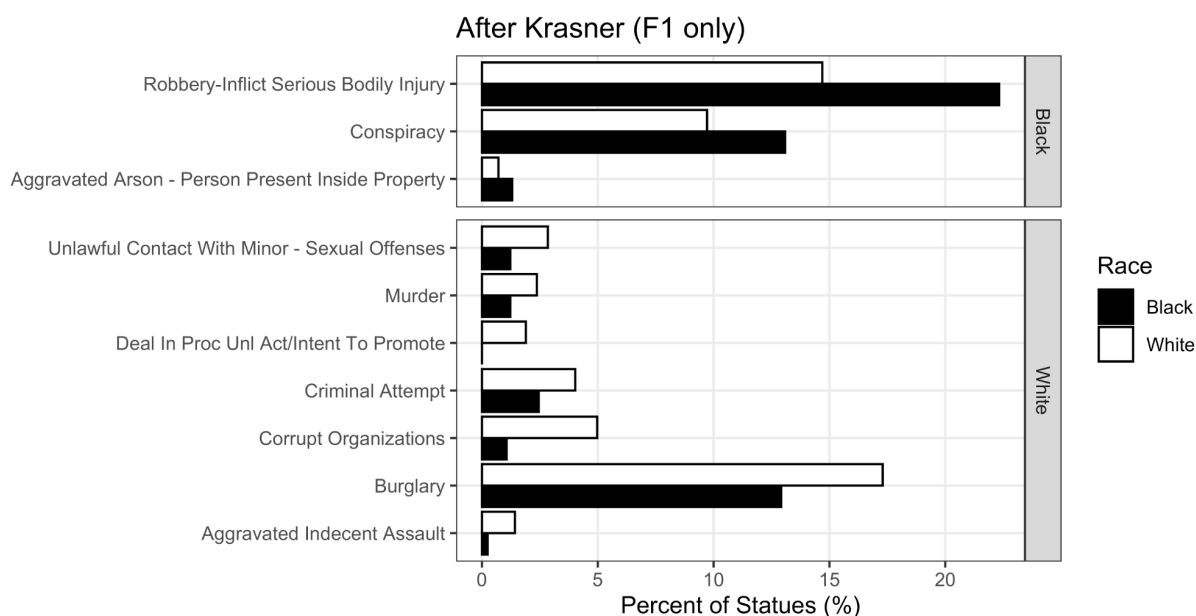
⁵ We explored trends in minimum bail rather than initial bail because we could not determine the order of bail actions occurring in the same month.

Representation of Statutes in First Degree Felony Dockets, by Race

A



B

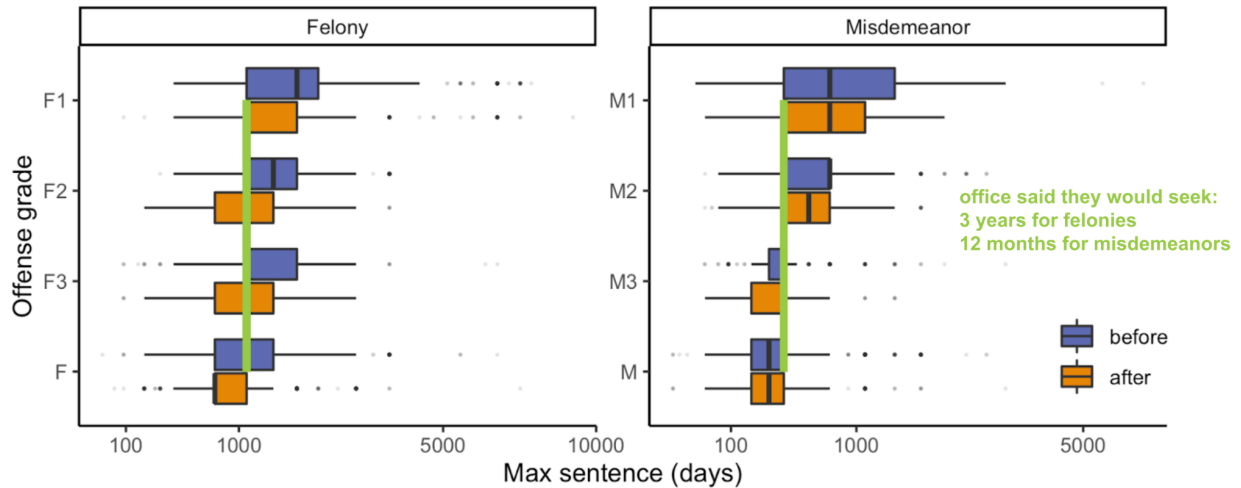


We evaluated the representation of different statutes between Black and White defendants 2 years before (A) and after (B) Krasner took office. We wanted to understand if differences in statutes committed by Black and White individuals accounted for the difference in minimum bail for first degree felonies (above). Regardless of the timeframe (before/after), Black defendants were more likely charged for statutes involving robbery or conspiracy, while White defendants were more likely charged for burglary and criminal attempt.

Krasner Sought to Reduce Maximum Sentences for Probation

According to The Appeal, "In March 2019, [Krasner] instituted a policy where his office now only seeks a maximum of 12 months of probation or parole for a person convicted of a misdemeanor and a maximum of three years for a person convicted of a felony."⁶

Max Sentences for Probation Lowered for Some Offense Grades



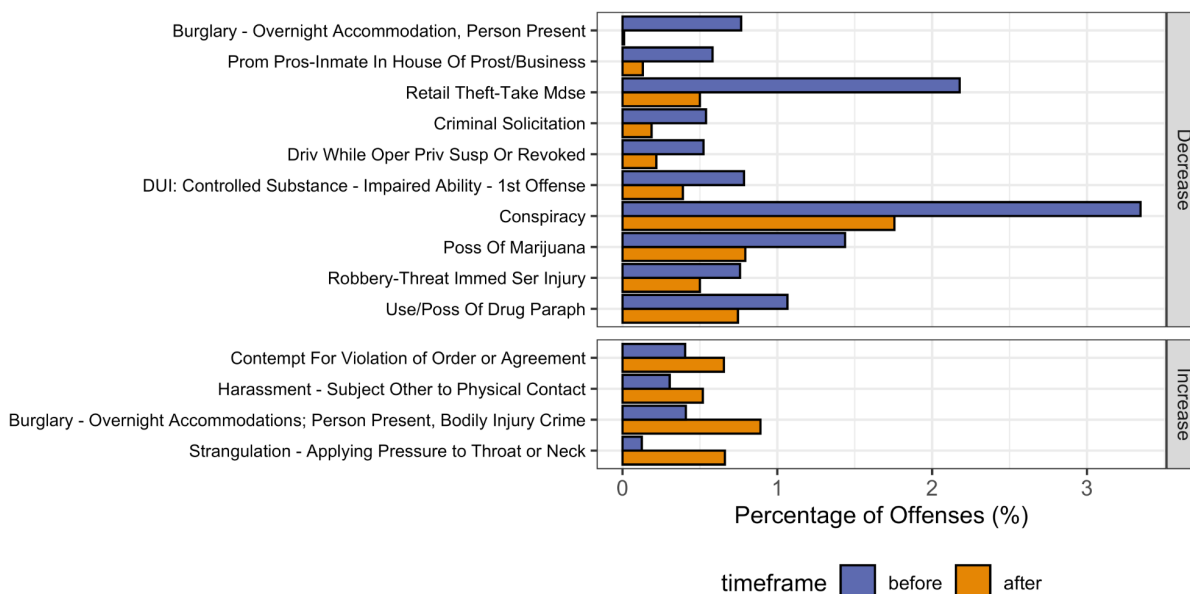
For some offense grades, max sentences for probation were lower after Krasner took office. The medians of the max sentences for felonies were similar to the desired threshold (3 years). However, this improvement was not as clear for misdemeanors.

⁶ Vaughn, Joshua. "The Successes and Shortcomings of Larry Krasner's Trailblazing First Term." The Appeal. March 22, 2021. Accessed May 01, 2021. <https://theappeal.org/>

Krasner Decriminalized Certain Actions

In February 2018, Krasner's office announced that they would rarely pursue cases related to retail theft, prostitution, and possession of marijuana.⁷

Some Charges Related to Krasner's Reforms Decrease



In the graph above, we grouped charges that decreased (top) and charges that increased (bottom) following Krasner's term. Following Krasner's commitment to decriminalize certain actions:

- Retail theft decreased by over 4.3 times
- Prostitution (prom pros) decreased by over 4.4 times
- Possession of marijuana decreased by over 1.8 times

Retail theft, prostitution, and marijuana related cases were also eligible for Krasner's 2018 bail reform mentioned previously. Other charges related to this bail reform such as DUI-first offense and burglary also decreased.⁸

The graph above reflects the percentage (%) of offenses. However, it's not necessarily clear what is driving some of these changes. For example, the changes could be due to Krasner's office choosing to pursue these cases less often, decreases in crime, or some other reason.

⁷ Ouss and Stevenson, "The Influence of Prosecutors," 43.

⁸ "Prosecutor-Led Bail Reform: Year One Transparency Report." Philadelphia District Attorney's Office. February, 2019. 13. <https://medium.com/philadelphia-justice/prosecutor-led-bail-reform>

Conclusion

“Our power to achieve criminal justice reform now flows directly from the movement and the people we serve, all Philadelphians.”

- Larry Krasner, *Prosecutor-Led Bail Reform: Year One Transparency Report*

Based on our exploratory analysis, we did see progress during the first two years of Krasner’s term. These changes occurred after Krasner’s policies, even though bail and sentencing were still up to the judges’ discretion. Moving forward, it will be essential to continue exploring Krasner’s impact, including his response to the COVID-19 pandemic. Overall, these changes can determine if someone will await their trial behind bars or how soon they can return to their family.

In summary, there was progress in Krasner’s first two years:

- ROR and equity in minimum bail in first degree felonies
- Reduced max sentencing for probation
- Decriminalization of certain statutes

Next Steps:

- Continue to monitor the impacts of Krasner’s term
- Evaluate impacts of the COVID-19 pandemic
- Collect other data that will help with the evaluation (e.g. ethnicity)
- Include arrest data to inform statutes increasing and decreasing

Other Resources

- [Philadelphia DA’s Office Data Dashboards](#)
- [Pennsylvania Court Data Dashboards - Criminal Caseload](#)
- [Prosecutor-Led Bail Reform: Year One Transparency Report](#)