Overlooked: How Parole Boards Shape Lives and Systems

A technical analysis of parole eligibility and release timing.

The Council of State Governments Justice Center

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Contents

1. Introduction

The majority of policymakers and the public pay little attention to parole board policies and practices until someone on parole commits a notorious new offense. State parole boards are often composed of appointed executive branch officials who have extraordinary authority and limited transparency requirements. There is little coverage given to parole boards and their practices when they deny parole to people or delay hearings for years. This lopsided coverage results in parole policies and boards erring on the side of caution when making release decisions. However, parole boards and their decisions are an important backend lever affecting incarceration rates that deserve more attention.

Importantly, to date, there are no good estimates of how many people remain incarcerated after their earliest eligibility for parole or for how long, both nationally and in many states. Less is known about what disparities exist in terms of who remains incarcerated past their parole eligibility or for how long. While few states report some of these metrics, in many it is unknown and it is not easy to calculate due to how data is collected and stored, sometimes overwriting earlier parole eligibility dates.

To address this knowledge gap, The Council of State Governments (CSG) Justice Center partnered with Arnold Ventures to create a tool that helps states understand the power of parole boards in the parole-granting process. In addition to reporting the data for each state in the tool, CSG Justice Center staff conducted an analysis of (a) national trends and patterns regarding people incarcerated past their parole eligibility year (PEY), (b) the potential differences regarding incarceration past PEY experienced by different demographics, and (c) the association between the states' patterns of incarceration past PEY and their "degree of sentencing indeterminacy" (i.e., what proportion of the maximum sentence can people potentially avoid if they are released early via discretionary parole).[1]

2. Background: Why Is This Study Important?

Parole has an immense impact on prison populations, but no single data point exists to summarize that impact. The *Supervision Violations and Their Impact on Incarceration* project demonstrated the value of establishing a national data point to draw attention to a key driver of incarceration. We found that 44 percent of admissions to prison stemmed from supervision violations and that this cost states $10 billion in 2021. To drive attention to the impact of parole, a similar high-value data point is needed to indicate the percent or absolute number of people who are in prison because of a parole board's decision (or indecision) rather than a decision made by a judge, jury, or prosecutor. For policymakers and the public, it is critical to know what these decisions cost states annually.

2.1 The Influence of Back-End Release Mechanisms on Prison Populations

Parole boards play a critical role in determining the number of people on parole supervision nationally as well as the length of time served in prison in the 34 states with discretionary parole.[2] While much attention is focused on the role of prosecutors and sentencing policies in driving incarceration trends, in many states, it is the parole board's discretion that determines how long most people will remain in prison and how much the state will spend on incarceration. Broad swings in the prison population can be a direct result of changes in parole release discretion in those states. For example, states may see an increase in prison population if the parole board restricts its parole release standards and release rate. In contrast, states that do not use parole release have less control over prison population size at the back end of the system—corrections and parole—than in paroling states. Hawaii represents one extreme of parole discretion. The maximum allowable sentence is set by statute based on which of the three felony classes the offense falls under. This removes the role of the prosecutor and judge in dictating the length of incarceration. Instead, Hawaii's parole board sets the minimum time served and determines the maximum allowable sentence by law. Further, in Iowa and North Dakota, parole boards can grant release to most people in prison on the first day of their incarceration. In Michigan, judges set the minimum sentence, and the maximum is set by statute; the actual period of time served is controlled by the parole board and is usually 300–400 percent longer than the minimum. In Texas, the sentence is the maximum, and people become eligible for release at one-fourth or one-half of the maximum, with parole discretion figuring largely in the actual amount of time served.

Understanding how and why individuals who are parole eligible remain incarcerated is a complex undertaking because parole decisions are influenced by a combination of factors including sentencing structure, parole board norms, and an individual's behavior during incarceration, among other things. Reitz and colleagues at the Robina Institute completed a seminal review of the degrees of indeterminacy in state systems, i.e., the "unpredictability of time served."[3] They found that the predictability of individual prison sentences varied greatly by state and that back-end (e.g., corrections and parole) release decisions are more influential in some states than others. Higher degrees of "indeterminacy" raise questions about the quality and fairness of prison release decisions and whether states have adequate procedural safeguards in place to examine whether decisions are fair in practice. This work provides clear terminology for policy analysis and breaks down time-served calculations in each state into their relevant components, facilitating comparisons across states as well as deeper analysis of any given state. Each

state is classified roughly by its sentencing structure (1–5, from extremely low indeterminacy to extremely high indeterminacy), and Robina's new framework also includes a "population-multiplier-potential" (PMP). The PMP quantifies the influence that back-end decision-makers, such as parole boards, have on prison sentences and, therefore, the size of the prison population. It is a summary figure that reflects the portion of the sentence ceded to the parole board—e.g., if an individual becomes eligible for parole after serving 25 percent of their sentence in prison, the PMP for that sentence is 4:1. The PMP varies greatly across states; for example, Alabama's PMP is greater than 100:1 for sentences with maximums up to 5 years, and Hawaii's is greater than 100:1 for all general-rules sentences. This differs starkly from Connecticut and Kansas, which have PMPs of 1.18:1 and 1.2:1 for serious offenses, respectively. However, the Robina study did not explicitly explore how sentencing structures influence prison popuation sizes. In fact, one of their recommendations was to conduct research on the relationship between varying degrees of indetermiancy and prison size.

Of course, these describe variation in sentencing structures, but they do not tell us how much variation there is in time served behind bars for people who received the same sentence. To understand the actual impact (beyond the "potential impact"), we must examine three things: (1) who is going in front of the parole board and at what time intervals, (2) the outcomes of parole board hearings, and (3) the size of the parole-eligible population that remains behind bars. Unfortunately, there is little data to rigorously answer these questions. A review of 29 states by the Prison Policy Initiative found that fewer people went in front of the parole board in 2023 as compared to 2019 in all but three states, and only eight states had parole grant rates above 50 percent. The net result was that only one state released more people on parole in 2022 than in 2019.[4] But there is no data on how or why the decision was made or information about the timeliness of parole board hearings. The data to answer the third question (How many people are parole-eligible but remain incarcerated?) is rarely publicly reported by states.

2.2 Quantifying the Size of the Parole-Eligible Population that Remains Incarcerated

National and state-by-state data suggest that there are many parole-eligible people who remain in prison, but no specific data point exists that details a precise number or the impact of this population remaining in prison. A high-value and state-specific data point is required if states are to understand the impact of their parole board's decisions on this population and their communities. A specific data point will also help states recognize the annual cost of keeping parole-eligible people in prison.

2.3 Examining Back-End Release Mechanisms by Demographic Group

There is extensive research discussing racial disparities, racial bias, and racial profiling within the criminal justice system. Sabol and colleagues found that while disparities in incarceration rates across different racial and ethnic groups narrowed between 2000 and 2016, disparities remained high, particularly between Black and White people.[5] In fact, Black Americans are still incarcerated in state prisons at over five times the rate of White Americans nationally, but racial disparities vary greatly across states.

However, little is known about what role discretionary parole and parole boards play in driving these disparities, and it is probable that parole decisions are subject to the same racial bias that is observed across the rest of the criminal justice system. For example, parole boards have started including more input from victims, prosecutors, and judges, which has introduced more opportunities for racial biases to affect decisions.[6] In a small study in Alabama, researchers found that Black individuals were incarcerated longer prior to being considered for parole than White individuals, and, although there was a larger number of Black parole-eligible people than White parole-eligible people, Black people were granted fewer parole hearings.[7] There is mixed evidence about whether parole boards also grant parole at a lower rate to Black individuals. Fifteen percent of Black people as compared to 25 percent of White people were released on parole at their first hearing in New York, with even larger disparities examining property crime specifically (30 percent of White individuals versus 18 percent of Black individuals). Even still, another study found no difference in parole grant rates by race in Pennsylvania.[8]

3. Analysis Questions

Given this context, this report begins to describe (1) general patterns and trends in terms of incarceration past parole eligibility year (PEY) and their relation to time or proportion of sentence served, (2) how incarceration past PEY may be associated with sentencing indeterminacy, and (3) differences by race and sex in terms of incarceration past PEY.

(1) The analysis of national trends and patterns regarding people incarcerated past their PEY focuses on the following questions:

a. How many people are past their PEY but still in prison? What percentage of the total prison population is that?
b. How does that percentage vary among states?
c. How has that percentage and the raw number changed since 2010, nationally and among states?

d. How many years after their PEY are served by people released and those who remain incarcerated, and how does this vary across states?
e. What proportion of their time served and of the maximum sentence are people spending after their PEY, and how does this vary across states?
f. How do the offenses and sentences of people incarcerated past their PEY compare to those of people who are not currently eligible for parole?

(2) Finally, regarding degrees of indeterminacy, the analysis addressed the following questions:

a. Is the state's sentencing indeterminacy associated with indicators of time served and time served past PEY, such as (i) the percentage of people incarcerated past their PEY, (ii) how long they remain past PEY, and (iii) the percentage of time served past PEY?
b. Is the state's sentencing indeterminacy associated with the indicators of the sentences and lengths of stay, such as (i) the percentage of the maximum sentence served, (ii) the total time served, or (iii) the maximum sentence length?

(3) The analysis of racial disparities focused on the following questions:

a. What is the extent of racial and sex disparities in terms of whether people are incarcerated past their PEY, and how do they vary across states?
b. What is the extent of racial and sex disparities in terms of years incarcerated past PEY, and how do they vary across states?
c. What is the extent of racial and sex disparities in terms of the proportion of the sentence served past PEY, and how do they vary across states?

4. Methodology

This section summarizes the methodology used for the data tool and the analysis in this technical report. It begins by defining key terms and indicating the data sources used for key variables. It then explains the procedures used to estimate parole eligibility year when it was missing. Finally, it presents an overview of the calculations of disparities.

4.1 Key Terms

Parole Eligibility Year (PEY): The first year in which a person is eligible for discretionary parole, determined by state-specific sentencing practices. PEY reflects the point at which a person who is incarcerated can be considered for release, though it does not guarantee release. If a parole board has discretion to set that date, PEY is the first year that the board can set a hearing.

Parole-Eligible Individual: A person who is serving a sentence for a criminal offense who remains incarcerated past their PEY. This excludes individuals who were returned to prison from parole and people with life sentences or sentences of less than one year.

Projections: Statistical models used to estimate future values based on historical trends. Here, projections estimate the number of people incarcerated past their parole eligibility date in 2023, based on trends from 2010 to 2020.

Racial Disparities: Racial disparities refer to measurable differences in outcomes, access, or treatment between racial or ethnic groups. Racial disparities have many causes and are manifested in statistics like arrest rates, sentencing lengths, and prison populations. Racial disparities should not be confused with individual acts of racism or prejudice. While individual bias can contribute to disparities, these patterns exist at a systemic level across institutions.

Relative Rate Index (RRI): A comparative measure that evaluates the rate of an outcome (such as incarceration or remaining in prison past parole eligibility) between two groups. For this project, RRI compares the rates for Black and Hispanic populations to those of the White population or for men compared to women.

4.2 Data Sources

Parole Eligibility: For parole-related metrics, including the year that an individual becomes eligible for parole, data from the National Corrections Reporting Program (NCRP) Selected Variables was the primary source.[9] NCRP collects individual-level data on prison admissions, releases, custody populations, and parole status changes. The data includes demographics, offenses, sentences, admission/release types, and time served from individual records, with collection ongoing since 1983. At least 47 states contributed data during the time period of our study, but this data varied in quality and, as a result, not all states are included in our analyses. While the most recent NCRP data extends only to 2020, projections for 2023 were made to provide up-to-date estimates.

Prison Populations, prior to 2023: The number of people who are incarcerated by race, ethnicity, and sex was derived from the Bureau of Justice Statistics (BJS) Prisoners Series and the National Prisoner Statistics (NPS).[10] These datasets are collected annually from all 50 states and provide detailed aggregate information on prison populations for each state, including data on race and sex of people who are incarcerated. The most recent data available at the time of our analysis was for 2022.

Prison Populations, 2023: Our modelling approach required more recent prison population numbers than were available from the NPS, so we manually collected prison population

data from state departments of corrections for 2023. These are cited on each state's page in the web tool.

4.3 Case-Level Estimation of PEY

Our preliminary analysis indicated that PEY data reported to NCRP by the states was not always reliable. It is often missing for people who should have one (e.g., in many states, everyone is eligible for parole). It is likely that for many people the earliest PEY had been deleted or replaced with a new date after a failed hearing. Therefore, the main analytical task was to identify the earliest possible PEY for each person in the datasets.

We began by limiting our population to individuals incarcerated in prison, excluding people who were returned to prison from parole and those serving a life sentence or a sentence of less than one year.[11] We also excluded states where most people are not eligible for discretionary parole, that is, where parole is only for people with life sentences or had been abolished decades ago. PEY estimates for 2020 and earlier were calculated in three steps:

1. We started with the PEY variable in the NCRP for the state and year of interest.
2. Next, we looked at the PEY provided in previous years' reports to identify the earliest PEY recorded for a person.
3. When PEY was missing, we used the state's parole eligibility rules to create a conservative estimate of the PEY. We also replaced the reported PEY if our rules-based estimate was earlier than the PEY reported in the NCRP data. Because the estimate is conservative, the results may undercount the number of people in prison past their PEY.

To match people to their PEY in previous years' reports without an NCRP identifier available across reports, we created our own identifier based on the variables that should be constant across reports: state, sex, race, admission year, admission type, age at time of admission, sentence length, maximum release year, offense (detailed), offense (general), terms count, sentences count, most serious prior sentence, last serious prior offense, and second-to-last serious prior offense.[12] If multiple people had the same identifier, the latest PEY among them was selected, with missing PEY treated as later than any other year. If a previous report returned a PEY earlier than the one from the year of interest, that one was selected. The process was repeated for each report back until 2000.

Rules-based imputation was based on rules identified by Reitz and colleagues.[13] It is a conservative estimate computed as follows: First, each person was assigned a minimum sentence that was the highest possible percentage of the maximum sentence or a minimum number of years, based on each state's laws.[14] A separate calculation was made

for people whose most serious offense was nonviolent, for those whose most serious offense was violent, and for those with an offense category with special eligibility restrictions. For some states that have additional special rules based on previous sentences, the imputed minimum sentence took into consideration previous sentences. For states without data about previous sentences, the calculation assumed everyone with the relevant offense type had previous sentences. For states that have special restrictions for most serious offenses that always involve sentences above certain thresholds—e.g., a felony A comes with a sentence of at least 20 years—the restricted minimum sentence was calculated for people with a maximum sentence equal to or above that threshold. All fractions were rounded up. If the rules-based imputation was earlier than the one found in the previous steps, it was used as the best estimate.

Results were then checked against available data from states about people in prison past parole eligibility and parole hearing approval rates. We also checked whether estimates and the percent of missing PEY were consistent with the state's eligibility rules and for the potential influence of any missing data in the imputation. Data was excluded for any year in a state when more than 33 percent of the cases were missing their admission year or the maximum sentence length variables, as well as for years when more than 40 percent were missing PEY after imputation.[15] Even if missing data was under this threshold, if the missingness appeared to follow a pattern that might bias the estimate, that state's yearly data was excluded. Conversely, if a state was missing more than the abovementioned thresholds any year but due to other available data that missingness was not problematic, the year was not excluded. When it is unclear whether the estimate is too conservative or not, a note about this was included at the top of the state's report. This is usually the case when the imputation might be too conservative, but most people had a PEY matched to previous records.

Because there was a change in the trend of percentage of people past PEY in 2020 in many states, likely due to the COVID-19 pandemic, the state reports use data from 2019 if available. If a state did not have reliable data for any year after 2017, it was excluded from state reports and national analysis of disparities. However, reliable data from previous years was used for 2023 projections and the national analyses described below.

4.4 Projections of People Past PEY by State

Because NCRP data is reported only until 2020, we created projections of the percent of people past their PEY in each state for subsequent years. Our models were restricted to a subgroup of the prison population, excluding all individuals who were returned to prison from parole and people with life sentences or sentences of less than one year. Estimates

for the percentage of people who had passed their PEY in 2023 were derived from a regression model based on data from 2010 to 2020. This regression accounted for state-specific trends in the annual changes in the percentage of people past their PEY over the decade, as well as the impact of special COVID-19 policies in 2020. (Technically, a mixed-effects model with random slopes for both factors was used.)[16] The total number of people past their PEY in 2023 was calculated by multiplying the 2023 restricted subgroup of the population by the estimated percentage of people past their PEY.

The size of the restricted subgroup of the population in 2023 was estimated using a regression model based on the percentage of the total population represented by this subgroup between 2010 and 2020. For data from 2010 to 2022, the custody population reported in the NPS was used if it matched the type of population reported in the state's 2023 data. If the state reported the jurisdiction population instead of the custody population, the jurisdiction population was used. When the type of population reported in 2023 was unclear, it was assumed to be the one closest to the data reported in the 2022 NPS.

4.5 Differences by Race, Ethnicity, and Sex in Incarceration Past Parole Eligibility

To estimate differences in incarceration past parole eligibility, we utilized data from the NCRP and estimates developed by the CSG Justice Center. These analyses focus exclusively on individuals who remained incarcerated beyond their parole eligibility date. Due to differences in how states record race and ethnicity, the analysis was limited to the following categories: White, Black, Hispanic, and Other. According to the NCRP's definitions, White, Black, and Other refer to people of those races who are not Hispanic, while Hispanic includes people of any of the other races. Data for Hispanic populations should be interpreted with caution because the original question and coding for ethnicity in state systems were unavailable and likely varied across states. This inconsistency may impact how individuals identifying as Hispanic are counted in prison data and could also affect counts of other people. For instance, if many Hispanic people are recorded as White, the number of White people would be inflated, perhaps significantly, and rates comparing Black and White people would be inaccurate; they would reflect a comparison of Black people to White and Hispanic people combined.

We used the RRI to measure racial, ethnic, and sex disparities for incarceration past parole eligibility. The RRI compares the rates of these outcomes across different racial and ethnic groups and between men and women, relative to their representation in the overall population. We calculated the RRI by comparing the rates of an outcome—such as

remaining in prison past parole eligibility—experienced by Black and Hispanic populations to those experienced by the White population. For example, an RRI of 10-to-1 between Black and White populations would mean that Black individuals are 10 times more likely to experience that outcome than White individuals. Conversely, an RRI of less than 1 would indicate that Black individuals experience the outcome at a lower rate than White individuals.

5. National Trends in Parole Eligibility

5.1 Methodological Note

The analyses below are restricted to the states for which we have reliable estimates for most people in 2017 or later—that is, the states that have a state report page—except when we report aggregate data for 2023 projections. For most states, the data used is from 2019 when reporting on case-level variables other than whether people are past their PEY at year's end, such as sentence length, offense type, or years past PEY. 2023 projections are used when reporting about the total and percentage of people past PEY without filtering by other case-level variables. When trends over time are reported, other years are used and indicated, with projections being used for any year after the latest reliable year of data for each state.

The data also excludes people who are sentenced to less than one year or a life sentence and those whose admission is a parole return/revocation or "other admission," with the latter including unsentenced, transferred, and AWOL escapee return, unless otherwise noted. It does include people for whom the sentence or the admission type is missing, assuming most are not part of the excluded categories. We call this the “restricted subgroup” of the population for shorthand. Because of this filter, the numbers might differ with those reporting elsewhere that compare people past PEY to the total prison population. For the analysis that considers the entire U.S. population, the total and sentenced jurisdiction population was used, taken from the Bureau of Justice Statistics' data.[17]

States included are: Arkansas, Colorado, Connecticut, Georgia, Hawaii, Idaho, Iowa, Kentucky, Louisiana, Montana, Nevada, New Hampshire, New York, North Dakota, Oklahoma, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, and West Virginia. The total number of people included are: 456,251.

5.2 Percentage of People past PEY

To begin, we want to explore how many people are past their PEY but still in prison and what percentage of the total prison population they represent in 2023, based on our projections.

In 2023, at least 213,000 people were past their PEY in the paroling states with a projection. This represents 48 percent of the "restricted subgroup" of the prison population in those states and 37 percent of the total prison population in those states. It also represents 17 and 18 percent of the country's total prison and total sentenced population, respectively.

There is wide variation among the states in terms of what percentage of the restricted subgroup of the population is incarcerated past their PEY, ranging from 7 percent in Arkansas to 98 percent in Hawaii, with a mean of 44 percent and a median of 45 percent. Figure 1 shows the distribution is relatively normal, concentrated around 40 percent (the continuous line, kernel density, shows the estimated distribution of the data, while the dashed line represents an ideal normal distribution for comparison).

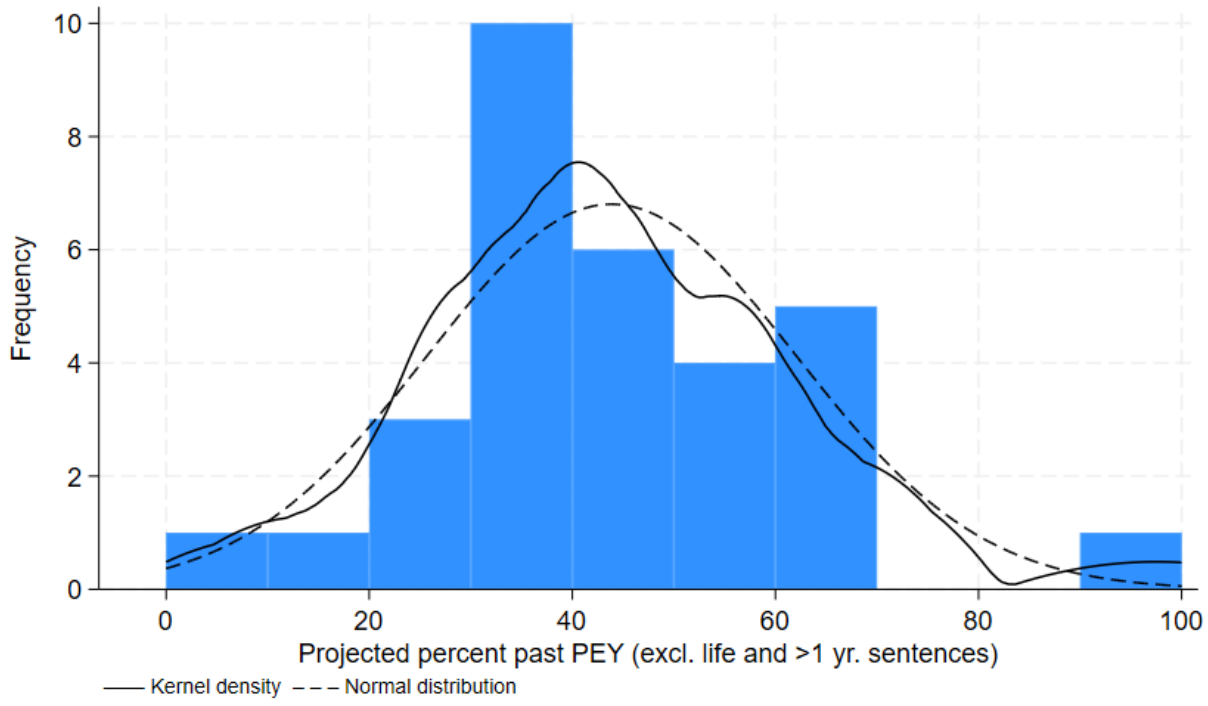


Fig. 1. Number of paroling states by percentage of people past PEY by state, with normal and kernel density distribution.

5.3 Trends since 2010

Beyond 2023, it is worth looking at the trend from the last decade before the COVID-19 pandemic, since there has been a general decline of the prison population starting in 2010, accentuated by a sharp decline in 2020, which has rebounded slightly since then.[18] Fig. 2 shows that the total number of people past PEY has decreased by an estimated 38,000 between 2010 and 2023, particularly starting in 2020. This is likely due to the fact that the overall population decreased since 2019 by approximately 59,000 due to COVID-19 policies (for context, between 2010 and 2019, the overall population decreased by approximately 45,000). The percentage of people past PEY increased slightly until 2019, about 1 percent, but more noticeably in 2020. This might have happened because, having admitted fewer people due to delays in courts, there were less new admissions that were not past their PEY. It is also possible that COVID-19 policies involving releases tended to favor people who were likely going to be released on discretionary parole soon, regardless of COVID-19.

However, not all states followed the same trend. The trend described above is especially influenced by larger states, which have more weight when considering all individuals equally. In contrast, when considering all states equally, the average percentage of people past PEY had increased by 3 percent between 2010 and 2019.

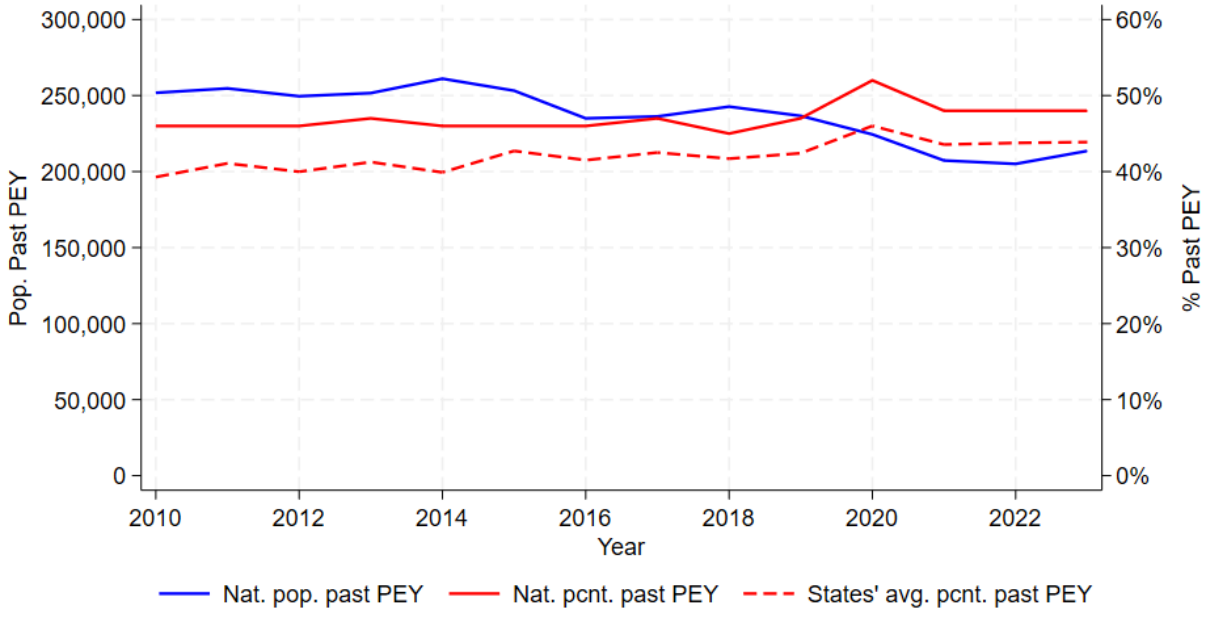


Fig 2. Trend of People past PEY over Time

There is variation among the states in how much the average percent of people past their PEY changed from 2010 to 2023. On the one hand, Maryland and Michigan saw an estimated change of -10 percent. On the other hand, South Dakota saw an estimated change of 35. The mean change was 3 percent, and the median change was 0 percent.

5.4 Time Served Variables by People Released

The following analysis focuses on the time served, what proportion of the maximum sentence it represents, what proportion of it was served past PEY, and what proportion of the maximum sentence and of the total time served was spent past PEY. While this section specifically focuses on those metrics among people released, the next section will discuss the same metrics among people still incarcerated at year end. This distinction is important because people released and people who remain incarcerated are likely not so similar. For instance, those who remain incarcerated include many people still not past PEY, so their average time past PEY is likely smaller than among those released. On the other hand, given the national pattern of declining admissions, it is likely that each year the year-end population includes a higher proportion of people with longer sentences than in previous years and in the released population. Those people may also be more likely to stay incarcerated past PEY. Differences between the time spent past PEY among those released and those still incarcerated are likely most noticeable among people with longer sentences.

Fig. 3 shows that most people released spend one or two years past PEY, with decreasing numbers after that. The distribution is highly right skewed, with a mean of 1.7 years and a median of 1 year. This mean varies by state. Fig. 4 shows that the state average of time past PEY among released people tends to concentrate around 1 and 1.5 years, but in some states the average is greater than 2 years, while in one state it is closer to 0 years.

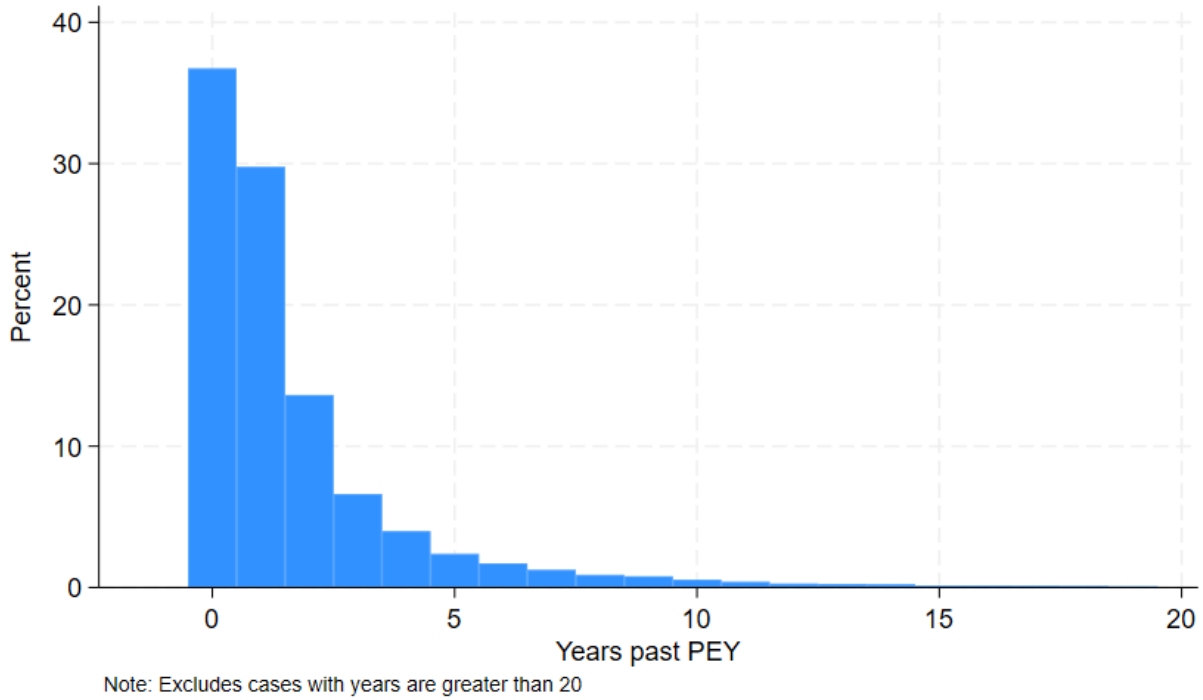


Fig. 3. National distribution of years past PEY served by people released

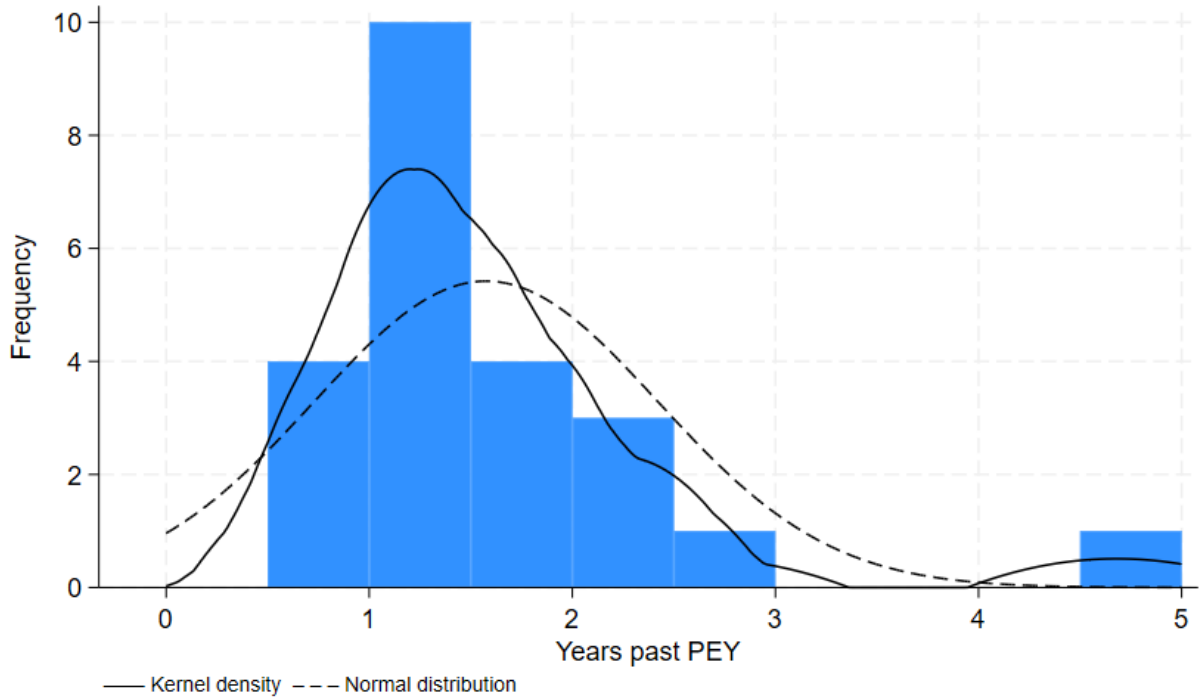


Fig. 4. Distribution of states' average of years past PEY served by people released

To put this in context, the average time served is also right skewed, but 1–2 years are more common, as shown in Fig. 5. The mean is 2.5 years and the median is 1. This mean also varies across states, with most having a mean between 2 and 2.5 years, but in some being over 4 years, as shown in Fig. 6.

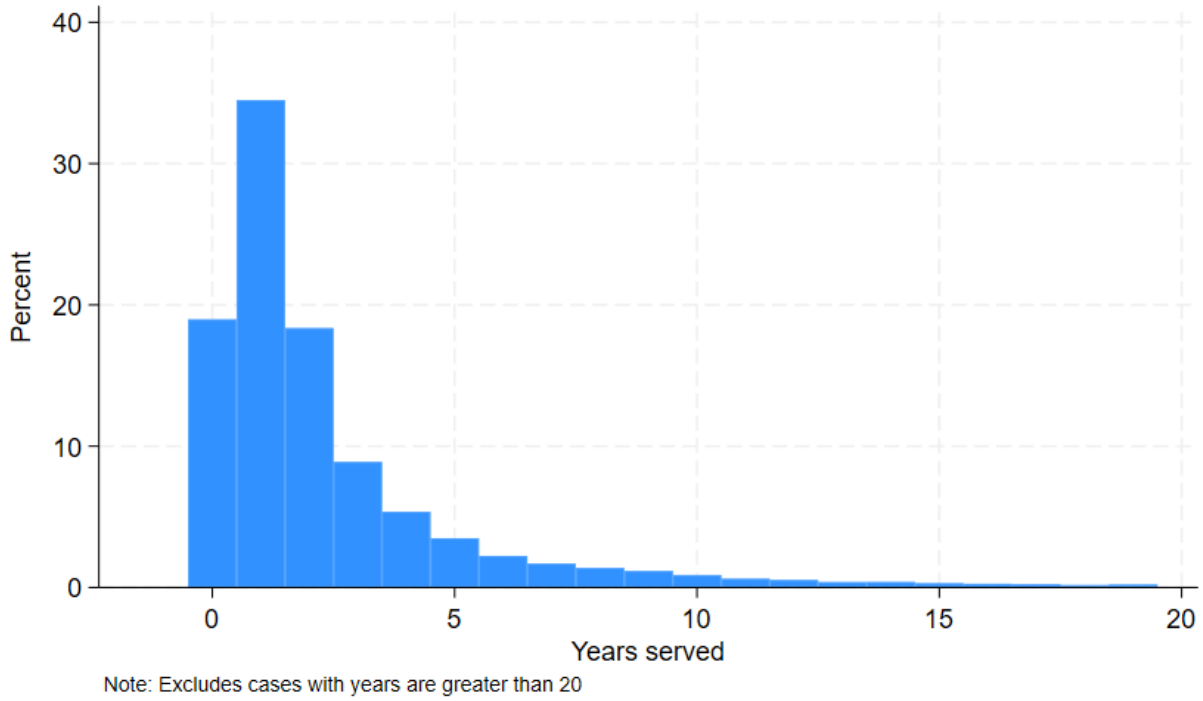


Fig. 5. National distribution of years served among people released

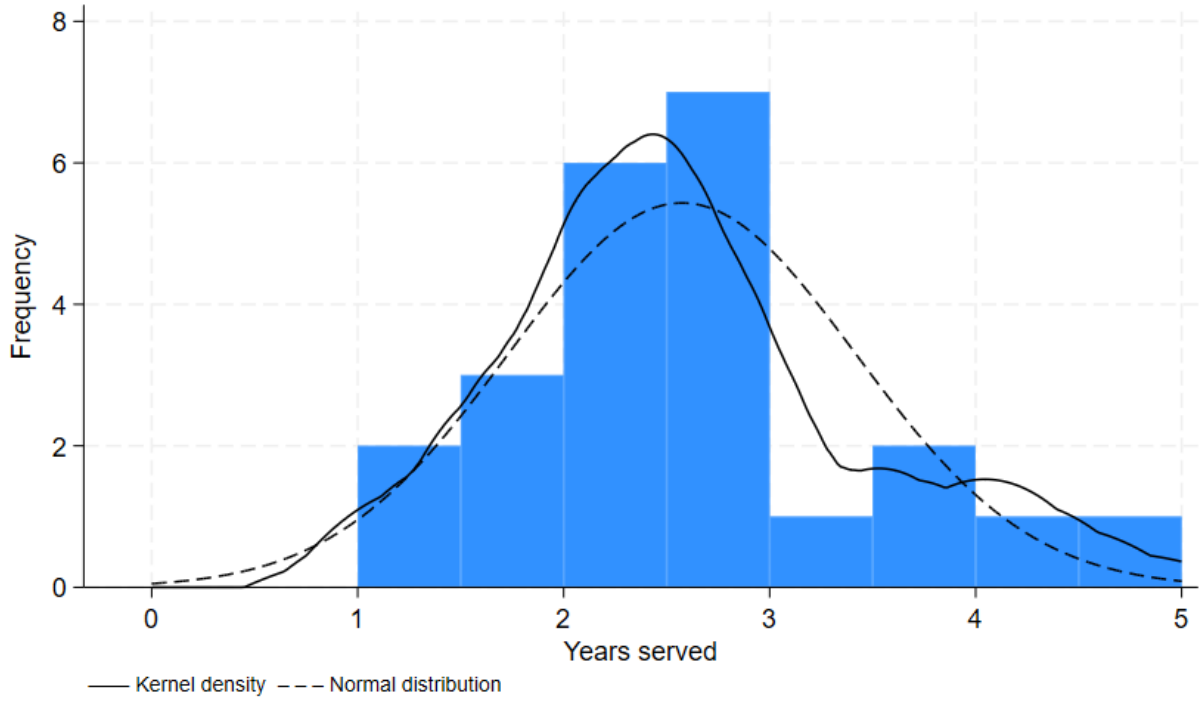


Fig. 6. Histogram of states' average of years served by people released

It is also worth looking at the percentage of the maximum sentence served by people and what percentage is served past PEY. Fig. 7 show that the distribution of the percentage of the maximum sentence served has multiple peaks around 0–10, 20–40, and 50–60 percent. The mean is 58 percent, and the median is 50 percent. Fig. 8 shows that the distribution of time served past PEY also has multiple peaks in those same areas, although more than 40 percent of the people released are serving less than ten percent of their maximum sentence past PEY. The mean is 39 percent, and the median is 33 percent. However, when it comes to the percentage of the actual time served, the peaks are at 0–10 and 50–60 percent, with about half of the people serving more than half of their time past their PEY, as shown in Fig. 9. This suggests that if most states were able to have a high approval rate at the earliest PEY, the time served by people could be reduced substantially, probably by more than half. It should be noted that all these figures include 9,339 people who are not eligible for discretionary parole (6 percent).

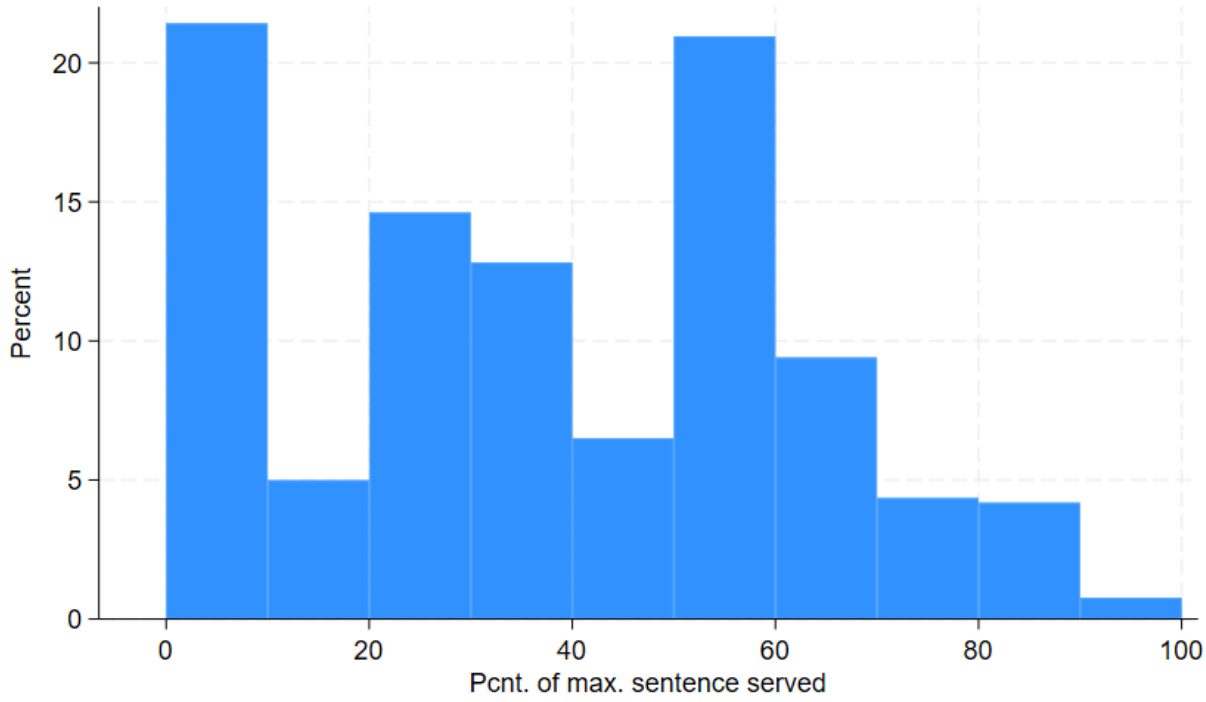


Fig. 7. National distribution of the percent of the maximum sentence served at release

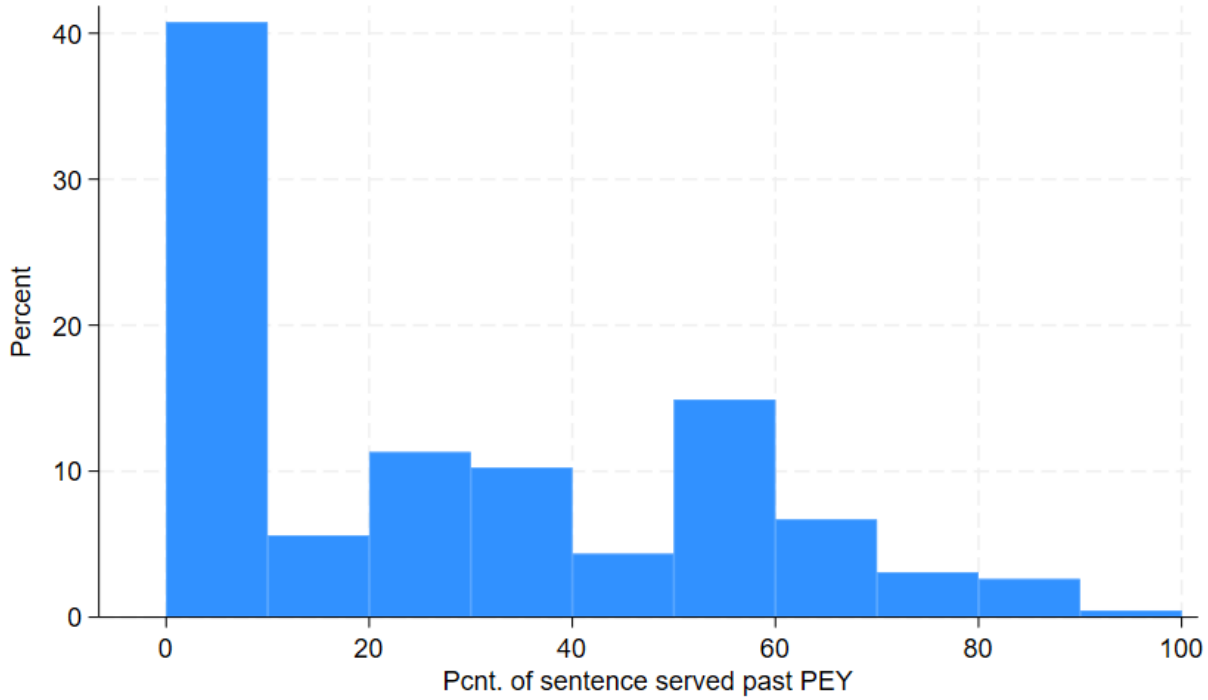


Fig. 8. National distribution of the percent of the maximum sentence served past PEY at release

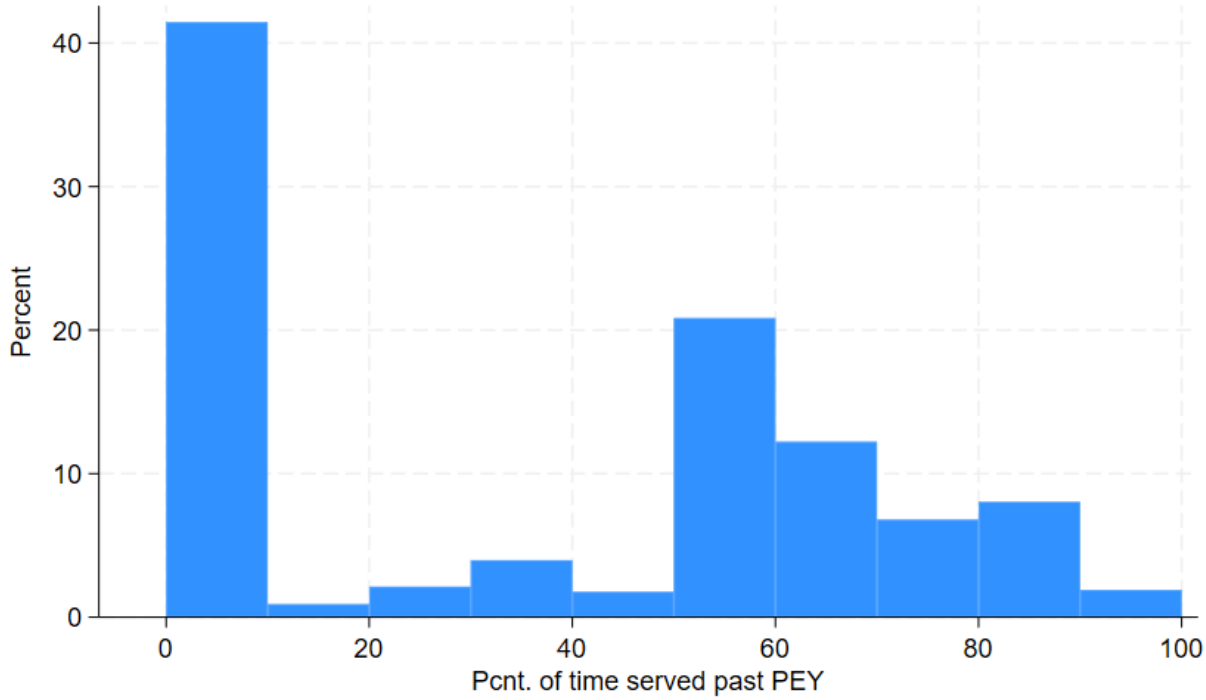


Fig. 9. National distribution of the percentage of the time served spent past PEY at release

These means and distributions also vary across states. This distribution deserves special attention, since national distributions are highly influenced by patterns from large states. Fig. 10 shows that the distribution of the states' average percentage of the maximum sentence served has a relatively normal distribution concentrated around 60 percent. Readers might note that some states have an average above 100 percent, which seems unusual. That is because some states were missing data on the release year for all the maximum sentences and only had data on the maximum sentence for the longest sentence or the estimated release year accounting for good time. The last two variables were used to estimate the latest possible release year when that variable was missing. Therefore, if many people were serving more than one sentence or had a release year based on good time, they could end up serving more than the estimated sum of maximum sentences length.

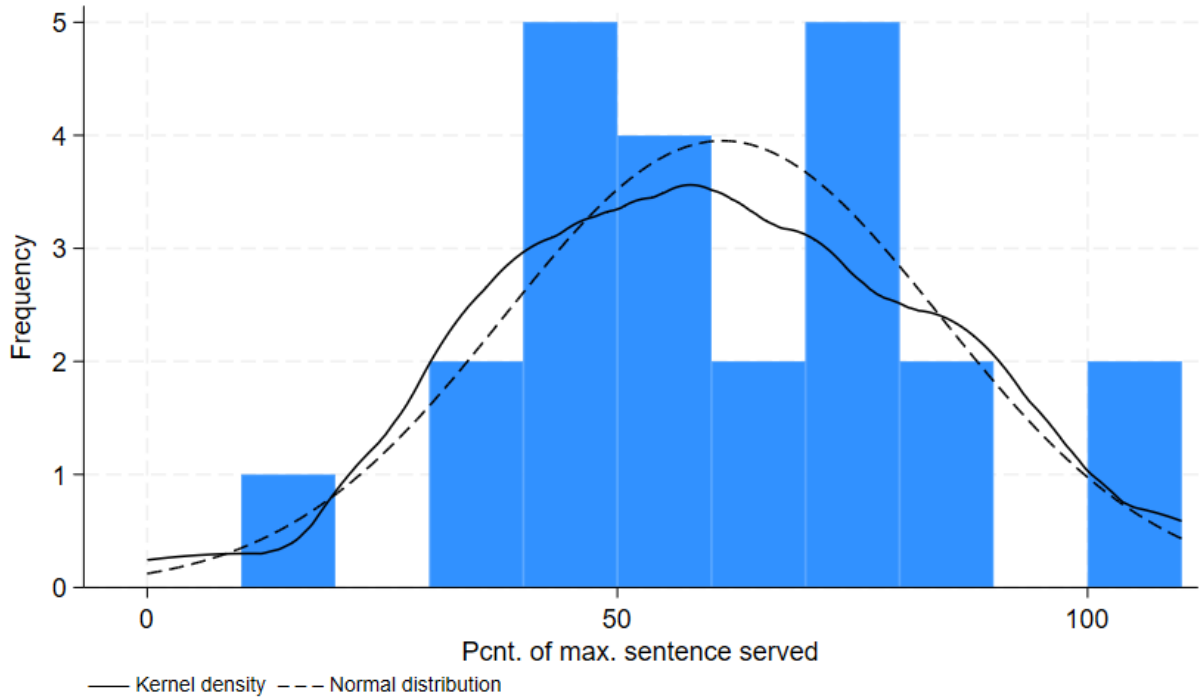


Fig. 10. Distribution of states' average percentage of the maximum sentence served by people released

Similarly, Fig. 11 shows that the average percentage of time served past PEY varies across states, with a relatively normal distribution concentrated around 35 percent, slightly right skewed. The one outlier above 100 percent is explained by the same issue with missing data described in the previous paragraph. When looking at the percentage of the total time served past PEY, Fig. 12 shows that the average varies between states and is relatively normally distributed, concentrated around 60 percent.

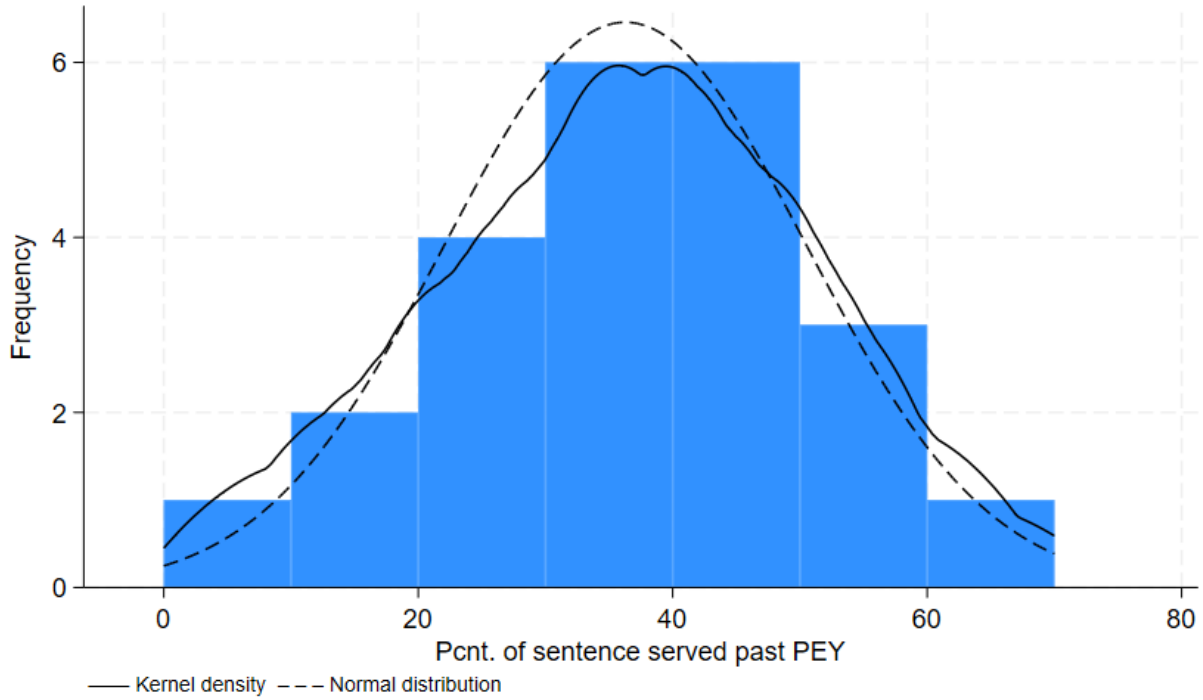


Fig. 11. Distribution of the states' average percentage of the maximum sentence served past PEY at release

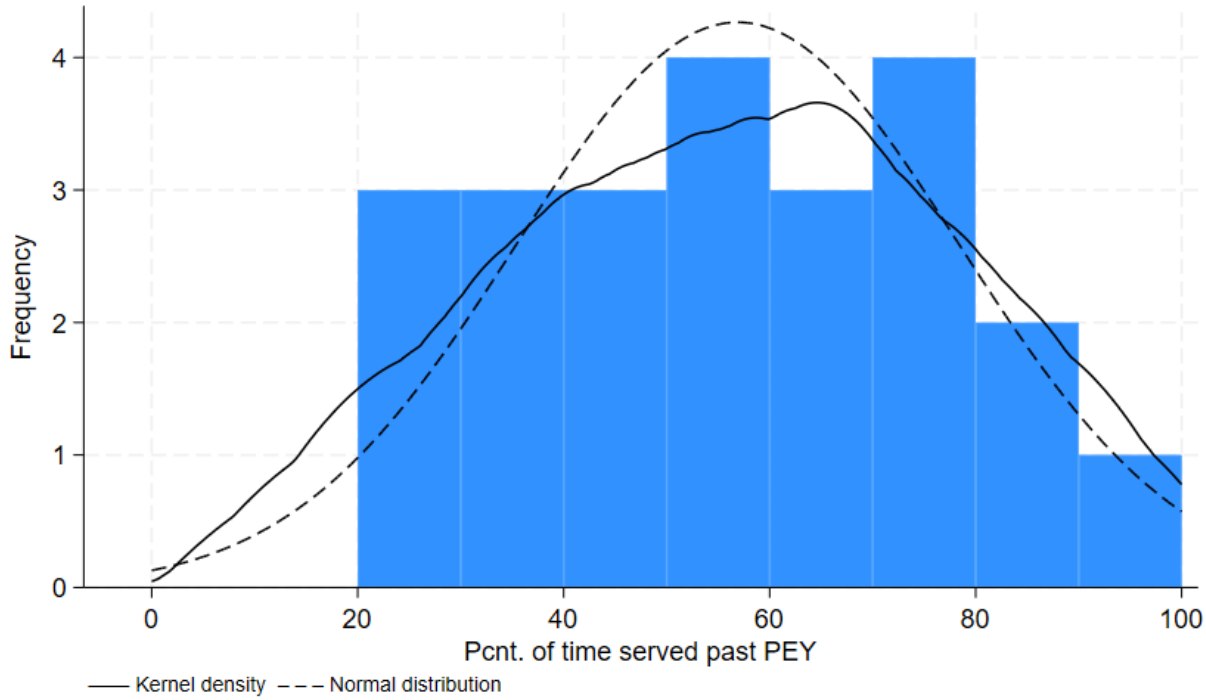


Fig. 12. Distribution states' average percentage of the time served past PEY at release

A detailed table with the averages of the indicators discussed in this subsection among all states is included in Appendix 1.

5.5 Time Served Variables by People Incarcerated at Year End

The following analysis repeats what was done in the previous section but focused on the year-end population. As the data shows, results differ from those above.

Fig. 13 shows that, nationally, more than 60 percent of people incarcerated at year end have spent only 1 year past PEY, about 10 percent have spent 2 years past PEY, and less each year after that. However, it should be noted that 13 percent were still incarcerated at the end of their PEY, so past their parole eligibility date. The distribution is heavily right skewed, with a mean of 1.8 years and a median of 0 years. Similar to the analysis for released people, this mean varies by state. Fig. 14 shows that the states' average of time past PEY among people incarcerated at year end tends to concentrate around one year, but in some states the average is greater than two, while in one state it is closer to zero (nearly the same pattern observed among released people, slightly right skewed).

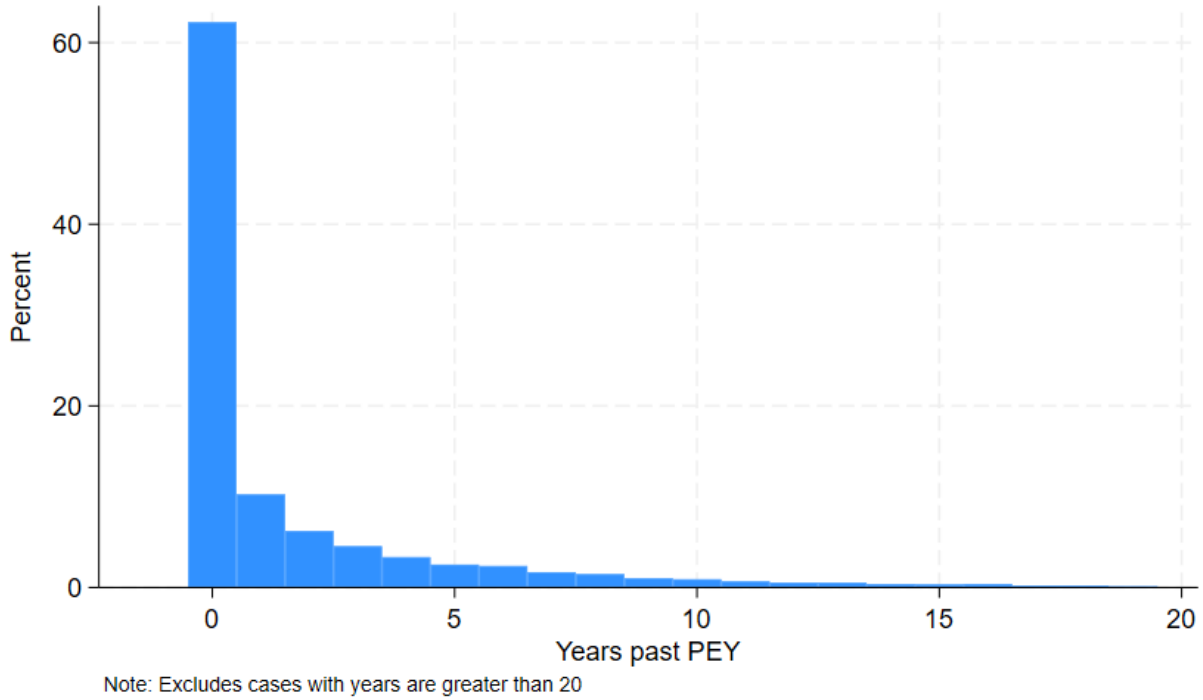


Fig. 13. National distribution of years past PEY served by people released

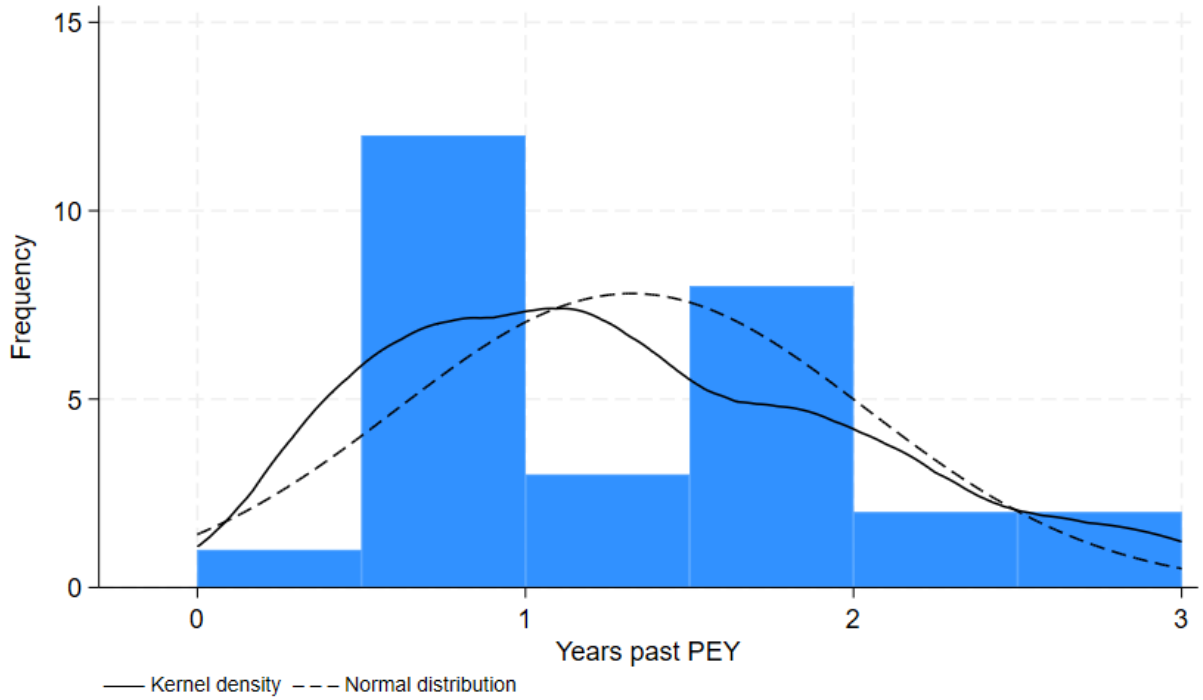


Fig. 13. Distribution of states' average of years past PEY served by people incarcerated at year end

The distribution of the total time served provides some relevant context. Fig. 15 shows that the distribution is also heavily skewed right, with almost one-third having served less than a full year by year's end and almost half having served less than two full years. The mean is 3.9 years, and the median is 2 years. Note that this is counting complete years served. Someone admitted at the beginning of the year would have served 11 months but zero years by the year's end, so the actual average time served is greater. This mean also varies across states. However, unlike in the case of people released, states' average tends to concentrate around 3.5 years, as shown in Fig. 16.

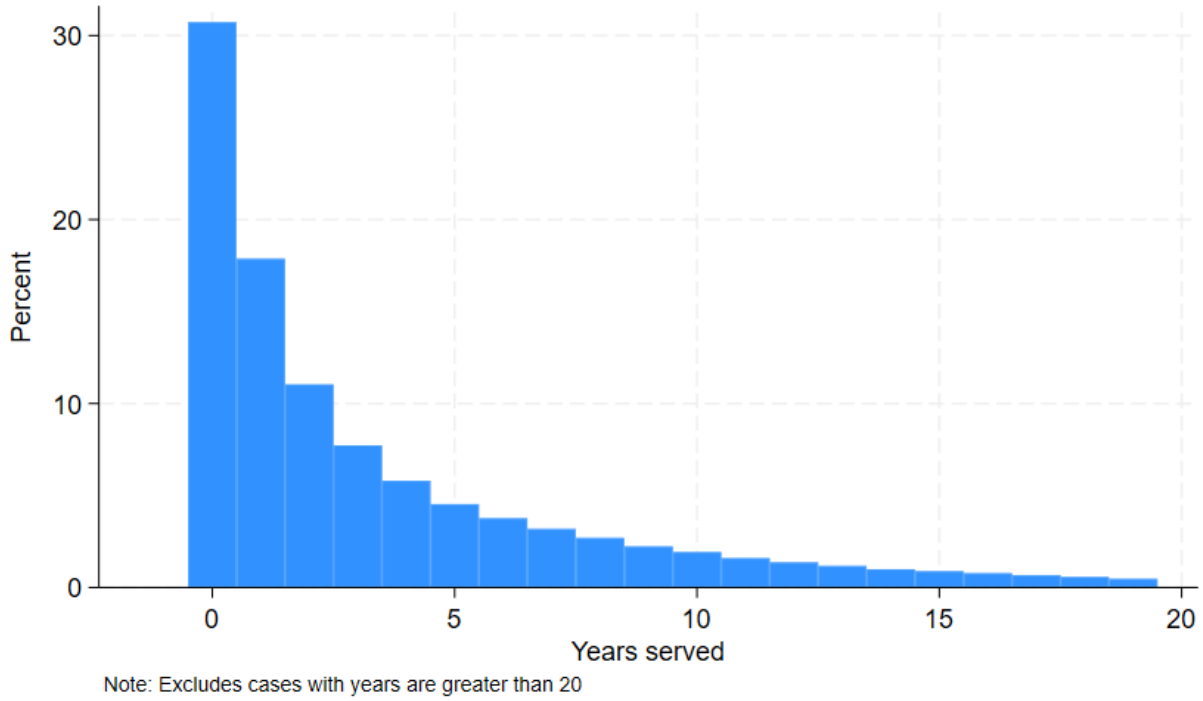


Fig. 15. National distribution of years served among people incarcerated at year end

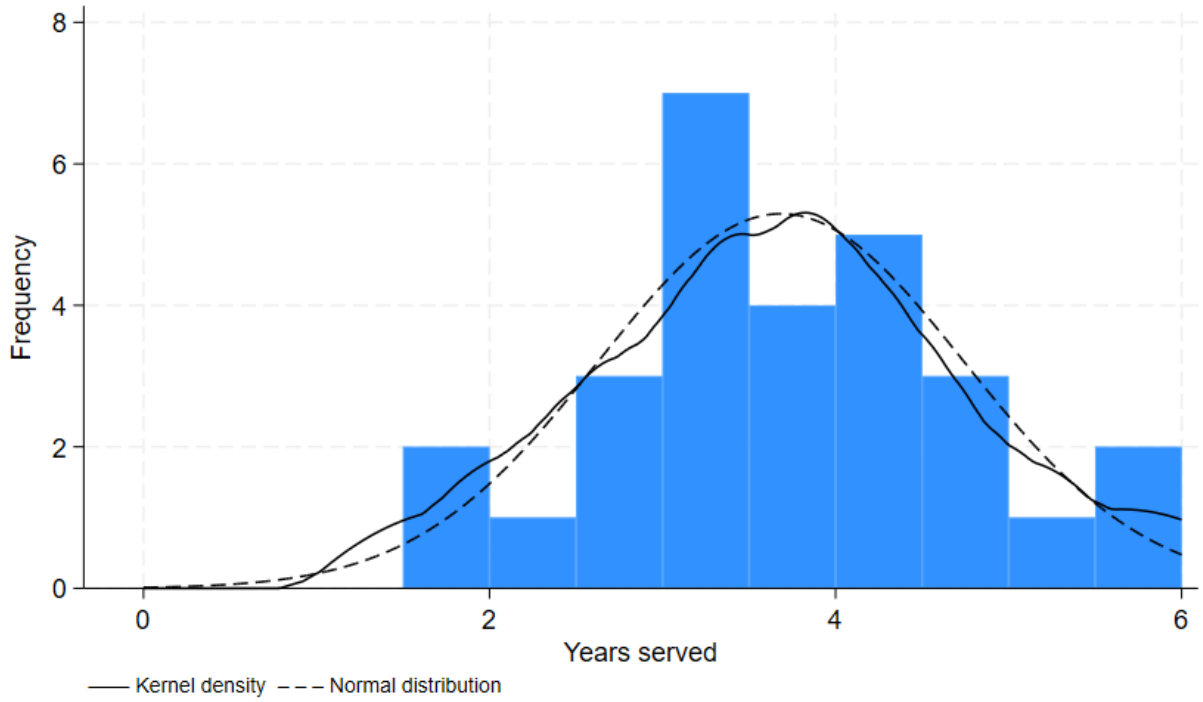


Fig. 16. Histogram of states' average of years served by people incarcerated at year end

As reported among released people, it is also worth looking at the percentage of the maximum sentence served by people incarcerated at the year's end and what percentage they served past their PEY. Fig. 17 shows that the distribution of the percentage of the maximum sentence served is concentrated between 0 and 10 percent, much more heavily than among released people. While the distribution is not consistently declining, it does not show the noticeable peaks seen among released people. This is likely because many people are newly admitted, still early in their sentence. The mean is 31 percent, and the median is 19 percent.

Similarly, Fig. 18 shows that the distribution of time served past PEY is also heavily concentrated between 0 and 10 percent without noticeable peaks elsewhere. This is also influenced by 36 percent of people still not past their PEY and 13 percent who were still incarcerated at the end of their PEY but were counted as having zero complete years past their PEY. The mean of the percent of the maximum sentence served past PEY is 17 percent, and the median is 0.

When it comes to the percentage of the actual time served, while more than half are still between 0 and 10 percent due largely to the 36 percent not past PEY and the 13 percent less than a full year past PEY, there are some small peaks between 50 and 60 percent, as shown in Fig.19. In other words, a substantial proportion of those past PEY are serving more than half of their time after their PEY. This is consistent with the finding suggested from the similar graph for released people: if most states were able to have a high approval rate at the earliest PEY, the time served by people could be reduced substantially, probably by more than half. As with the figures for released people, it should be noted that all these figures include 24,237 people who are not eligible for discretionary parole (5 percent).

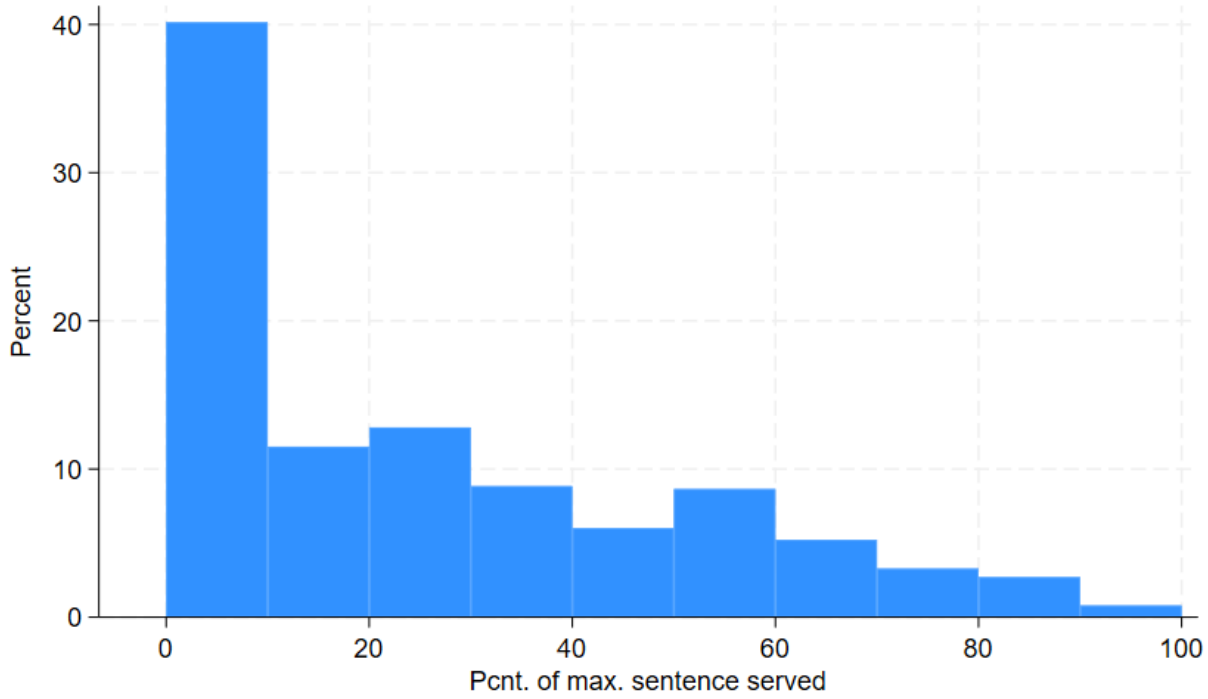


Fig. 17. National distribution of the percentage of the maximum sentence served at year end

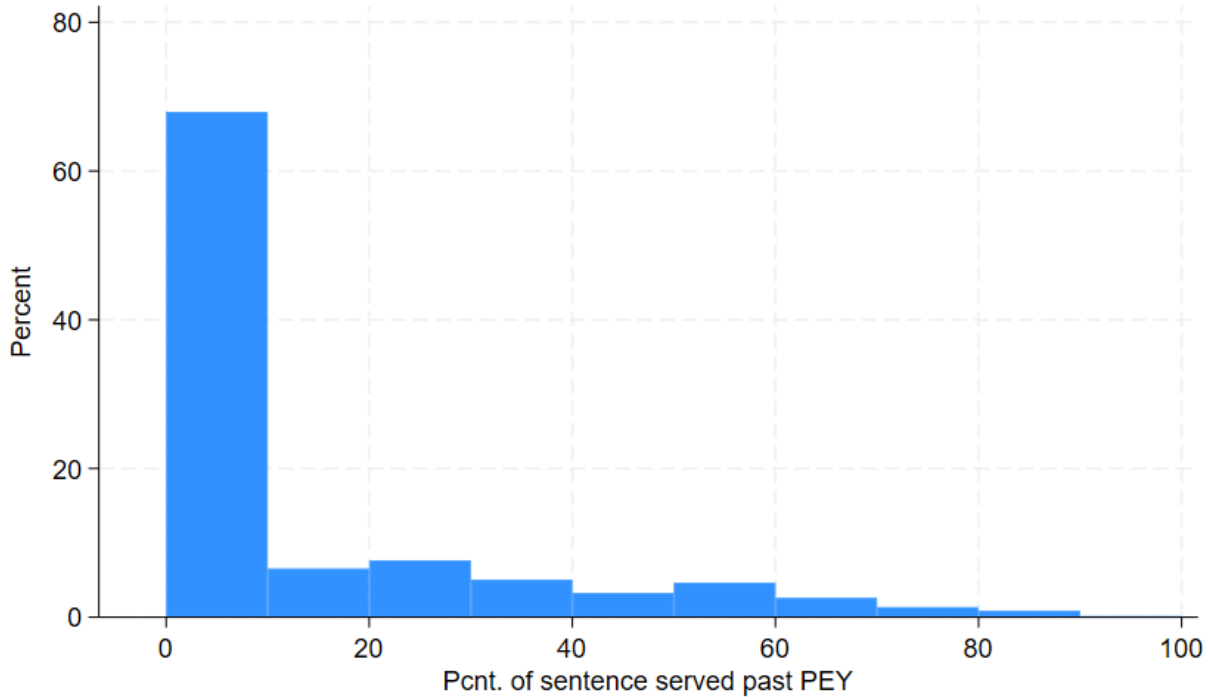


Fig. 18. National distribution of the percentage of the maximum sentence served past PEY at year end

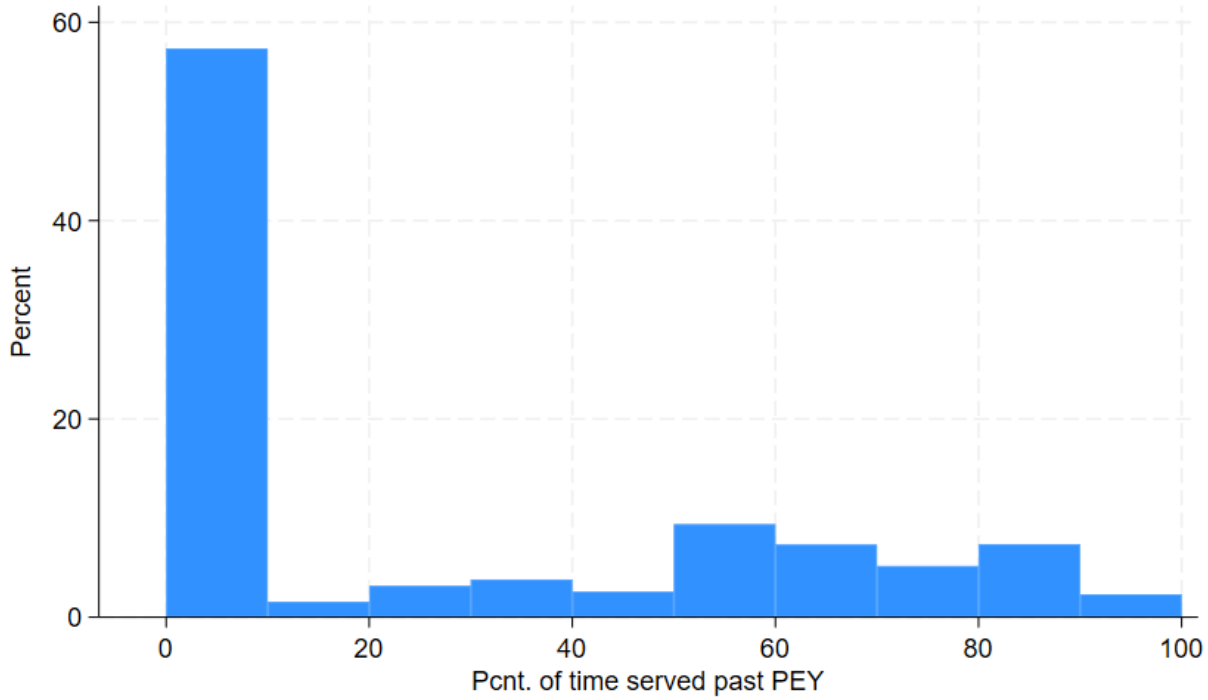


Fig. 19. National distribution of the percentage of the time served past PEY at year end

As was the case among people released, these means and distributions also vary across states. This variation across states shows a different picture, not heavily influenced by a few large states. Fig. 20 shows the distribution of the states' average percentage of the maximum sentence served has a relatively normal distribution concentrated around 30 percent, that is, at about half of the percentage for the central tendency among released people. This is likely the result of having many people recently admitted, early in their sentence, and not yet a full year past their PEY.

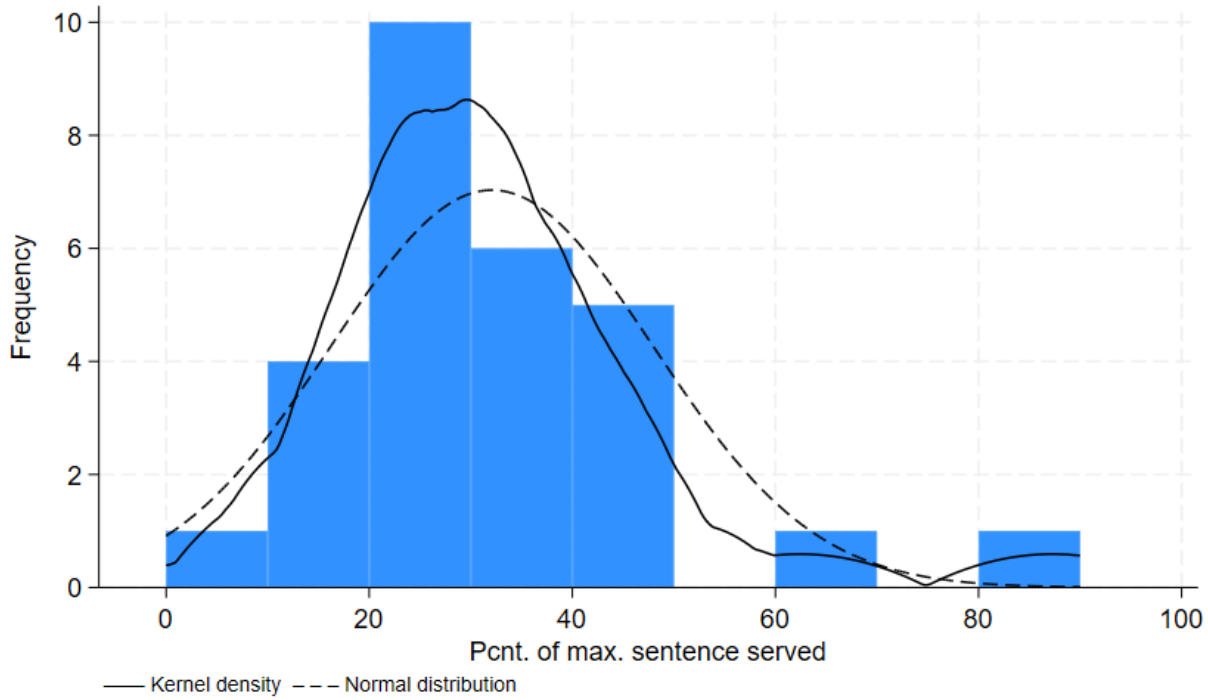


Fig. 20. Distribution of states' average percentage of the maximum sentence served by people at year end

Similarly, Fig. 21 shows that the average percentage of time served past PEY varies across states, with a relatively normal distribution concentrated around 30 percent, slightly right skewed. Again, the peak at a lower percentage than among released people is likely due to many people being early in their sentences and not yet a full year past PEY. When looking at the percentage of the total time served past PEY, Fig. 22 shows that the average varies among states and is relatively normally distributed, concentrated around 25 percent, and again lower than among released people likely for the abovementioned reasons.

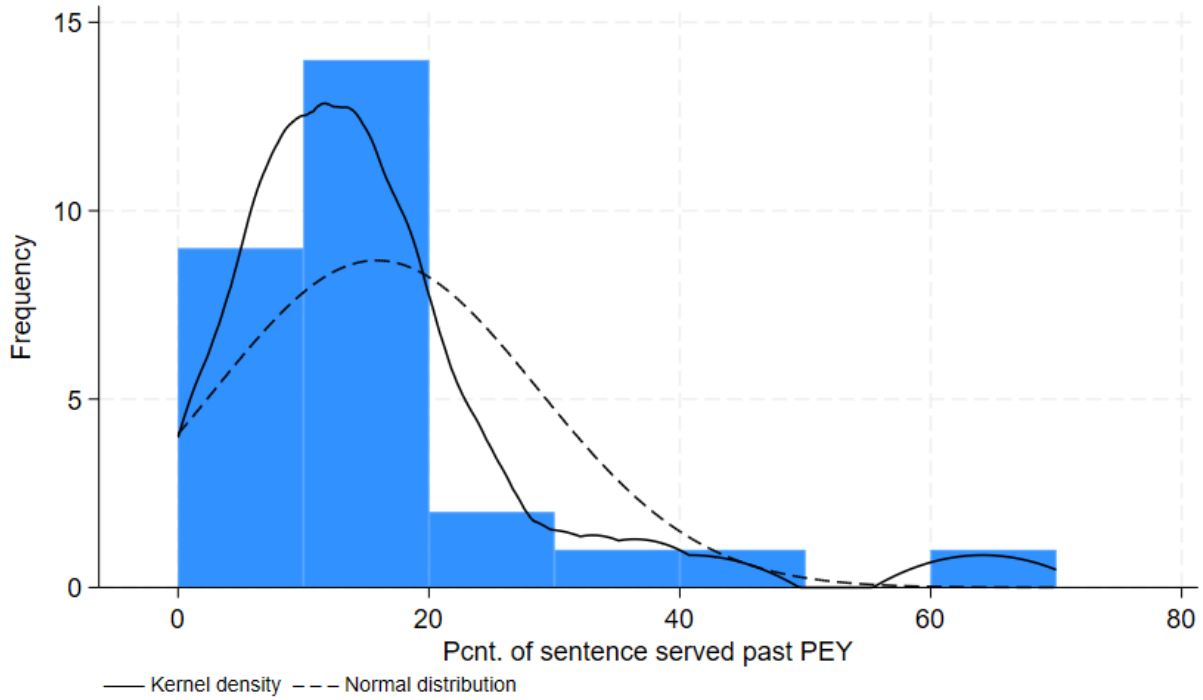


Fig. 21. Distribution of the states' average percentage of the maximum sentence served past PEY at year end

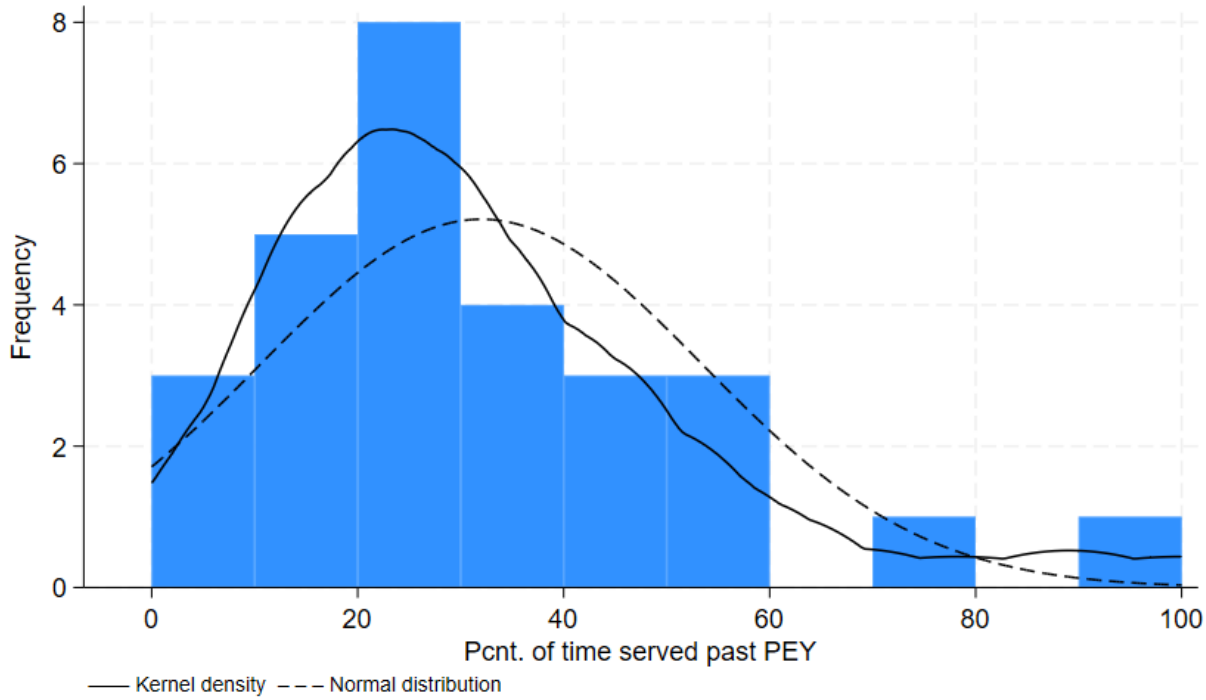


Fig. 22. Distribution states' average percentage of the time served spent past PEY at release

5.6 Differences and Trends by Offense Type and Sentence Length

How do the offenses and sentences of people past PEY compare to those of people who are not currently eligible for parole? Fig. 23 shows the percentage of people past their PEY and not yet past their PEY by broad categories of offense type. The totals do not add to 100 percent because some people did not have a PEY, either because they were not eligible or because it was missing and not enough data was available for a conservative estimate of their PEY. The figure shows that there are not very large differences between people sentenced for violent, public order, and drug offenses, which have almost the same percentage of people past their PEY and with a future PEY. However, people incarcerated for property offenses were noticeably more likely to be incarcerated past their PEY. In total, 100,354 people were incarcerated past their PEY for nonviolent offenses. This includes an estimated 27,975 for public order offenses, 32,285 for drugs offenses, and 38,090 for property offenses.

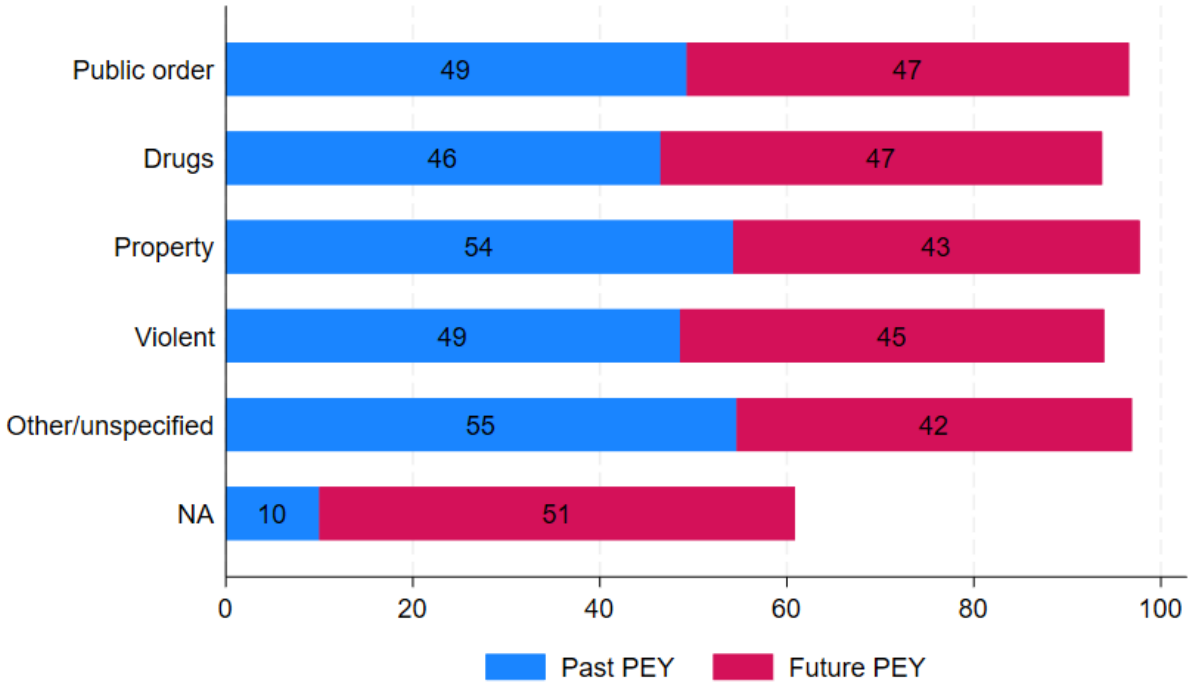
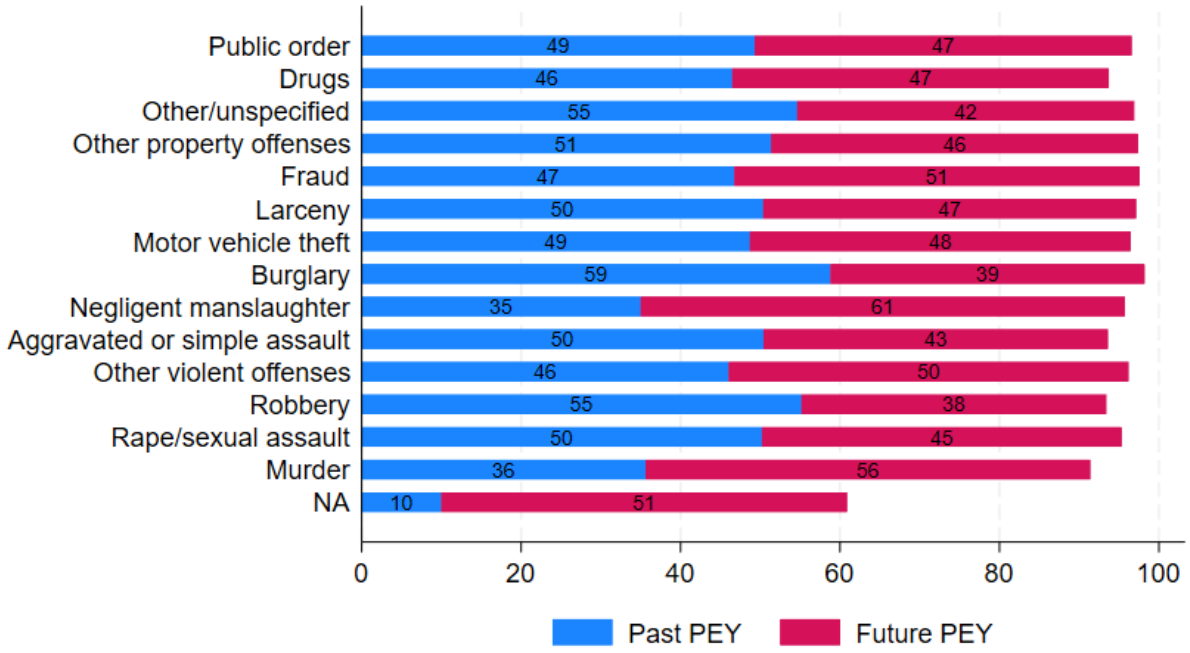


Fig. 23. Percent of people past and not past their PEY by offense type (general categories)

When breaking down the offense types by more detailed categories, the data shows a somewhat similar pattern (Fig. 24). However, the most serious violent offenses, murder and negligent manslaughter, have a substantially lower percentage of people past their PEY than others. This is likely because several states require a longer proportion of the sentence to be served before people incarcerated for those offenses become eligible for discretionary parole. In other words, it does not necessarily indicate that people incarcerated for those sentences are being approved for parole at a higher rate than others. For context, 45,168 people were incarcerated past their PEY for those two most serious violent offenses.



Notes: Drugs incl.: possession, distribution, trafficking, other. Murder incl. non-negligent manslaughter

Fig. 24. Percent of people past and not past their PEY by offense type (detailed categories)

Fig. 25 shows the percentage of people past PEY by sentence length of the longest sentence. The general trend is that the longer the sentence, the higher the proportion of people past PEY, except when it comes to sentences equal to or greater than 25 years. This is likely because those people were sentenced for offenses that have a high minimum before people are eligible for parole or because they had been sentenced multiple times, which increases both the sentence length and the minimum proportion before they are eligible for parole in several states.

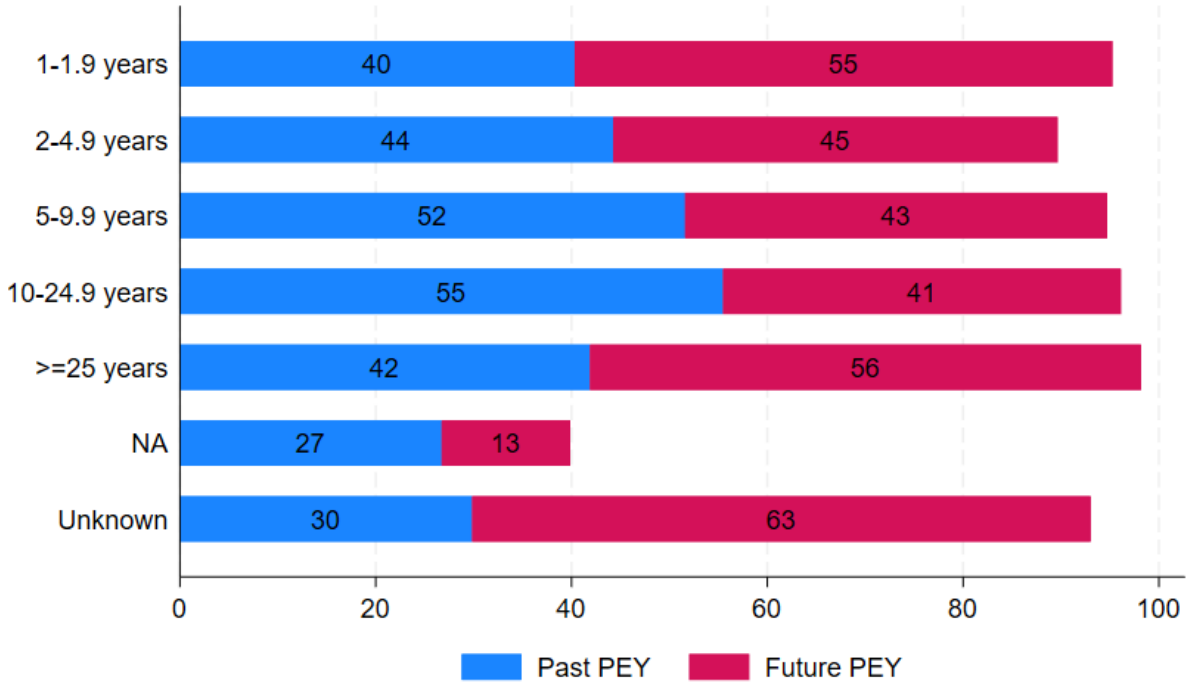


Fig. 25. Percent of people past and not past their PEY by their longest sentence's length

6. Association Between the Degree of Indeterminacy of Sentencing and Incarceration past PEY

Reitz and colleagues at the Robina Institute have created a rating of degrees of indeterminacy for prison release systems. It is based on what percentage of the maximum sentence is the first prospect of release for people incarcerated in a state, on average.[19] In this section, we analyze the extent to which the degree of indeterminacy is associated with the percent of people past PEY at year end and with several variables among released people: years past PEY that are served, the percent of time served past PEY, the total time served, and the percent of the maximum sentence served. Some variables, like the percent of the maximum sentence served and to a lesser extent the total time served, are likely to be associated with the degree of indeterminacy. However, any association is mediated by the approval rate of people eligible for parole.

Fig. 26 shows, for each degree of indeterminacy (1 being extremely low, 5 extremely high), where states lie in terms of their projected percent of people past PEY in 2023. With higher degrees of indeterminacy, there seems to be a higher percentage of people past PEY, with a Kendall's τ_b rank correlation coefficient of 0.318 ($p = 0.000$, significant). This is a moderate

association.[20] It suggests that when people are eligible for parole after a short percentage of the maximum sentence, they are, on average, less likely to be approved by the board or for nondiscretionary parole soon after. There are many possible reasons for that, including that they are less likely to have completed programing relevant for discretionary or nondiscretionary parole.

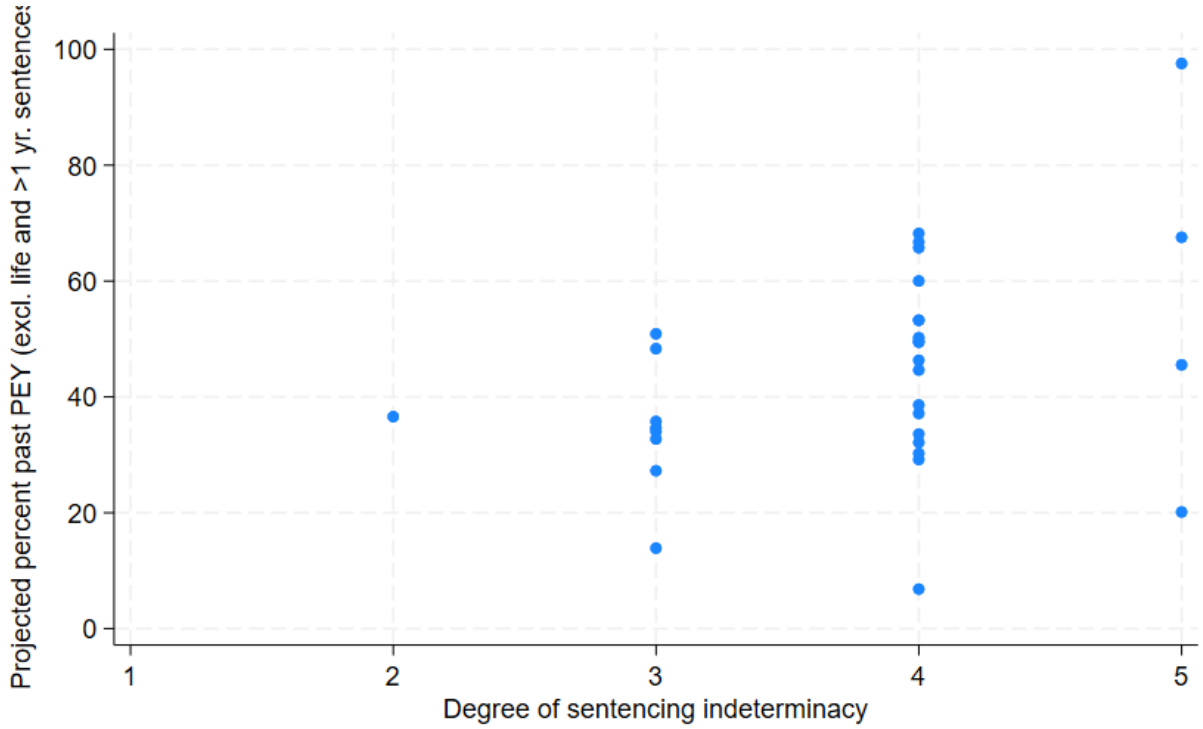


Fig. 26. Percent of people past PEY by indeterminacy degree of the state

Fig. 27 reports the average number of years past PEY among people released for each state by degree of indeterminacy. Unlike with the previous variable, there does not appear to be a clear association. In fact, Kendall's τ_b is 0.060 ($p = 0.752$, not significant). In other words, even though people may be less likely to be approved for parole in their PEY in states with more indeterminate systems, on average people do not tend to spend more time in prison past PEY in those states; that is, less people may spend zero years past PEY in those states, but also less people spend many years past PEY in the same states.

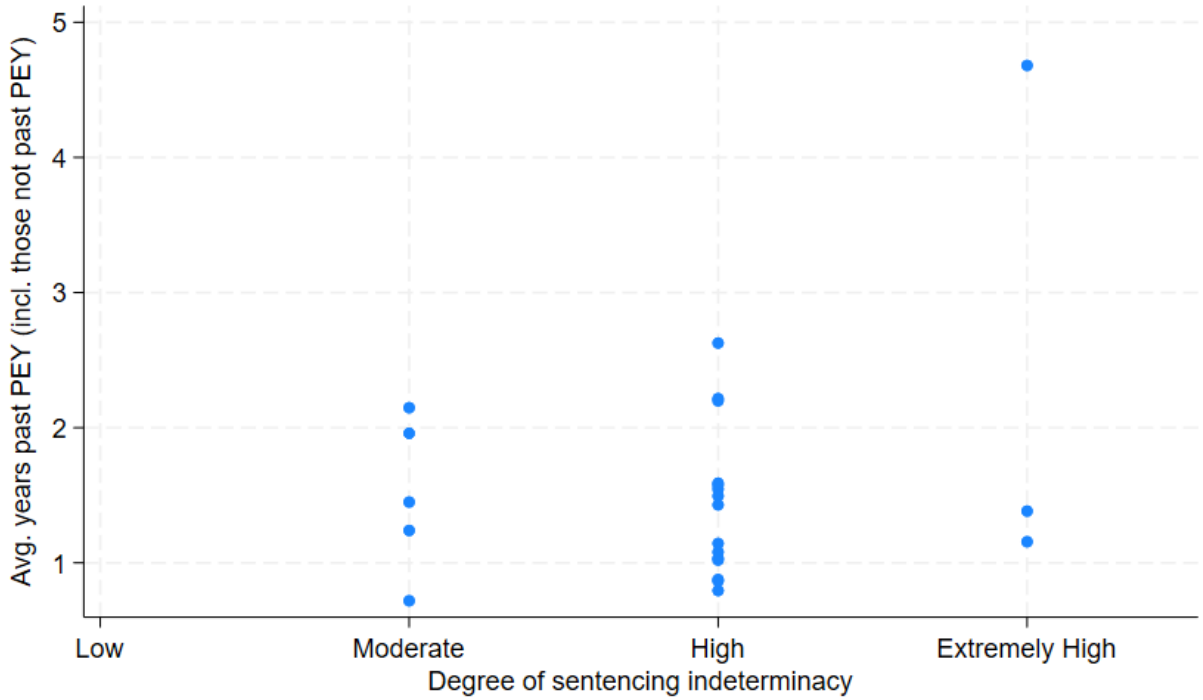


Fig. 27. Average years past PEY among people released by indeterminacy degree of the state

Fig. 28 reports the average percent of time served past PEY among people released for each state by degree of indeterminacy. This time, there appears to be a moderate association. Kendall's τ_b of 0.298 confirms that, but it is not significant ($p = 0.088$), which is not surprising considering that it is in the lower end of a moderate association with a small sample. This is somewhat consistent with the results from the previous figures. If people in states with higher indeterminacy are (a) more likely to be released past their PEY, but (b) not spend more years in prison past PEY, and (c) serve less time, their proportion of the sentence served past PEY should be longer, on average, since those same years past PEY represent a higher proportion of their time served. But we do not know if they actually serve less time. If they do not, the nonsignificant τ_b would be expected.

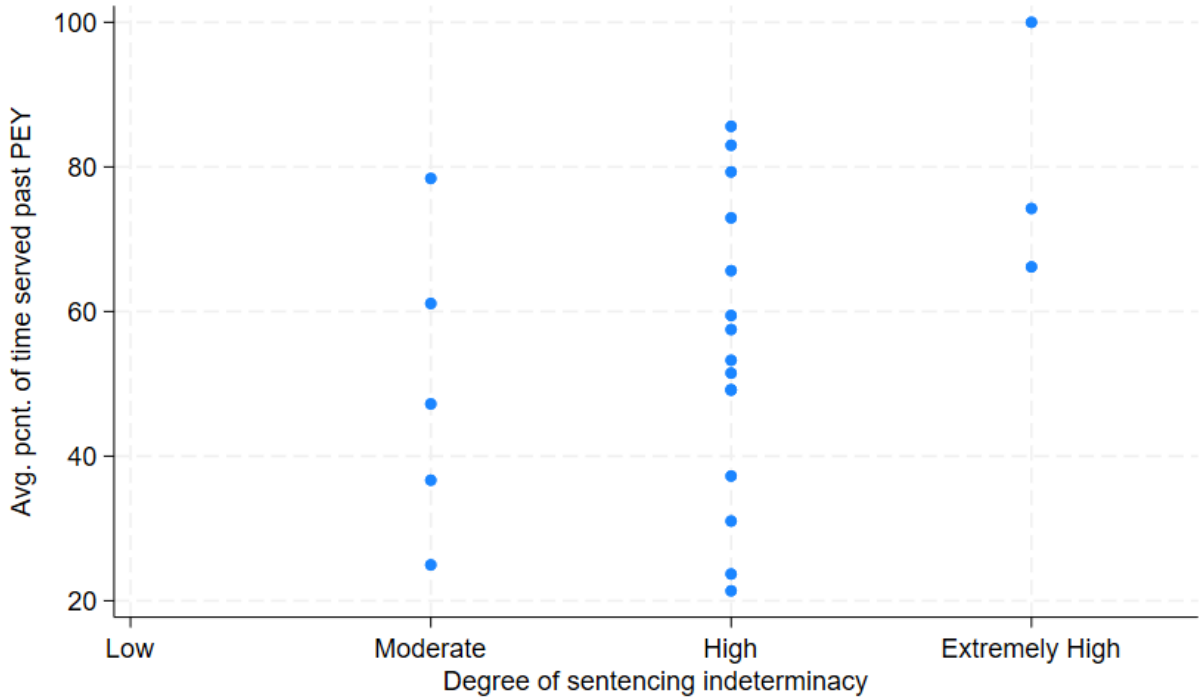


Fig. 28. Average percentage of time served past PEY among people released by indeterminacy degree of the state

In fact, Fig. 29 suggests there is no association between the average time served by people released and the state's degree of indeterminacy. A Kendall's τ_b of -0.070 ($p = 0.705$, not significant) confirms that it is weak, almost negligible. In other words, having longer minimum sentences does not mean that, on average, people will serve shorter incarceration terms.

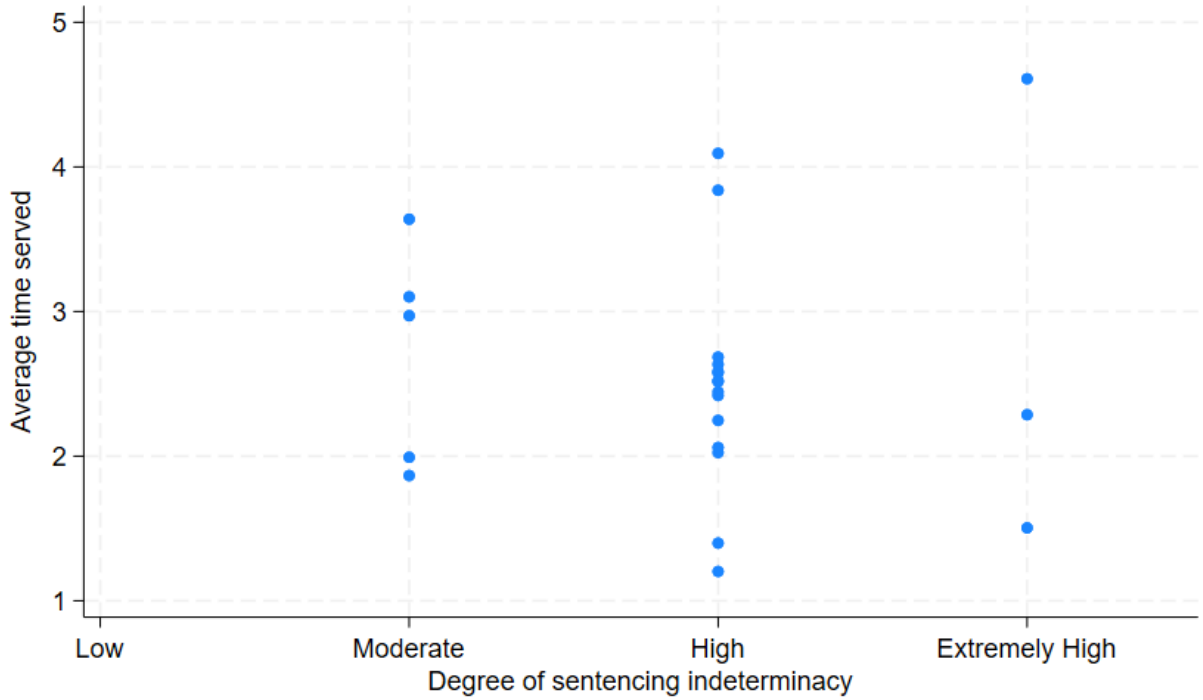


Fig. 29. Average time served among people released by indeterminacy degree of the state

Fig. 30 suggests there is a negative association between the percentage of the maximum sentence served at release and the state's degree of indeterminacy. A Kendall's τ_b of -0.438 indicates that the association is negative and moderate ($p = 0.012$, significant). In other words, in states with a higher degree of indeterminacy, people are serving, on average, a lower percentage of the maximum sentence. This is to be expected if the minimum sentence is shorter, but the time past PEY is the same, on average.

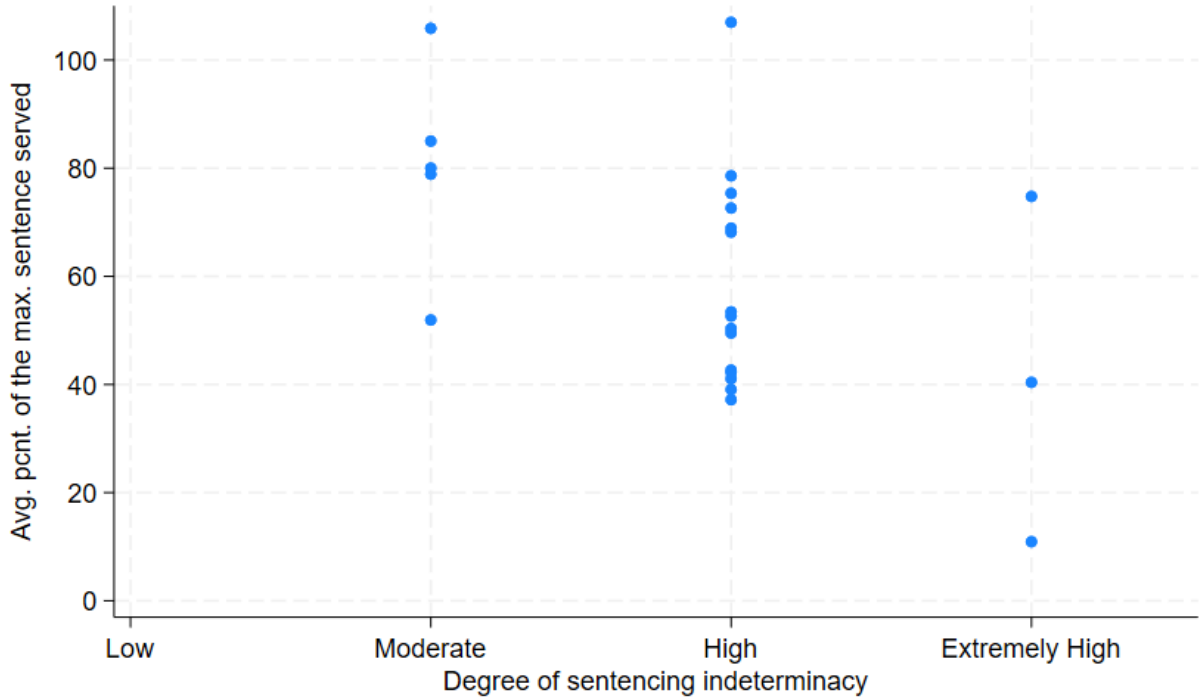


Fig. 30. Average percentage of the maximum sentence served among people released by indeterminacy degree of the state

Finally, given that the time served is not associated with the degree of indeterminacy, it is worth looking at whether the maximum sentences tend to be longer in states with higher degrees in indeterminacy. There are many possible reasons for this. If policymakers or judges expect that people will be released after a short proportion of their sentence, it is possible that the maximum sentences would be longer to ensure that actual time served is not shorter. Similarly, if maximum sentences are shorter, policymakers and judges might err on the side of having longer minimum sentences. Conversely, if maximum sentences are longer, it is possible that judges or policymakers reduce the minimum sentence requirements to account for that. Fig. 31 shows a slight positive association between maximum sentence length and degree of indeterminacy, but it might be driven by only a couple of states. Kendall's τ_b of 0.211 indicates that the association is weak ($p = 0.231$, not significant).

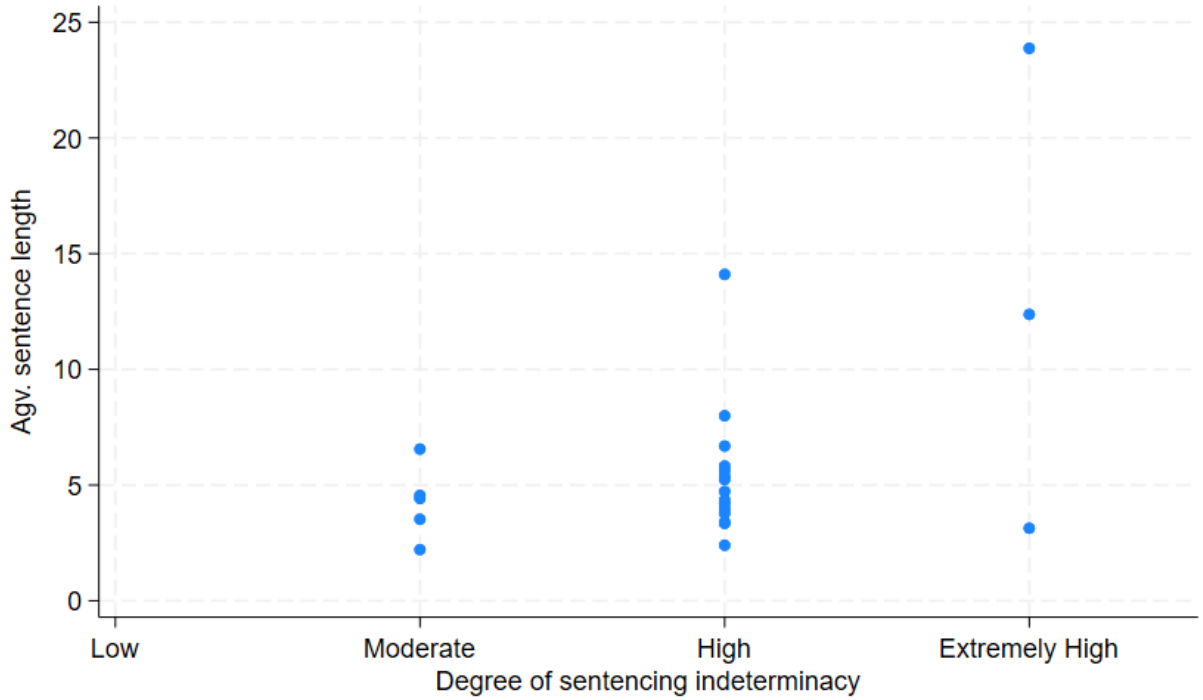


Fig. 31. Average sentence maximum length among people released, by indeterminacy degree of the state

In sum, a higher degree of indeterminacy is associated with serving a lower proportion of the maximum sentence, and a higher proportion of the sentence past PEY. But degree of indeterminacy is not significantly associated with states giving longer maximum sentences, the total time served, the total years served past PEY, nor the percentage of the time served past PEY.

7. Differences by Race and Sex

7.1 Methodological Note

The analyses below are restricted to the states for which we have reliable estimates and race data for most people in 2017 or later (that is, the states that have a state report page, excluding those that do not report on race in the disparities section of their report). It also excludes people who are sentenced to less than one year or have a life sentence and those whose admission is a parole return/revocation or "other admission," with the latter including unsentenced, transferred, and AWOL escapee return. It does include people for whom the sentence or the admission type is missing, assuming most are not part of the excluded categories. We call this the "filtered population" for shorthand. Because of this

filter, the numbers might differ with those reporting elsewhere that compare people past PEY to the total prison population.

States included are: Arkansas, Colorado, Connecticut, Georgia, Hawaii, Idaho, Iowa, Kentucky, Montana, Nevada, New Hampshire, New York, North Dakota, Maryland, Massachusetts, Mississippi, Missouri, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, West Virginia, and Wyoming. The total number of people included is 389,100.

For all states, the year used was 2019, the latest available that was not anomalous due to the COVID-19 pandemic, except for Hawaii (2018).

7.2 Differences in Incarceration past PEY by Race and Sex

Table 1 shows several summary measures of possible disparities by race and sex among people incarcerated at year end. The percentage of people past PEY is higher among people who are Black, Hispanic, and other races, compared to White people, and among men compared to women.[21] This is to be expected. The differences are almost all significant at $p < 0.001$ (except at 0.01 for "Other races"), as is the case with nearly all differences reported in this section, as would be expected with such a very large sample.

Below, the table shows the relative rate indices (RRIs), that is, the rate at which one group receives an outcome compared to a reference group. In this case, the reference groups are White, non-Hispanic people for RRIs by race and women for RRI by sex. The rates compared are the outcomes of being incarcerated past PEY among all people incarcerated within the same group. Results show that, as expected from the previous row, people who are Black, Hispanic, or other races are incarcerated past their PEY at higher rates than White people, with the rate being particularly higher among Hispanic people. Similarly, as expected, men remain incarcerated past PEY at substantially larger rates than women, and this disparity is larger than that of any race compared to White people.

Table 1. Incarceration past PEY by race and by sex

	White, non-Hispanic	Other race(s), non-Hispanic	Hispanic, any race	Black, non-Hispanic	Male	Female
Percent past PEY	49	51	53	51	51	42
Significance level	N/A	.01	.001	.001	.001	N/A
RRI people past PEY	1	1.04	1.08	1.04	1.21	1

Disparities by race vary substantially between states. This is noticeable when looking at the RRIs for people incarcerated past their PEY. The rate at which Black, non-Hispanic people are incarcerated past their PEY ranges from 0.7 times the rate of White, non-Hispanic people (New Hampshire) to 1.3 times (Arkansas). The rate at which Hispanic people of any race are incarcerated past their PEY also ranges from 0.7 times the rate of White, non-Hispanic people (Montana) to 1.3 times (Arkansas).

Similarly, disparities by sex also vary substantially between states. The rate at which men are incarcerated past their PEY ranges from 0.8 times the rate of women (North Dakota) to 2.8 times (Arkansas).

7.3 Differences in Years Incarcerated past PEY, by Race and Sex, Among People Incarcerated at Year End

Table 2 reports the average years past PEY, total number of people past PEY, and total collective years past PEY of each group. It does so three times, among (a) all people incarcerated, (b) those incarcerated at year end past PEY, and (c) those released. Additionally, below each average, it shows the significance level of the difference between that average and the one for the reference group (White, non-Hispanic people or women). Results show that Black people and Hispanic people spend more years past PEY than White people. This is true among those incarcerated at year end and those released. The same is the case for men compared to women. All these averages are significantly different than those for the reference group. While Black and Hispanic people spend roughly an additional half a year past PEY than White people, men spend roughly an additional year past PEY compared to women. For other races, the differences with White people are not consistent between the year-end population and released population.

Table 2. Total people and average and total years past PEY, by race and sex

	White, non-Hispanic	Other race(s), non-Hispanic	Hispanic, any race	Black, non-Hispanic	Male	Female
Avg. yrs. past PEY (people incarcerated at year-end)	1.5	1	1.9	2.1	1.9	.8
Significance level	N/A	.001	.001	.001	.001	N/A

Avg. yrs. past PEY (pop. incarcerated at year-end past PEY)	3	1.7	3.3	3.8	3.5	1.7
Significance level	N/A	.001	.001	.001	.001	N/A
Tot. pop. past PEY (pop. incarcerated at year-end past PEY)	81,097	3,998	34,230	74,568	181,670	14,041
Tot. yrs. past PEY (pop. incarcerated at year-end past PEY)	245,362	6,924	111,427	282,279	628,221	24,250
Avg. yrs. past PEY (people released)	1.4	1.9	2	2.1	1.8	.9
Significance level	N/A	.001	.001	.001	.001	N/A

7.4 Differences in Percentage of Time Served past PEY, by Race and Sex, Among People Incarcerated at Year End

Table 3 reports, for each group, the average percentage of years served past PEY among people incarcerated past PEY and among those released. Below each average, it shows the significance level of the difference between that average and the one for the reference group, White, non-Hispanic people or women. Results show that people who are Black, Hispanic, and other races served a larger proportion of their time past their PEY than White people, on average, among those incarcerated at year end. The differences are statistically significant, although they are relatively small, with the largest difference among Hispanic people. However, when looking at released people, the results show that only Hispanic people spend a higher proportion of their time past PEY than White people, on average. The difference is significant but smaller than among people incarcerated at year end. Released people who are Black and other races spent a slightly lower percentage of their time past PEY than White people, although again the differences are small. When it comes to differences by sex, men incarcerated at year end spent a substantially higher proportion of their time than women past PEY, but, surprisingly, the opposite is true among released men. Further research should explore why these results are contradictory and counterintuitive.

Table 3. Percentage of time served past PEY, by race and sex

	White, non-Hispanic	Other race(s), non-Hispanic	Hispanic, any race	Black, non-Hispanic	Male	Female
Avg. pcnt. time past PEY (pop. incarcerated at year-end)	61	63	68	64	64	57
Significance level	N/A	.001	.001	.001	.001	N/A
Avg. pcnt. time past PEY (pop. released)	85	83	88	83	84	87
Significance level	N/A	.001	.001	.01	.001	N/A

Disparities among people incarcerated at year end vary substantially between states. In terms of race, White, non-Hispanic people spent, on average, 2 percent of their time served past their PEY in Arkansas, while they spent 100 percent of their incarceration past PEY in Hawaii. People of other race(s) spent, on average, 1 percent of their time served past their PEY in Arkansas, while they spent 100 percent of their incarceration past PEY in Hawaii. Hispanic people spent, on average, 3 percent of their time served past their PEY in Maryland, while they spent 100 percent of their incarceration past PEY in Hawaii. Black, non-Hispanic people spent, on average, 2 percent of their time served past their PEY in Arkansas, while they spent 100 percent of their incarceration past PEY in Hawaii.

In terms of sex, men spent, on average, 2 percent of their time served past their PEY in Arkansas, while they spent 100 percent of their incarceration past PEY in Hawaii. Women spent, on average, 1 percent of their time served past their PEY in Arkansas, while they spent 100 percent of their incarceration time past PEY in Hawaii.

As would be expected, disparities among released people also vary substantially between states. In terms of race, White, non-Hispanic people spent, on average, 21 percent of their time served past their PEY in Mississippi, while they spent 100 percent of their incarceration past PEY in Hawaii. People of other race(s) spent, on average, 12 percent of their time served past their PEY in Mississippi, while they spent 100 percent of their incarceration past PEY in Hawaii. Hispanic people spent, on average, 16 percent of their time served past their PEY in Maryland, while they spent 100 percent of their incarceration past PEY in Hawaii. Black, non-Hispanic people spent, on average, 22 percent of their time served past their PEY in Mississippi, while they spent 100 percent of their incarceration past PEY in Hawaii.

In terms of sex, men spent, on average, 22 percent of their time served past their PEY in Mississippi, while they spent 100 percent of their incarceration past PEY in Hawaii. Women spent, on average, 13 percent of their time served past their PEY in Maryland, while they spent 100 percent of their incarceration past PEY in Hawaii.

8. Appendix

Appendix 1. Averages of select variables among released people, by state

State	Time Served	Years past PEY	% max. sentence served	% max. sentence served past PEY	% time served past PEY	Sentence length	Intedeter-minacy
Colorado	2.6	1.5	73	52	66	5.4	High
Georgia	2.5	2.2	69	59	83	4.0	High
Hawaii	4.6	4.7	40	40	100	12.4	Extremely High
Iowa	1.5	1.2	11	8	74	23.9	Extremely High
Kentucky	1.4	0.9	43	27	58	3.3	High
Louisiana	2.0	1.2	79	62	78	4.4	Moderate
Maryland	3.8	1.1	50	14	24	8.0	High
Massachusetts	3.6	1.4	80	32	37	4.6	Moderate
Michigan	4.1	2.6	37	23	53	14.1	High
Mississippi	2.5	0.8	42	14	21	5.6	High
Missouri	2.1	1.5	41	32	73	4.7	High
Montana	2.0	1.1	53	30	49	5.2	High
Nevada	2.3	1.4	75	53	66	3.1	Extremely High
New York	3.0	2.1	85	46	47	3.5	Moderate
North Dakota	1.2	0.9	50	39	79	2.4	High

Oklahoma	2.6	1.6	39	23	51	6.7	High
Pennsylvania	3.1	2.0	52	36	61	6.6	Moderate
Rhode Island	2.4	1.4	68	45	59	3.8	High
South Carolina	2.7	1.6	79	41	49	3.4	High
South Dakota	1.9	0.7	106	30	25	2.2	Moderate
Tennessee	2.2	1.0	75	38	37	4.2	High
Texas	2.6	2.2	53	46	86	5.8	High
Wyoming	2.4	1.0	107	45	31	4.4	High

Endnotes

[1] For more details on the degree of sentencing indeterminacy, see Kevin Reitz et al., *American Prison-Release Systems: Indeterminacy in Sentencing and the Control of Prison Population Size, Final Report* (Minneapolis, Minnesota: Robina Institute, University of Minnesota, 2022), https://robinainstitute.umn.edu/sites/robinainstitute.umn.edu/files/2022-05/american_prison-release_systems.pdf.

[2] Louisiana eliminated discretionary parole in 2024, but it is listed among the 34 paroling states because the majority of the population remains eligible for parole release under the previous system.

[3] Reitz et al., *American Prison-Release Systems*.

[4] Emmett Sanders, "No Release: Parole Grant Rates Have Plummeted in Most States since the Pandemic Started," *Prison Policy Initiative* (blog), October 16, 2023, https://www.prisonpolicy.org/blog/2023/10/16/parole-grants/.

[5] William J. Sabol, Thaddeus L. Johnson, and Alexander Caccavale, "Trends in Correctional Control by Race and Sex. Council on Criminal Justice," *Federal Sentencing Reporter* 32, no. 3 (2020): 157–77.

[6] Yu Du, "Racial Bias Still Exists in Criminal Justice System? A Review of Recent Empirical Research," *Touro Law Review* 37, no. 1 (2021): 79–103.

[7] Morgan and Brent Smith, "The Impact of Race on Parole Decision-Making," *Justice Quarterly* 25, no. 2 (2008): 411–35.

[8] Michael Winerip, Michael Schwirtz, and Robert Gebeloff, "For Blacks Facing Parole in New York State, Signs of a Broken System," *New York Times*, December 4, 2016, https://www.nytimes.com/2016/12/04/nyregion/new-york-prisons-inmates-parole-race.html; Shamena Anwar and Hanming Fang, "Testing for Racial Prejudice in the Parole Board Release Process: Theory and Evidence," *The Journal of Legal Studies* 44, no. 1 (2015): 1–37.

[9] US Bureau of Justice Statistics, "National Corrections Reporting Program NCRP Series" (Inter-university Consortium for Political and Social Research, 2022), https://www.icpsr.umich.edu/web/NACJD/series/38.

[10] E. Ann Carson and Rich Kluckow, "Prisoners in 2022 – Statistical Tables," Bureau of Justice Statistics, Prisoners Series, 2023, https://bjs.ojp.gov/library/publications/prisoners-2022-statistical-tables; US Bureau of Justice Statistics, "National Prisoner Statistics, 1978-2022" (Inter-university Consortium for Political and Social Research), accessed January 10, 2024, https://doi.org/10.3886/ICPSR38871.v1.

[11] Calculating PEY for people with life sentences would be a more complex task that could be explored by future studies. Because most states only have people with sentences of at least one year in prison and the variables report years, not exact dates, calculating PEY for people with sentences of less than one year would not have been useful for most states and would have been inaccurate for states where it applies.

[12] NCRP reports "projected release year" and "mandatory release year." Our analysis indicates that states use these two variables inconsistently, with some states using the former as the maximum release year and others using the latter. This is indicated by either having one of the two variables missing or being equal or earlier than the other variable for almost all cases. States that use one still have the other one missing for some people. Because of this, we combined both, taking the latest one as the maximum release year. For definitions of all variables, see the documentation in the NCRP dataset, US Bureau of Justice Statistics, "NCRP Series."

[13] A general summary of rules is provided in Reitz et al., *American Prison-Release Systems*, 36–43. For more detailed rules for some states, especially offenses with special parole eligibility restrictions, see Reitz and colleagues' individual state reports available via Kevin R. Reitz et al., "Prison-Release Discretion and Prison Population Size State Reports," 2023, https://robinainstitute.umn.edu/publications/prison-release-discretion-and-prison-population-size-state-reports. Our state reports also cite some specific state laws that were reviewed.

[14] The maximum sentence was calculated as the difference between the maximum release year and the admission year. When one of them was missing, we used the maximum of the intervals in "sentence length," using 200 years as the conservative maximum for sentences over 25 years. However, since this variable is based on wide intervals, it is highly conservative, so was only used when a small proportion of cases had missing data for the other variables and it did not appear to substantially affect state-level estimates based on the checks explained below.

[15] NCRP provides three datasets for each year: "year-end population," "releases," and "terms." The latter includes both each year's year-end population and releases, along with data on previous incarceration terms for each person. In addition to having more data, it is not always completely consistent with the data in the other two datasets, with some cases or variables missing some years. Furthermore, not all states report data for each dataset every year. Because of this, the analysis on the year-end population and the releases population was replicated with the "terms" dataset. When the "terms" dataset identified a higher proportion of the relevant population as being past their PEY in a given year and state—that is, the "terms" estimate was less conservative—that dataset was selected, except in rare cases where that higher proportion was an artifact of missing data in the "terms" dataset.

[16] Models that considered the parole grant rate and percent of people past PEY the previous year were also tested but found to be not reliable.

[17] Derek Mueller, "Prisons Report Series: Preliminary Data Release, 2023" (Bureau of Justice Statistics, 2024), tbl. 1, https://bjs.ojp.gov/preliminary-data-release-prisons-2023.

[18] E. Ann Carson, "Prisoners in 2016" (US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2018), https://bjs.ojp.gov/content/pub/pdf/p16.pdf; Mueller, "Prisons Report Series: Preliminary Data Release, 2023."

[19] Reitz et al., "Prison-Release Discretion."

[20] Rick Wicklin, "Weak or Strong? How to Interpret a Spearman or Kendall Correlation," *SAS: The DO Loop* (blog), April 5, 2023, https://blogs.sas.com/content/iml/2023/04/05/interpret-spearman-kendall-corr.html.

[21] Here and in the remaining text, "women" and "men" are used to refer to people distinguished by sex, not by gender, and reported by NCRP as female and male individuals, respectively.