In this essay, we comment on the quality and limitations of jail data produced by the Bureau of Justice Statistics (BJS), present an alternative jail data source—the Jail Data Initiative (JDI)—produced by the authors through New York University’s Public Safety Lab, and use the latter data to describe the composition of the jailed population in 2023. We also summarize recent research on measuring the costs and benefits of jail incarceration, and use these findings in tandem with the JDI data to calculate the net social costs of jail incarceration.

Introduction

The authoritative source for jail data in the United States is the Bureau of Justice Statistics (BJS), which conducts a point-in-time census of the universe of jail facilities every 5-7 years—the Census of Jails (COJ), and a point-in-time survey of a representative sample of jails from that universe every year—the Annual Survey of Jails (ASJ). These data, provided to the BJS by jail administrators nationwide, enable statistical summary of annual trends in the jail population, including decomposition of this population by demographic groups, detention status, and other important characteristics (Zeng 2022).

Although the BJS data are valuable for jail incarceration research and policy, they do have some significant limitations. The BJS data are not released until approximately 1.5 years after collection, implying that at any given point in time, BJS jail data are between about 1.5-2.5 years out of date. The last available survey of jails was conducted in June 2021 and was released in December 2022 (ASJ 2021); these data are now over two years out of date. The BJS data also may not capture seasonality and other factors causing variation in the jail population between surveys.

Moreover, the BJS jail data do not lend themselves to assessment of the public safety benefits of jail incarceration versus harms imposed, information critical to current policy debates on topics like bail reform. Recent work has revealed that survey respondents perceive the harms of jail incarceration to be considerably larger than the harms of experiencing most crimes, with the exception of certain serious violent crimes (Bambauer and Roth 2021, Stevenson and Mayson 2022). A key policy question, then, is whether jail incarceration averts serious violent crimes at a rate sufficiently high to justify the harms imposed on the incarcerated. One way to answer this question is to look at the rates at which those recently released from jail are rebooked on charges of serious violence. Unfortunately the BJS data do not report on rebooking rates for those released from jail (nor do they report on charges associated with rebookings).
In this chapter, we use daily individual-level and real-time jail data from the Jail Data Initiative (JDI) at New York University’s Public Safety Lab to report on the state of jail incarceration in 2023. These data show that, in the two years since the collection of the most recent available data from the Annual Survey of Jails, jail populations have increased by over 9%, jail admissions have increased by over 10%, and the average length of stay has increased by over 19%. The proportion of Black individuals in the jail population has increased by nearly 5% while the white share of this population has decreased by nearly 4%, the proportion identified as male has decreased by about 1%, and the percentage charged with felonies has decreased by 12%.

The JDI data also enable us to observe jail rebooking rates and rebooking charges. Using these data in tandem with the relative harm valuations of jail incarceration and crime victimization reported by Bambauer and Roth (2021) and Stevenson and Mayson (2022), it is highly likely that the harms caused by the current scope of jail incarceration substantially outweigh the harms averted. The magnitude of this cost-benefit disparity is substantially larger for those initially incarcerated for charges other than serious violence, more than 80% of all jail bookings in the JDI data sample. For these individuals, the harm of their incarceration is approximately 300 times greater than the harm averted by that incarceration. For the remaining group of individuals initially incarcerated on charges of serious violence (fewer than 20% of the JDI sample), the harm of incarceration is still approximately 66 times greater than the harm averted. These findings suggest an urgent need for more current and policy-relevant data on jail incarceration.

About the Jail Data Initiative

The Jail Data Initiative was launched in June 2019 by the Public Safety Lab at New York University to address the problems of jail data recency and frequency. As of this writing, the JDI is the only large-scale effort to collect daily individual-level jail records in the United States of which we are aware.

The JDI collects daily individual-level jail data in the approximately 1,300 counties that post online daily jail rosters, representing over one-third of county and municipal jails in the United States. During 2019, automation scripts were written for each county with an online jail roster to enable the daily collection of information from online rosters and the construction of booking-level records with several associated data fields, including name, age, gender, race, booking charges, booking date, and release date. The JDI data also record when released individuals are rebooked into the same jail.

Charge categories are predicted from text fields using the Text-based Offense Classification (TOC) algorithm developed by the Criminal Justice Administrative Records System (CJARS) at the University of Michigan. Charge text strings are classified into six categories. These categories are (in order of seriousness, from most serious to least serious): Violent, Property, Drug, Public Order, DUI, and Criminal Traffic. Within these charge categories, charges are further categorized into hierarchies of offenses. The JDI data report the most serious charge category (“top charge”) for individuals booked on multiple charges. Finally, the JDI also collects any other information
reported on a jail roster, including bond/bail status and conviction status, although these fields generally require additional work to be interpretable.

Although the JDI data address significant limitations of the BJS data sources, they too have some limitations. For example, they do not presently include a standardized indicator for pretrial detention status. Our findings in this chapter thus describe the jail-incarcerated population in general, including both those detained pretrial (71% of the jail population in the most recent ASJ (Zeng 2022)), and those serving relatively short sentences for lower-level offenses. We note that, in the context of the relative harm valuations discussed later in this chapter, the harms inflicted by both pretrial and post-conviction incarceration are worth equal consideration.

Another limitation of the JDI data is that, because the JDI currently collects data from jail rosters only once per day, individuals who are booked into a jail and released on the same day may not always be recorded in the JDI data. The JDI data may then underestimate both jail admissions and jail populations, and overestimate length of stay, relative to the true jail population.

Data collection began in January 2020, and the booking-level database now contains over 8 million jail bookings. The Jail Data Initiative dashboard (https://jaildatainitiative.org/) allows users to visualize daily facility- and county-level booking data, produce PDF reports, and download facility-level data in CSV format. Users may also request permission to access the restricted database, containing complete daily individual-level data. The searchable database also hosts over 4 million criminal case records scraped from court systems and matched to jail records.

Representativeness of JDI data

The JDI data do not cover the universe of jail facilities in the United States, nor do the data represent a random sample of those facilities. In order to use the JDI data to report on the state of jail incarceration in 2023, a threshold question is how representative the JDI data are of the universe of jails. In particular, we would like to know whether the changes in jail populations between 2021 and 2023, as observed in the JDI data, are representative of changes in the national jail population between 2021 and 2023.

One strategy to address this question is to ask whether the changes in jail populations between 2019 and 2021, as observed in the BJS and JDI data, are representative of the changes in the national jail population between 2019 and 2021, as observed in the BJS data alone. We can first match facilities in the JDI data to the facility-level data reported in the 2019 Census of Jails. We can then measure the changes in jail populations between 2019 (as reported in the COJ) and 2021 (as reported in the JDI) and apply these changes to the universe of jails reported in the 2019 COJ. We can then assess whether this estimate of the 2021 jail population is consistent with the estimate reported by the 2021 ASJ. If these estimates are consistent, we can then be more confident that changes in the JDI data between 2021 and 2023 can be used to make inferences about changes in the national jail population between 2021 and 2023.
The 2019 COJ reports on facility-level jail populations recorded on the last weekday in June 2019 for those jails that responded to the census. Imputing data for nonresponding facilities, the 2019 COJ estimates that 734,500 persons were jailed in the United States on the last weekday in June 2019. The 2021 ASJ likewise reports on facility-level jail populations recorded on the last weekday in June 2021, for a random sample of jurisdictions overseeing local jails in the United States. Imputing data for jurisdictions not included in the sample, the 2021 ASJ estimates that 636,300 persons were jailed in the United States on the last weekday in June 2021.

In the JDI data, there are 826 facilities reporting jail populations on the last weekday of June 2021 that can be mapped to the facilities recorded in the 2019 COJ. On average, the 2021 JDI jail populations for these jails were 84.64% of their 2019 populations in the COJ. Applying this estimated rate of change to the 2019 COJ jailed population of 734,500 results in a predicted 2021 jailed population of 621,681. Although this point estimate of the 2021 jailed population is slightly smaller than the estimate reported by the 2021 ASJ, the confidence intervals for these estimates have substantial overlap, suggesting that changes in jail populations recorded by the JDI can be used to approximate changes in the national jailed population.

There are 583 jails in the JDI data for which we have data on both the last weekday of June 2021 and the last weekday of June 2023, the BJS reference date for the ASJ and COJ, and 418 jails for which we have complete data from the months of June 2021 and June 2023. These samples of jails will be used to estimate the changes in the national jail population between June 2021 and June 2023.

**Jail Incarceration in 2023**

As reported in Figure 1, between 2005 and 2019, the national jail population decreased only slightly, from 747,500 to 734,500. The onset of the COVID-19 pandemic in March 2020 caused a sharp reduction in jail populations, with the national jail population decreasing by 25.2% to 549,100 as of June 2020. Jail populations began to climb again as the pandemic eased, increasing by 15.9% to 636,300 as of June 2021. In the JDI data, jail populations increased on average by another 9.3% between June 2021 and June 2023. Applying that rate of increase to the national jail population reported by the 2021 ASJ, the national jail population in June 2023 is likely close to 695,349 individuals, or only 5.3% less than the pre-pandemic June 2019 jail population.
As reported in Figure 2, between 2005 and 2019, annual jail admissions decreased from 12.1 million to 10.3 million. The pandemic accelerated this decrease in admissions, with annual admissions decreasing to 8,700,000 between June 2019 and June 2020, and to 6,900,000 between June 2020 and June 2021. In the JDI data, jail admissions increased by 10.1% between June 2021 and June 2023, indicating that annual jail admissions between June 2022 and June 2023 were likely close to 7,596,900.
As reported in Figure 3, between 2005 and 2019 the average length of stay increased from 22.1 days to 26.2 days. Length of stay increased even more during the pandemic, to an average of 27.8 days between June 2019 and June 2020, and to an average of 32.8 days between June 2020 and June 2021. In the JDI data, average length of stay increased by 19.2% between June 2021 and June 2023, indicating that the average length of stay in the national jail population in June 2023 was likely close to 39.1 days.
The BJS only began to collect information on the distribution of felony and misdemeanor top charges in the jailed population in 2015. As reported in Figure 4, between 2015 and 2019, the percentage of the jailed population comprising individuals charged with felonies increased from 67.8% to 70%. This trend accelerated during the pandemic, with the percent charged with felonies increasing to 76.7% in 2020 and to 76.3% in 2021. In the JDI data, the percent charged with felonies decreased by 12% between 2021 and 2023, indicating that the percentage of the national jail population in June 2023 comprising individuals charged with felonies is close to 67.1%, the lowest percentage observed since 2015.
As reported in Figure 5, between 2005 and 2019, the percent white in the jailed population increased from 44.3% to 49.4%, while the percent Black decreased from 38.9% to 33.6%, slightly lessening the severe racial disparities in the jailed population. However, pandemic changes in jail admissions reversed these trends, leading to a sharp increase in the percent Black in the jailed population (to 35.1%) and a decrease in the percent white (to 47.7%) between 2019 and 2020. In the 2021 BJS ASJ, the percent Black decreased slightly to 34.8% and the percent white increased slightly to 48.7%. In the JDI data, the percent Black increased by 4.5% between June 2021 and June 2023, while the percent white decreased by 3.7%, indicating that in the 2023 jailed population the percent Black is likely close to 36.4% and the percent white is likely close to 46.9%. These estimates suggest that the current racial disparity in the national jailed population may be the highest observed since 2013.
As reported in Figure 6, between 2005 and 2019, the percent male in the jailed population decreased from 87.3% to 84.9%. With the onset of the pandemic, the percent male in the jailed population increased sharply to 87.3% as of June 2020, then decreased slightly to 86.6% as of June 2021. In the JDI data, the percent male further decreased by 1.1% between June 2021 and June 2023, indicating that the percent male in the national jailed population in June 2023 is likely close to 85.7%.
A central policy issue involving jail incarceration is whether the harms averted through jail incarceration outweigh the harms created by that incarceration (Stevenson and Mayson 2022). The primary harms averted through incarceration are any criminal acts that would have been committed during the period of incarceration, had an individual not been incarcerated. The primary harms imposed by jail incarceration are the harms to the incarcerated individual and the financial costs of incarceration. While measuring the financial costs of incarceration is relatively straightforward, the challenge is to measure both the harms of averted criminal acts and the harms imposed on the incarcerated (Bambauer and Roth 2021; Stevenson and Mayson 2022).

Recent work has proposed an innovative survey method to assist in measuring these competing harms (Bambauer and Roth 2021; Stevenson and Mayson 2022). Survey respondents are asked to choose between being the victim of a specified crime or being incarcerated for varying lengths of time. The point at which a respondent would choose incarceration over being the victim of a given crime represents the respondent’s assessment of the harms imposed by a specific crime victimization, expressed in units of days of incarceration.

Two independently fielded surveys using this methodology have yielded strikingly similar findings. For the median respondent, the harms of experiencing a simple assault are equivalent to the harms of spending 10 minutes incarcerated, the harms of experiencing burglary are equivalent to the harms of spending one to three days incarcerated, the harms of experiencing a
robbery without serious injury to the victim are equivalent to the harms of spending three days incarcerated, and the harms of experiencing an aggravated assault (assault with dangerous weapon/serious injury to the victim) are equivalent to the harms of spending one month in jail (Bambauer and Roth 2021; Stevenson and Mayson 2022).

If we take these survey findings at face value (and disregarding any additional financial costs of jail incarceration), they indicate that, in order for the harms averted by jail incarceration to outweigh the harms imposed by that incarceration, incarcerating one individual for 30 days must avert at least one crime as harmful as aggravated assault, and incarcerating one individual for six months must avert at least six crimes as harmful as aggravated assault.

We know relatively little about the actual numbers and kinds of crimes averted by jail incarceration. Charges brought against those who are arrested but not incarcerated may not provide a reliable estimate of the crimes averted by jail incarceration, because those who are arrested and incarcerated may have a higher propensity to be charged with crimes if released. Studies that leverage as-if randomization of arrested individuals to jail incarceration only estimate averted crimes for those just on the margin of incarceration and release, and generally do not disaggregate criminal activity by charge category.

Assuming that jail incarceration does not appreciably increase or decrease an individual’s propensity to be charged with criminal acts, a reasonable proxy for the number and kind of crimes averted by jail incarceration is the number and kind of criminal charges brought against individuals recently released from jail incarceration. Although the BJS data report neither charge descriptions nor rearrest/rebooking rates for those released from jail incarceration, the JDI data do record this information. Of particular policy relevance, we can identify when individuals recently released from jail incarceration are rebooked into the same jail on top charges of violence at least as serious as aggravated assault. Leveraging the CJARS offense hierarchy to identify these charges, they include (in addition to aggravated assault): murder, unspecified homicide, voluntary/nonnegligent manslaughter, non-vehicular manslaughter, kidnapping, rape, statutory rape, lewd act with children, sexual assault, and human trafficking.

During the six-month period spanning January through June 2022, 681,145 individuals for whom charge information was recorded were released from jails in the JDI database. Figure 7 reports the 6-month rebooking rates for serious violent offenses for this sample of recently released individuals, by category of initial booking top charge. Rebooking rates for serious violent charges range from a low of 0.8% for individuals initially booked on DUI top charges, to a high of 9.1% for individuals initially booked on top charges of serious violence. The average rebooking rate for a top charge of serious violence is only 2% for individuals not initially booked into jail on a top charge of serious violence.

In other words, over a 6-month period, a recently released individual originally booked on a top charge not involving serious violence can be expected to be charged with 0.02 crimes of serious violence. A recently released individual originally booked on a top charge of serious violence can be expected to be charged with 0.09 crimes of serious violence.
These rebooking rates suggest that the vast majority of those individuals incarcerated in U.S. jails incur far greater harms from their incarceration than the harms that are averted through that incarceration. Survey respondents report that incarcerating one individual must avert at least one crime as harmful as aggravated assault for every 30 days of incarceration, or six crimes as harmful as aggravated assault for every six months of incarceration (Bambauer and Roth (2021); Stevenson and Mayson (2022)). Yet during the six months following release, recently incarcerated individuals commit acts of serious violence at rates that range between only 0.008 crimes per six months and 0.09 crimes per six months.

As reported in Figure 8, among the 681,145 individuals in the JDI database who were released from local jails that record charge information during the first six months of 2022, only 17.5% had been booked on top charges involving serious violence, carrying a 9.1% average risk of rebooking on charges of serious violence after release. Based on the contingent valuation surveys conducted by Bambauer and Roth (2021) and Stevenson and Mayson (2022), the harms of incarceration for this group of individuals are approximately 66 times greater than the harms averted by their incarceration (6/0.09). 82.5% of all individuals in this sample had been initially booked on charges that carry only a 2% average risk of rebooking on charges of serious violence after release. Based on the contingent valuation surveys, the harms of incarceration for this group of individuals are approximately 300 times greater than the harms averted by their incarceration (6/0.02).
Discussion

Policy debates over jail incarceration require current and policy-relevant data on jail incarceration. Unfortunately, the data currently available through the BJS—the only governmental provider of data on the national jail population—are not currently sufficient to inform these debates.

In particular, decision makers need access to reliable data that could enable assessment of whether the harms averted through jail incarceration outweigh the harms imposed by that incarceration. The rates at which those recently released from jail incarceration are rebooked into jail on charges of serious violence are one form of data that could inform this assessment. The JDI data reported above suggest that the harms of jail incarceration for the over 80% of individuals incarcerated on charges other than serious violence are approximately 300x the harms averted by their incarceration, while the harms of jail incarceration for the less than 20% of individuals incarcerated on charges of serious violence are approximately 66x the harms averted by their incarceration.

Other policy debates over jail incarceration also lack current and policy-relevant data. For example, policy debates over pretrial detention require real-time data on the extent and nature of pretrial incarceration. The BJS data do report conviction status (convicted or awaiting
disposition) for the national jail population, but these data are currently two years out of date. Between 2005 and 2021 (the last available jail data from the BJS), the percent of the national jail population awaiting disposition grew from 62% to 70.9%. We do not know what the current scope of pretrial detention is. The JDI collects information from jail rosters that could be used to infer conviction status, but these data require additional work to be usable. These data are available from the JDI to interested researchers.

Likewise, policy debates over bail reform require real-time data on the role of bail in pretrial detention. The BJS data do not report information on the bail status of individuals incarcerated pretrial. The JDI does collect information on the bail status of those incarcerated in local jails, but this information also requires additional work to be interpretable. These data are also available from the JDI to interested researchers.

Current estimates suggest that over 7.5 million individuals are booked into U.S. jails every year, with close to 700,000 individuals incarcerated in jails as of June 2023. Estimates of rebooking rates further suggest that the societal harms of this large-scale jail incarceration far outweigh any societal benefits. Given the scale and potential harms being imposed by current practices of jail incarceration, funding the provision of policy-relevant and real-time data on jail incarceration should be a priority for federal and state policy makers.
References


