

# COVID-19, Jails, and Public Safety

**December 2020 Update** 

PREPARED FOR THE COMMISSION BY

#### **ANNA HARVEY**

Professor of Politics, Affiliated Professor of Data Science and Law Director, Public Safety Lab New York University

#### ORION TAYLOR

Lead Data Scientist, Public Safety Lab Center for Data Science New York University

#### ANDREA WANG

Data Scientist, Public Safety Lab Center for Data Science New York University

Council on Criminal Justice December 2020

#### ABOUT THE COUNCIL

The Council on Criminal Justice is a nonpartisan criminal justice think tank and national invitational membership organization. Its mission is to advance understanding of the criminal justice policy choices facing the nation and build consensus for solutions based on facts, evidence and fundamental principles of justice.

The Council does not take policy positions. As part of its array of activities, the Council conducts research and convenes independent task forces composed of Council members who produce reports with findings and policy recommendations on matters of concern. The findings and conclusions in this research report are those of the authors alone. They were not subject to the approval of the Council's Board of Directors or its Board of Trustees.

For more information about the Council, visit <u>councilonci.org</u>

#### **ABOUT THE AUTHORS**

**Anna Harvey** is a Professor of Politics and Affiliated Professor of Data Science and Law at New York University. Harvey is founder and Director of the Public Safety Lab, which provides data science and social science support to communities and law enforcement agencies seeking to reform their criminal justice practices.

**Orion Taylor** is the Lead Data Scientist at the Public Safety Lab at New York University. He is a master's candidate at the NYU Center for Data Science.

**Andrea Wang** is a Data Scientist at the Public Safety Lab at New York University. She holds an MS in Data Science from New York University.

#### **ACKNOWLEDGEMENTS**

This paper was produced with support from Arnold Ventures, the John D. and Catherine T. MacArthur Foundation, Microsoft, the Charles and Lynn Schusterman Family Foundation, and other contributors.

#### **Suggested Citation**

Harvey, Anna, Orion Taylor and Andrea Wang. COVID-19, Jails, and Public Safety: December 2020 Update. Washington, D.C.: Council on Criminal Justice, December 2020.

# **Executive Summary**

This report, updating the September 2020 Impact Report on COVID-19, Jails, and Public Safety, draws on a sample of approximately 19 million daily individual-level jail records collected by New York University's Public Safety Lab between Jan. 1, 2020 and Oct. 22, 2020. We explore how bookings, releases, and rebooking rates changed during the pandemic, relative to the pre-pandemic period.

- + Jail populations in the sample decreased by an average of 31% over the six weeks following the March 16 issuance of the White House "Coronavirus Guidelines for America," which expired on April 30. Jail populations then increased and have since recovered half of these decreases, despite explosive COVID-19 case growth in many of the counties in the sample. Counties with higher countywide COVID-19 case growth between March 1 and Oct. 22 have not seen larger reductions in jail populations. The decreases in jail populations after the issuance of the White House Guidelines on March 16, and the lack of responsiveness of jail populations to local COVID prevalence after those guidelines expired, suggest the importance of clear policy directives for reducing disease transmission risk within county jails.
- + Jail bookings dropped sharply in mid-March and remain on average 36% below prepandemic levels. As bookings declined, the characteristics of those booked into jails shifted. Those booked into jails between mid-March and late October were booked on more charges on average, were more likely to be booked on felony charges, and were less likely to be booked on lesser charges like failure to appear, than those booked into jails prior to this period.
- + Although jail bookings dropped after mid-March, those booked into jails were detained for longer periods of time. Average detention duration increased sharply after mid-March, doubling from about 15 to 30 days, and remains nearly twice as high as the pre-pandemic average detention duration. This increase has offset reductions in admissions, and contributed to rebounding jail populations observed since mid-March.
- + Parallel to trends in daily bookings, daily releases dropped sharply in mid-March and remain approximately 40% below baseline levels. Those released from jails between mid-March and late October had been booked on more charges on average, were more likely to have been booked on felony charges, and were less likely to have been booked on lesser charges such as failure to appear, than those released from jails prior to mid-March.

- The rate at which those released from detention are rebooked into jail following release is one possible measure of the public safety risk of jail releases. To date, 30-, 60-, 90-, and 180-day rebooking rates among those released during the pandemic have remained 13% 33% below pre-pandemic rebooking rates. To the extent that rebooking rates measure the average public safety risk of releasing individuals from jail, this risk remains lower now than prior to the pandemic.
- + While the proportion of Black individuals among daily jail admissions did not change appreciably during the pandemic, the proportion of Black people among those released from jails during the pandemic decreased by approximately 5% relative to the pre-pandemic period. As a result, the proportion of jail populations composed of Black individuals rose during the pandemic.

# Introduction

Detained populations are thought to have high risk of contracting and spreading COVID-19 due to population density, movement through facilities, and preexisting health conditions. However, data on the incidence of COVID-19 in jails, and on transmission between jails and communities, are sparse. According to data collected by *The New York Times*, of the nation's 3,162 jails, at least 174, or 5.5%, have experienced COVID-19 clusters of at least 50 cases as of Nov. 15, 2020. Jails with clusters of at least 50 COVID-19 cases are much larger, on average, than the typical jail, with an average facility capacity of 1,151, relative to the average facility capacity of 285. Jails with clusters of at least 50 cases are also located in more urban counties with fewer White, more Black, and more Hispanic residents. Beyond this, little is known about COVID-19 incidence in jails.

Some have raised concerns about the potential negative public safety impact of measures taken to reduce jail populations during the pandemic. However, data on the public safety effects of reductions in jail populations are likewise virtually nonexistent.

In September 2020 we reported to the National Commission on COVID-19 and Criminal Justice on data collected from 375 jails by New York University's Public Safety Lab between Jan. 1, 2020 and July 20, 2020, comprising 14,393,325 daily individual-level records. We assessed how jail admissions, releases, and rebooking rates changed early in the pandemic, relative to the pre-pandemic period. We found that, although those released from jails during the early pandemic were more likely to have been booked on felony charges and to have served longer periods of detention than those released prior to the pandemic, 30-, 60-, and 90-day rebooking rates during the early pandemic remained below pre-pandemic levels.

This study updates the September report using daily individual-level jail data collected between Jan. 1, 2020 and Oct. 22, 2020. The sample reported on here contains data for

<sup>&</sup>lt;sup>1</sup> Jiménez, Monik C., Cowger, Tori L., Simon, Lisa E., Behn, Maya, Cassarino, Nicole and Bassett, Mary T., "Epidemiology of COVID-19 Among Incarcerated Individuals and Staff in Massachusetts Jails and Prisons," JAMA Network Open, 3:8, pp. e2018851-e2018851, August 2020; Lofgren, Eric, Lum, Kristian, Horowitz, Aaron, Madubuonwu, Brooke and Fefferman, Nina, "The Epidemiological Implications of Incarceration Dynamics in Jails for Community, Corrections Officer, and Incarcerated Population Risks from COVID-19," medRXiv preprint doi 10.1101/2020.04.08.20058842, May 4, 2020; Reinhart, Eric and Chen, Daniel L., "Incarceration and Its Disseminations: COVID-19 Pandemic Lessons From Chicago's Cook County Jail," Health Affairs 39:8, pp. 1412-1418, June 4, 2020; Alsan, Marcella and Yang, Crystal, "National Commission on Correctional Health Care COVID-19 Survey of Correctional Facilities," June 1, 2020.

<sup>&</sup>lt;sup>2</sup> https://www.nytimes.com/interactive/2020/us/new-york-coronavirus-cases.html.

<sup>&</sup>lt;sup>3</sup> 2013 Census of Jails, Bureau of Justice Statistics (https://www.bjs.gov/index.cfm?ty=dcdetail&iid=254).

<sup>&</sup>lt;sup>4</sup> https://www.census.gov/programs-surveys/acs

<sup>&</sup>lt;sup>5</sup> The Public Safety Lab's Jail Data Initiative is collecting daily individual-level data from the close to 1,000 jails that post their daily jail rosters online (<a href="https://publicsafetylab.org/jail-data-initiative">https://publicsafetylab.org/jail-data-initiative</a>). Daily data collection was rolled out over these facilities between September 2019 and June 2020. The Jail Data Initiative is supported by Arnold Ventures, the Chan Zuckerberg Initiative, and New York University's Center for Data Science.

325 jails, comprising 18,930,456 daily records for individuals detained in 37 states.<sup>6</sup> Table 1 in the Appendix reports comparisons between the attributes of the facilities/counties in the current sample and those in the 2013 Bureau of Justice Statistics (BJS) Census of Jails. The average facility capacity of the jails in the sample is slightly larger but not statistically different from the capacity of facilities in the BJS Census. There are also no significant county-level differences between the sample and the population of jails in terms of population size, median family income, or percentage of Hispanic residents. The counties covered by the sample of jails have slightly more Black residents, slightly fewer White residents, and are slightly more urban, than the counties covered by the population of jails; these differences are significant in statistical terms but relatively small in magnitude.

All data used in this report may be found at <a href="https://github.com/publicsafetylab/public-psl-jdi-ccj">https://github.com/publicsafetylab/public-psl-jdi-ccj</a>.

#### **COVID-19 AND JAIL POPULATIONS**

Figure 1 reports the total daily jail population for the full sample of jails and the rolling seven-day average of new COVID-19 cases between March 1 and Oct. 22, for the 319 counties in which these jails are located. As is evident in Figure 1, despite the concerns raised about the potential for COVID-19 transmission in county jails, jail populations do not appear to have been influenced by local COVID-19 prevalence. Counties that saw larger countywide increases in COVID-19 cases over this period did not see larger percentage decreases in jail populations than counties with smaller countywide increases in COVID-19 cases.<sup>7</sup>

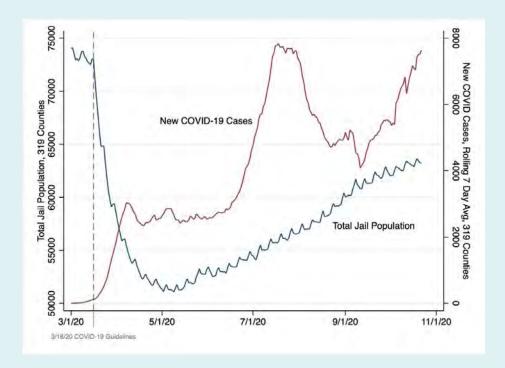
Instead, as can be seen in Figure 1, jail populations began to drop sharply after March 16. On that day the White House issued "Coronavirus Guidelines for America," which called for "30 Days to Slow the Spread." These Guidelines stated that, "in states with evidence of community transmission ... indoor and outdoor venues where groups of people congregate should be closed." The Guidelines were later extended until April 30.9 Jail populations decreased sharply immediately after the issuance of the March 16 Guidelines, by 31% between March 1 and May 2.

<sup>&</sup>lt;sup>6</sup> The size of the feasible set of scrapable jail rosters changes over time as facilities post or remove online rosters, and/or implement measures to prevent scraping of online rosters. States without jails in the sample reported on here are Alaska, Connecticut, Delaware, Hawaii, Massachusetts, Nebraska, New Hampshire, Nevada, New York, Rhode Island, Vermont, West Virginia, and Wyoming. We exclude jails for which there was a gap of greater than seven days in daily data collection during our sample period, due to a roster website going down or a facility failing to update its roster.

<sup>&</sup>lt;sup>7</sup> We find no relationships between countywide COVID-19 case growth and percentage changes in jail populations between March 1 and Oct. 22, using either the full sample or samples restricted to larger jails.

<sup>8</sup> https://www.whitehouse.gov/wp-content/uploads/2020/03/03.16.20 coronavirus-guidance 8.5x11 315PM.pdf.

<sup>&</sup>lt;sup>9</sup> https://www.npr.org/2020/03/29/821976925/coronavirus-cases-soar-across-the-u-s-and-officials-say-worse-is-yet-to-come?fbclid=lwAR3J9atMs3fEvq8qDMvEo3yMbUehZ0xTcCXkCpzC0MMb8JaH5fQZJeJx4Sk.



Almost immediately after the expiration of the Guidelines on April 30, jail populations began to rise again. Between May 2 and Oct. 22, the total jail population increased by 24%, despite steep local increases in new COVID-19 cases. As of Oct. 22, the total jailed population in the sample was only 15% smaller than its March 1 level.<sup>10</sup>

Figure A1 in the Appendix reports the average daily jail population for the full sample, and for the subsamples of jails for which our daily data collection had begun by Jan. 1 and Feb. 1, respectively. Figure A2 in the Appendix reports event study estimates of the weekly change in daily jail populations, relative to the week immediately prior to March 16. Figures A1 and A2 indicate that there were no significant trends in jail populations prior to March 16, that jail populations dropped sharply in the week after March 16, and that jail populations began to rise again in mid-May.

The decreases in jail populations after the issuance of the White House Coronavirus Guidelines on March 16, and the lack of responsiveness of jail populations to local COVID

.

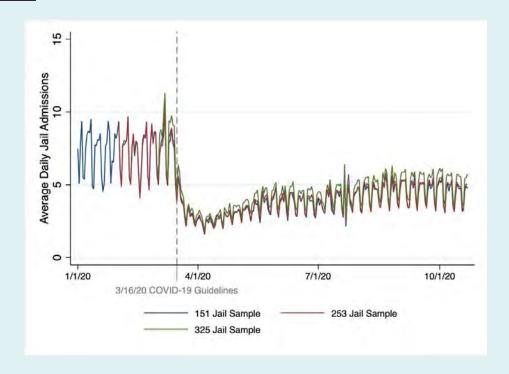
<sup>&</sup>lt;sup>10</sup> Jails may also have moved more individuals to electronic monitoring instead of in-facility detention. If these individuals remained on facilities' rosters, this may account for some of the post-May increases in jail populations.
<sup>11</sup> All of the event study plots reported herein display 95% confidence intervals, include fixed effects for each jail facility, and cluster standard errors on facility.

prevalence after those guidelines expired, suggest the importance of clear policy guidelines for reducing risk of disease transmission within county jails.

#### **COVID-19 AND JAIL BOOKINGS**

One mechanism driving changes in jail populations during the pandemic may have been changes in new bookings. Figure 2 reports average daily new bookings (per jail) between Jan. 1 and Oct. 22. Bookings typically follow a weekly cycle, peaking on Saturdays and reaching their lowest levels on Mondays. Average daily bookings oscillated between five and ten new bookings prior to March 16. Figure A3 in the Appendix reports event study estimates of the weekly change in daily bookings, relative to the week immediately prior to March 16. Both figures indicate that there was no weekly trend in daily bookings prior to March 16, and that bookings dropped sharply after March 16. After three weeks of decreases, daily bookings began to rise again, although they remain approximately 36% below baseline levels.

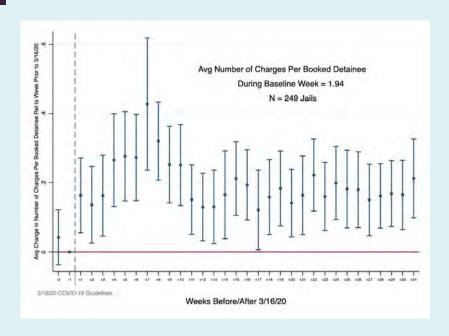
#### FIGURE 2

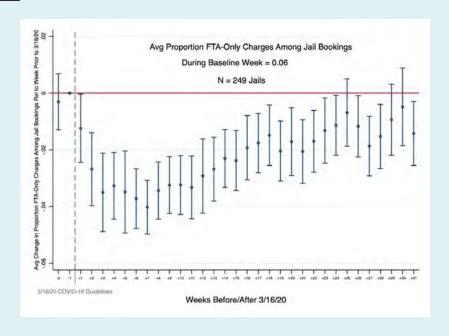


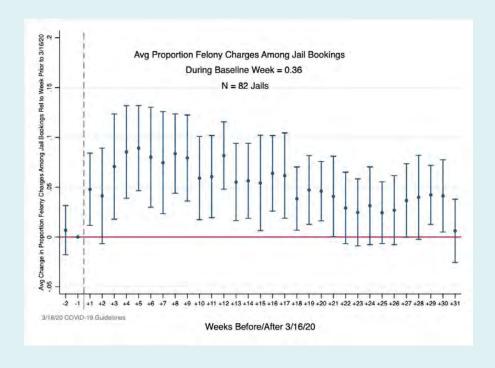
As bookings fell during the pandemic, the characteristics of those being booked into county jails also changed. As reported in Figures 3 - 5, both the average number of charges per booked individual and the proportion of bookings representing those booked on

felony charges increased after March 16, peaking at 23% and 25% increases, respectively, relative to the baseline week. The proportion of bookings representing those charged only with failure to appear (FTA), meanwhile, declined after March 16, bottoming out at a 67% decrease relative to the baseline week. These changes in the characteristics of those being booked into detention have persisted into late October.

#### FIGURE 3

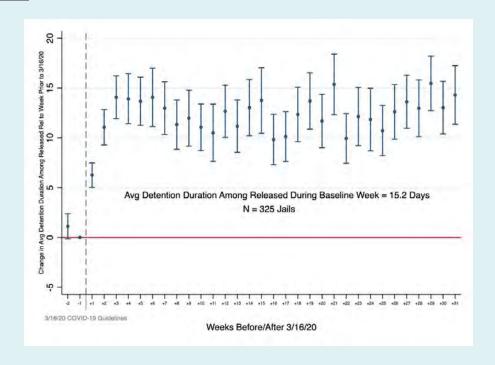






#### **COVID-19 AND LENGTH OF DETENTION**

Although jail admissions dropped after March 16 and continue to remain below prepandemic levels, those who are detained are being held for longer periods of time. As reported in Figure 6, the average duration of detention at time of release was approximately 15 days during the week immediately prior to March 16, and was relatively stable during the two weeks prior. But after March 16, average detention duration increased sharply, and it remains nearly 15 days, or 100%, higher than the baseline average. These increases in detention duration have contributed to increases in jail populations since mid-March.



#### **COVID-19 AND JAIL RELEASES**

Jail populations may also have changed during the pandemic due to changes in releases. Figure 7 reports average daily releases (per jail) between Jan. 1 and Oct. 22. Releases follow a weekly cycle that is the inverse of the weekly admissions cycle, typically peaking on Mondays and reaching their lowest levels on Saturdays. The number of weekly releases, however, tends to be approximately equal to the number of weekly admissions. Like average daily bookings, average daily releases oscillated between five and ten releases per jail prior to March 16. Figure A4 in the Appendix reports estimates of the weekly change in average daily releases, relative to the week immediately prior to March 16.

Both figures indicate that there was no weekly trend in average daily releases before March 16. Average daily releases dropped after March 16, but not immediately, and initially by less than the reductions in average daily admissions. Although average daily admissions in the sample dropped by 43% in the week immediately following March 16, relative to the week immediately prior to March 16, average daily releases stayed at about the same level before falling to match the declines in average daily admissions. Daily releases have continued to remain approximately 40% below baseline levels.

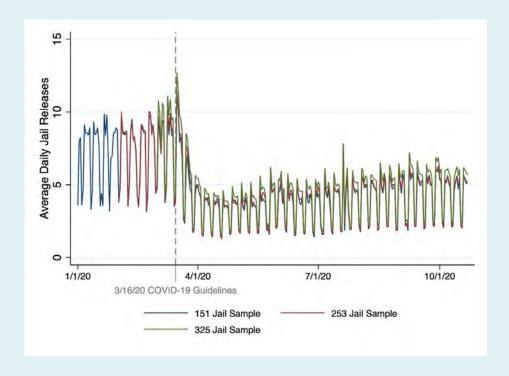
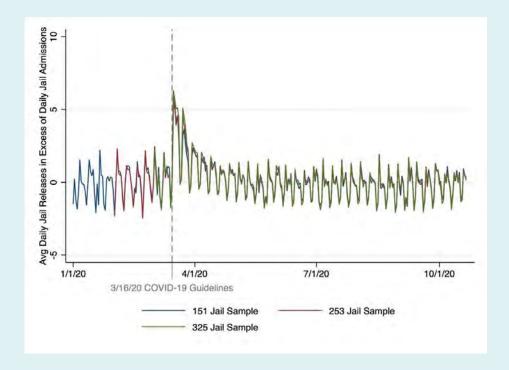
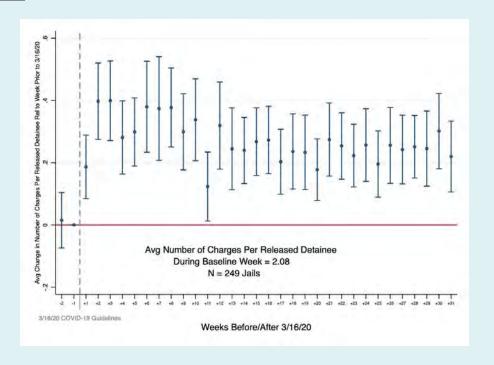
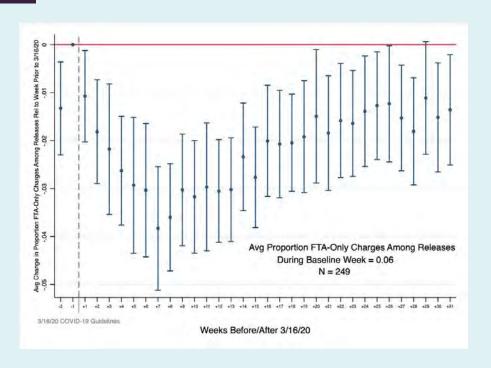


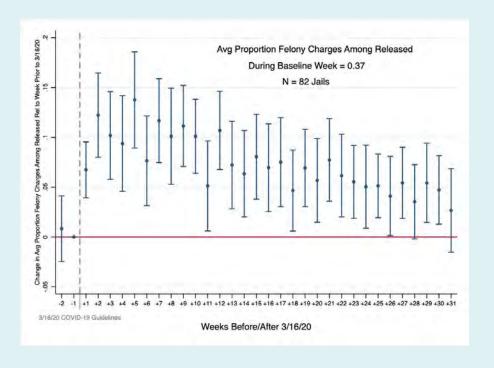
Figure 8 reports average daily "excess releases" per jail, or releases in excess of admissions. Figure A5 in the Appendix reports event study estimates of the average weekly change in daily "excess releases," relative to the week prior to March 16. Weekly averages of daily excess releases hovered around zero prior to March 16. Excess releases jumped by about 2.5 releases per jail per day during the week immediately following March 16, and remained elevated for two more weeks after March 16, before dropping back to the baseline rate through October.



As the characteristics of individuals being booked changed during the pandemic, so, too, did the characteristics of those released. As reported in Figures 9 - 11, both the average number of charges per released individual and the proportion of releases representing people booked on at least one felony charge increased after March 16, peaking at 20% and 38% increases, respectively, relative to the baseline rate. The proportion of those released who were charged only with failure to appear decreased, bottoming out at a 65% decrease relative to the baseline rate. These changes in the characteristics of those being released from detention have persisted into late October.







#### **COVID-19 AND REBOOKING RATES**

The rates at which people leaving detention are rebooked into jail after release is one measure of the net public safety risk of jail releases. Rebooking rates may be affected both by individuals' criminal justice histories, and by the conditions they face upon release.

The estimates reported here indicate that, after the issuance of the March 16 Coronavirus Guidelines, the composition of jail releases shifted. After March 16, those released from county jails had been booked on more charges on average, were less likely to have been booked on lesser charges like failure to appear, and were more likely to have been booked on felony charges, than those released during the week just prior to March 16.

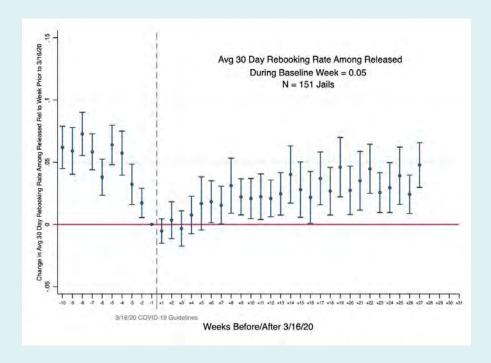
People released from jail during the pandemic also faced different post-release conditions than those released from detention prior to the pandemic. Most categories of reported property and drug-related crimes and arrests decreased during the pandemic, with the exception of commercial burglaries. However, several categories of reported violent

-

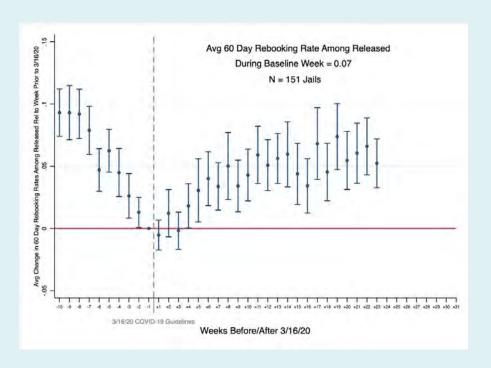
<sup>&</sup>lt;sup>12</sup> Jon Kleinberg, Himabindu Lakkaraju, Jure Leskovec, Jens Ludwig, Sendhil Mullainathan, Human Decisions and Machine Predictions, *The Quarterly Journal of Economics*, Volume 133, Issue 1, February 2018, pp. 237–293.

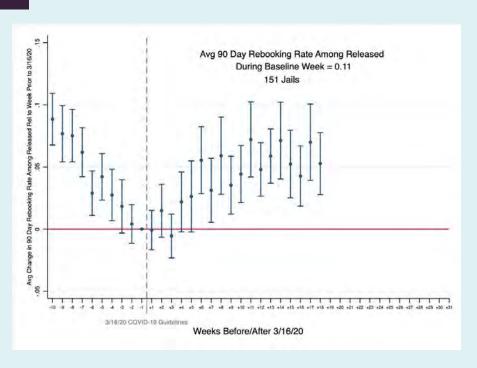
crimes and arrests saw large increases during the pandemic, including domestic violence, aggravated assaults, gun assaults, and homicides.<sup>13</sup>

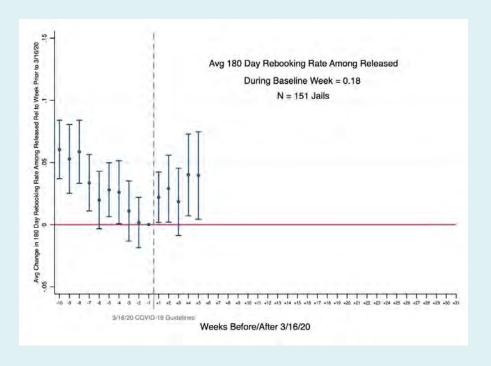
Both the changes in the characteristics of those released from detention, and the changes in communities' crime and arrest trends, may have influenced rebooking rates during the pandemic. Figures 12 - 15 report event study estimates of changes in rebooking rates within 30, 60, 90, and 180 days following release, relative to the week just prior to March 16.



<sup>&</sup>lt;sup>13</sup> Rosenfeld, Richard and Ernesto Lopez. Pandemic, Social Unrest, and Crime in U.S. Cities: November 2020 Update. Washington, D.C.: Council on Criminal Justice, December 2020; Leslie, Emily and Riley Wilson. Sheltering in Place and Domestic Violence. Washington, D.C.: Council on Criminal Justice, August 2020; Abrams, David, COVID and Crime: An Early Empirical Look, University of Pennsylvania Working Paper, August 2020.







Figures 12 - 15 indicate that 30-, 60-, 90-, and 180-day rebooking rates remain below the pre-pandemic rebooking rates observed for those released in January 2020. Relative to the average rebooking rates observed in January 2020, 30-day rebooking rates have decreased by an average of 33%, 60-day rebooking rates have decreased by an average of 30%, 90-day rebooking rates have decreased by an average of 21%, and 180-day rebooking rates have decreased by an average of 13%; these decreases are all statistically significant at the 95% level. To the extent that rebooking rates measure the average net public safety risks of releasing individuals from jail, the public safety risks of jail releases are lower now than prior to the pandemic.

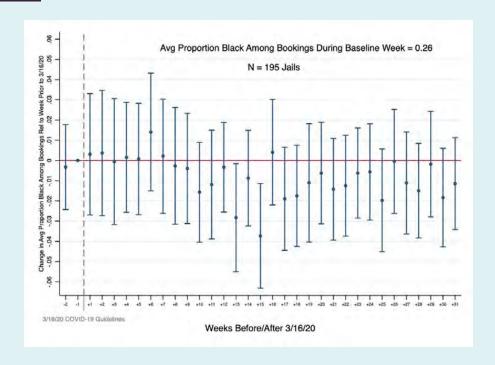
The Appendix reports rebooking rates for the sample of jails for which consistent daily data is available from Feb. 1 through Oct. 22.

# RACIAL DISPARITIES IN JAIL BOOKINGS AND RELEASES

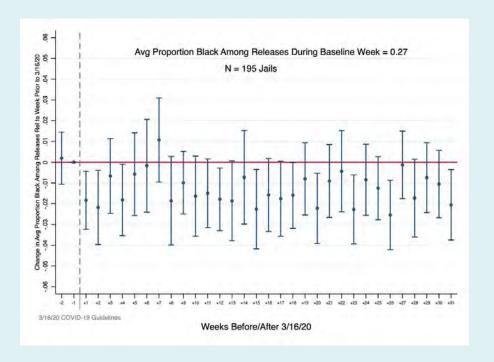
Changes in jail bookings and releases during the pandemic may have exacerbated existing racial disparities in local detention practices. Figures 16 and 17 report event study estimates of the changes in the proportions of Black individuals among those being booked into and released from jails between March 16 and Oct. 22, relative to the week

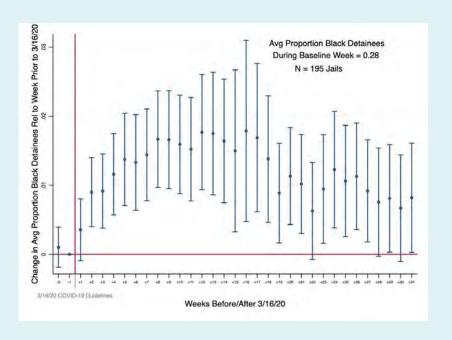
immediately prior to March 16. During the week just prior to March 16, on average 27% of those being booked into/released from jails were Black. Figure 16 indicates that there were few changes in the proportion of Black individuals among new bookings after March 16. Pooling weekly new bookings, we cannot reject the null hypothesis of no average change in the proportion of Black individuals among those booked after March 16, relative to those booked before March 16.<sup>14</sup>

Figure 17 indicates, however, that the proportion of Black individuals among weekly jail releases dropped after March 16. Pooling weekly releases, we find an average 1.4 percentage point or 5.2% decrease in the proportion of Black individuals among those released after March 16, relative to those released prior to March 16; this decrease is statistically significant at the 95% confidence level.



<sup>&</sup>lt;sup>14</sup> Models include fixed effects for facilities and standard errors clustered on facility.





As a result of these patterns in admissions and releases, the proportion of Black individuals among those detained began to rise after March 16 (see Figure 18), and it remains slightly elevated relative to the pre-pandemic proportion of Black individuals among those detained.

# ETHNICITY, GENDER, AND AGE DISPARITIES IN JAIL BOOKINGS AND RELEASES

We also explored whether the proportions of those booked into and released from jail by ethnicity, gender, and age changed during the pandemic. We report those changes that are significant at the 95% confidence level.

The proportion Hispanic among those booked into jail increased by approximately one-half of one percentage point relative to the baseline rate of 2% during the week prior to March 16, while the proportion Hispanic among those released from jail during the pandemic increased by approximately 1.5 percentage points relative to the baseline rate of 2.4%. The proportion Hispanic among the detained population did not increase significantly from the pre-pandemic rate of 3%.

The proportion male among those booked into and released from jail during the pandemic increased by one percentage point relative to the baseline rate of 76% during the week prior to March 16. The proportion male among those being held in jails increased by 2 percentage points relative to the baseline rate of 83% during the week prior to March 16.

The proportions of individuals of different ages booked into and released from jails did not change significantly during the pandemic. However, the age distribution of the detained population changed slightly. The proportion of those detained who were age 25 or younger increased by approximately one percentage point, relative to the baseline rate of 19%. The proportion of those detained who were age 35 or older decreased by approximately one percentage point, relative to the baseline rate of 44%. The proportion of those detained between the ages of 25 and 35 did not change significantly from the pre-pandemic rate of 37%.

# **Discussion**

The findings reported here may provide insight into the public safety consequences of jail population reductions that have occurred during the COVID-19 pandemic.

Compared to people released from jail before the emergence of COVID-19, those released from jails during the pandemic had been booked on more charges on average, were less likely to have been booked on lesser charges like failure to appear, and were more likely to have been booked on felony charges. Individuals released from jails during the pandemic also faced different post-release conditions than those released from detention prior to the pandemic. As documented in several studies, during the pandemic most categories of reported property and drug-related crimes and arrests have decreased (with the exception of commercial burglaries), while several categories of reported violent crimes and arrests have seen substantial increases (e.g., domestic violence, aggravated assaults, gun assaults, and homicides).<sup>15</sup>

<sup>15</sup> Rosenfeld, Richard and Ernesto Lopez. Pandemic, Social Unrest, and Crime in U.S. Cities: November 2020 Update. Washington, D.C.: Council on Criminal Justice, December 2020; Leslie, Emily and Riley Wilson. Sheltering in Place and Domestic Violence. Washington, D.C.: Council on Criminal Justice, August 2020; Abrams, David, COVID and Crime: An Early Empirical Look, University of Pennsylvania Working Paper, August 2020.

#### **APPENDIX**

Table A1: Representativeness of the Public Safety Lab Jail Sample

|                                 | Population | Sample   |
|---------------------------------|------------|----------|
| Avg Facility Capacity           | 285        | 304      |
| Avg County Population           | 104, 468   | 121,671  |
| Avg County Proportion Black     | 0.09       | 0.12***  |
| Avg County Proportion White     | 0.83       | 0.80***  |
| Avg County Proportion Hispanic  | 0.10       | 0.10     |
| Avg County Proportion Urban     | 0.41       | 0.52***  |
| Avg County Median Family Income | \$64,068   | \$65,323 |
| Facility N                      | 3162       | 325      |
| County N                        | 3143       | 319      |

Data Sources: 2019 American Community Survey, 2013 BJS Census of Jails. \*\*\* p < .01, reporting the significance of differences in means between population and sample.

Figure A1

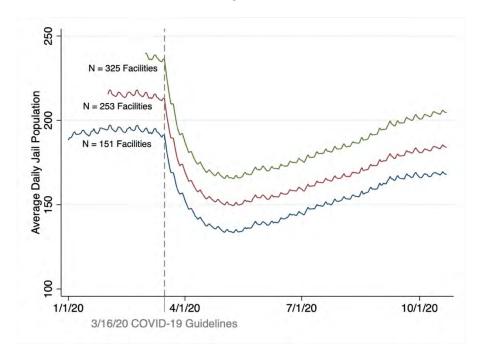


Figure A2

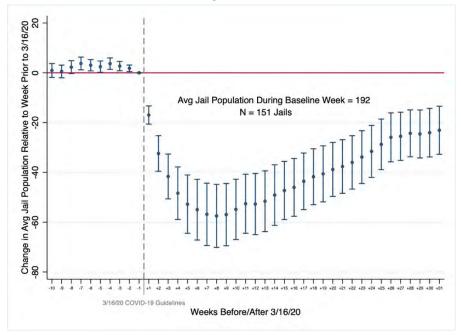
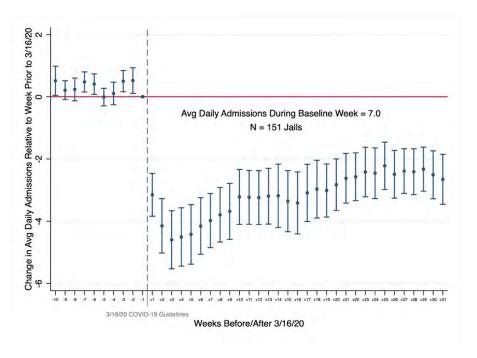


Figure A3





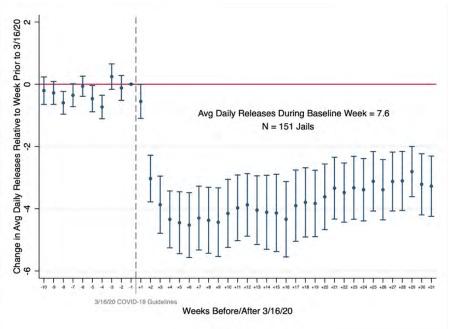
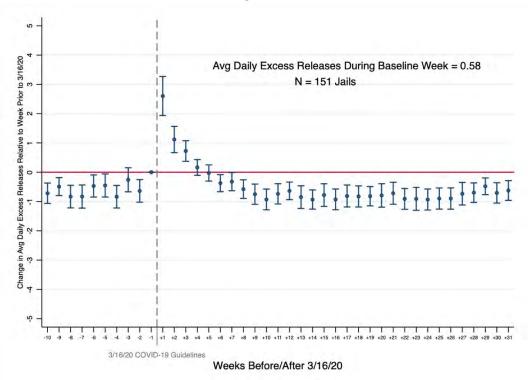
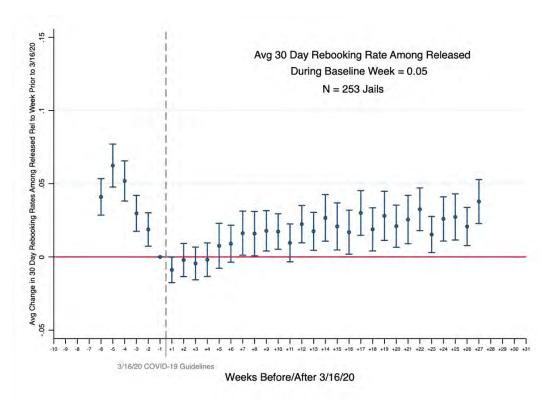


Figure A5



#### Rebooking Rates, 253 Jail Sample

Figure A6





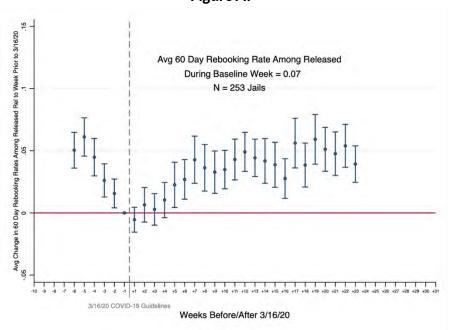


Figure A8

