

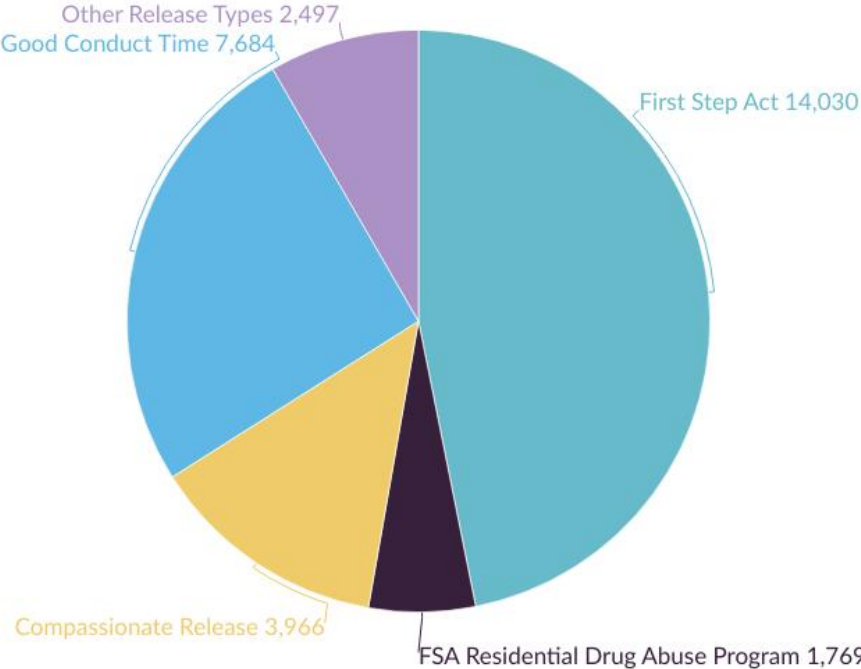
First Step Act: An Early Analysis of Recidivism

Methodology

The analysis, entitled [First Step Act: An Early Analysis of Recidivism](#), estimates recidivism rates among individuals released from the federal Bureau of Prisons (BOP) prior to the implementation of the First Step Act (FSA) who had similar risk profiles and were tracked for similar periods of time as those released under the FSA. Without access to data on individuals, several plausible assumptions were made to produce estimates using aggregate data that has been made public by the BOP and Office of the Attorney General (OAG). This supplemental methodology report details those assumptions. The analysis does not seek to evaluate the FSA or its implementation.

The [First Step Act Annual Report](#), published in April 2023, indicates that 29,946 people were released under the FSA (or benefitted from the FSA and were released under a different release code) from 2020 to January 2023. These people are included in BOP’s recidivism analyses and referred to in the current analysis as “people released under the FSA” regardless of their final release code.¹ A breakdown of the sample is provided in Figure 1.

Figure 1: Release Codes for 29,946 People Released Under the FSA



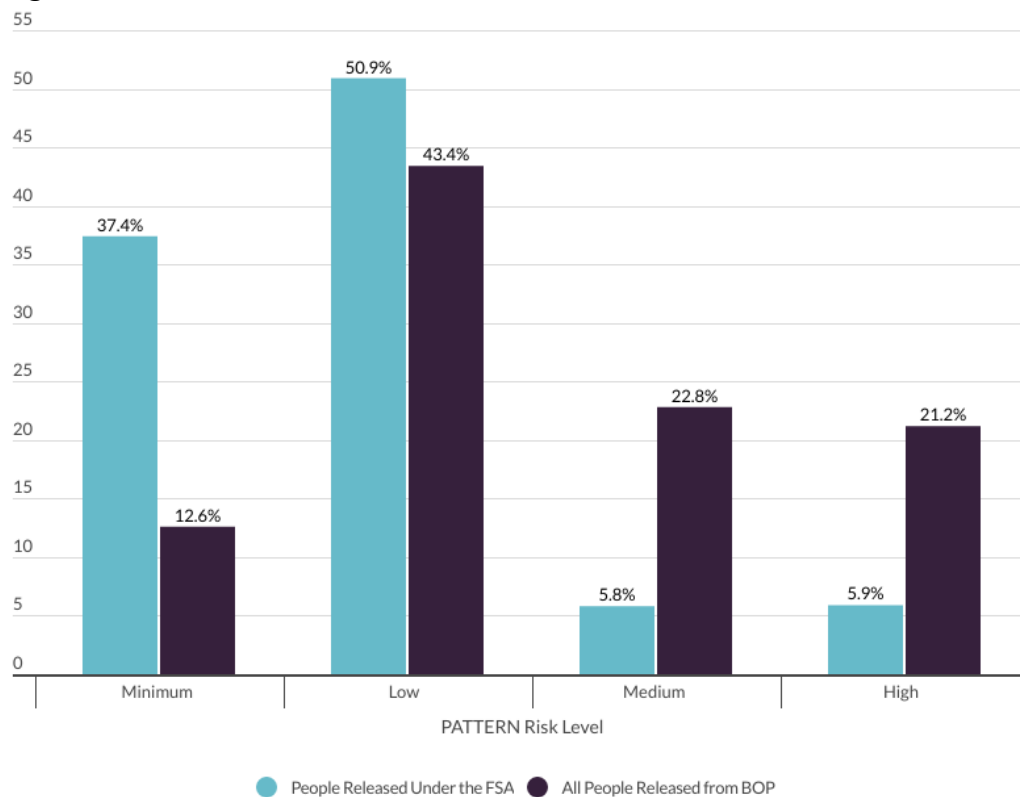
¹ Release code data were received from the BOP Office of Research and Evaluation. Other release types include, but are not limited to, clemency, full-term releases, and death.

The First Step Act Annual Report identifies that 3,713 people (12.4%) have recidivated [defined by BOP as any rearrest or return to federal prison for a new crime or technical violation of supervision regardless of the subsequent outcome of that arrest (whether or not a person is charged or convicted)] as of February 16, 2023.² While that is considerably lower than the 46.2% recidivism rate³ for all prisoners released from BOP facilities in 2018, it is not valid to compare these two numbers as people released under FSA differ in important ways from all persons released from federal prisons, including their assessed risk level and the length of time they have been out of prison. To account for these differences, this analysis estimates recidivism among people released prior to the FSA who are similar to FSA releases in two key ways: (1) they had a similar risk assessment according to BOP’s current [risk assessment tool](#), PATTERN, and (2) they had been released to the community for a similar amount of time.

RISK LEVEL

People released under the FSA have a lower overall risk profile when compared to all people released from BOP (Figure 2). This is by design, as the FSA lists risk levels as one of several eligibility criteria.

Figure 2: PATTERN Risk Levels



² People are tracked for recidivism after they complete both their term of imprisonment and any pre-release supervision including home confinement.

³ See Table 1: Labrecque, R. (2023). *2022 review and revalidation of the first step act risk assessment tool* (NCJ 305720). Washington, D. C.: National Institute of Justice. <https://www.ojp.gov/pdffiles1/nij/305720.pdf>

Comparing the distribution of risk levels for people released under the FSA to a 2018 release cohort of 37,874 people released from BOP and included in a revalidation study of the PATTERN risk assessment tool⁴ highlights the imbalance. The number of medium- and high-risk people in the PATTERN revalidation sample sums to nearly the same number as those identified as low-risk. When examining risk levels for people released under the FSA, those at medium- and high-risk sum to a fraction of the low-risk population. This imbalance needs to be accounted for to aggregate to an appropriate overall recidivism rate.

FOLLOW-UP PERIOD

The reported 12.4% recidivism rate for people released under the FSA was generated on people who were released at different times over the past three years. For example, the most recent recidivism analysis⁵ includes all people released under the FSA from 2020 to 2022. Therefore, when recidivism rates were calculated for the sample on February 16, 2023, some people included in the analysis were tracked for over three years, others for just a few months.

While the risk level and follow-up period comprise obvious differences between groups, there are standard (e.g., current charge) and discretionary criteria (e.g., requiring a warden's approval) that guide eligibility for release under the FSA and are not accounted for in the analysis. For example, not all people assessed as minimum or low risk for recidivism are released under the FSA. Therefore, additional eligibility or discretion will further limit the comparability of FSA releasees with general releases which do not occur under the FSA. Additionally, more than half (53.8%) of people released under the FSA completed at least one evidence-based recidivism reduction program. While participation in these programs may be associated with reduced recidivism, it is also possible that people with the most motivation for post-release success were more likely to complete these programs and therefore may have had lower rates of recidivism regardless of program participation.

This supplemental methodology report describes the strategy employed to correct for imbalances in risk level and follow-up period and generate recidivism estimates for a "comparable" group (i.e., similar risk level and follow-up period) released from BOP prior to the implementation of the FSA. Under a set of clearly stated assumptions (detailed below), estimates of the total number of arrests incurred by people released under FSA are also generated. These arrests are contextualized with the estimated total number of arrests reported nationwide from 2020 to 2022.

⁴ Labrecque, 2023: *supra* note 3.

⁵ See results beginning on p. 40: Office of the Attorney General. (2023). *First step act annual report*. Washington, D. C.: United States Department of Justice. <https://www.ojp.gov/first-step-act-annual-report-april-2023>

COMPARABLE RECIDIVISM RATES

This section describes the strategy used to generate a recidivism rate estimate that is more comparable to the 12.4% recidivism rate reported for people released under the FSA than the 46.2% three-year recidivism rate for all people released from federal prisons prior to the implementation of the FSA. To accomplish this, we first need to generate recidivism rates by risk level and one-, two-, and three- year follow-up periods for both groups. Recidivism by risk level is shown below for the 24,917 people released under FSA who had a risk score on the PATTERN tool (Table 1). The overall recidivism rate for these 24,917 is reported as 8.5%.

Table 1: Recidivism Rate for People Released Under the FSA with a PATTERN Classification

Risk Level	No Recidivism	Recidivism	Total (n)
Minimum	96.8%	3.2%	9,322
Low	92.0%	8.0%	12,678
Medium	79.0%	21.0%	1,455
High	65.6%	34.4%	1,462
Total (n)	22,790	2,127	24,917
Total (%)	91.5%	8.5%	

Notes: See Table 6, Office of the Attorney General, 2023, *supra* note 5. The value 2,127 is incorrectly reported as 2,217 in the original source; 5,029 people released under FSA are not included as they released prior to the implementation of the PATTERN risk assessment tool.

As the risk level on all 29,946 people released under the FSA is reported as 12.4%, then the recidivism rate among the 5,029 for whom risk data are not available must be 31.7% as this is the only rate compatible with a 12.4% rate for the full sample. These individuals were released prior to the implementation of the PATTERN risk assessment tool, meaning that they had the longest follow-up period of all FSA releasees and therefore are expected to have the highest recidivism based on time in the community/exposure. Our first set of assumptions are used to impute the risk levels and recidivism rates for the full sample of 29,946 FSA release (including the 5,029 pre-PATTERN releasees).

ASSUMPTION 1:

Although these 5,029 people were released prior to the implementation of the PATTERN risk assessment tool, we assume that their risk profile is identical to the remaining 24,917 people released under the FSA for whom we have PATTERN risk level data (Table 2). As such, we proportionally allocate these 5,029 into the four risk categories. This gives us the following estimated distribution of people released under the FSA by risk level.

Table 2: Allocation of People Released Under the FSA without a PATTERN Classification

Risk Level	Published Number	Allocated Number
Minimum	9,322	11,203
Low	12,678	15,237
Medium	1,455	1,749
High	1,462	1,757
Total (n)	24,917	29,946

ASSUMPTION 2:

Next, we assume that the distribution of recidivism rates among the full sample (the allocated risk levels among the 29,946) is proportional to the observed recidivism rates among the 24,917 for whom PATTERN risk level data are available (Table 3). This assumption allows us to allocate the 12.4% recidivism rate across the full sample of 29,946 by risk level in a way that is proportional to the observed rates.

Table 3: Allocated Rate of Recidivism for All People Released Under the FSA

Risk Level	Published Rate of Recidivism	Relative Risk (RR)	Allocated Rate of Recidivism
Minimum	3.2%	0.37	4.7%
Low	8.0%	0.94	11.6%
Medium	21.0%	2.46	30.6%
High	34.4%	4.03	50.1%
Total	8.5%		12.4%

This calculation is based on the relative risk (RR) between the observed risk-level specific rate (e.g., 3.2% for minimum risk) and the overall observed rate (8.5%). The RR is 0.37. By applying this RR to the 12.4% number for the full sample, we obtain an estimated 4.7% recidivism rate for the 11,203 total FSA releases with an allocated minimum risk classification. Similar RR calculations and applications to the remaining risk levels yields estimated recidivism rates for all four risk levels.

Taken together, these two assumptions provide a risk-level specific estimate of recidivism of all 29,946 people released under the FSA (Table 4).

Table 4: Risk-Level Estimation for All People Released Under the FSA

Risk Level	Total Releases (n)	Recidivism Rate
Minimum	11,203	4.7%
Low	15,237	11.6%
Medium	1,749	30.6%
High	1,757	50.1%
Total	29,946	12.4%

The estimated breakdown of the 12.4% recidivism rate by risk level for the full FSA release sample, however, still combines different follow-up periods (even among the different risk levels). The goal is to compute a recidivism column for the 29,946 people released under the FSA using data from the PATTERN revalidation sample of all people released from BOP in 2018. However, those data are provided in one-, two-, and three-year time intervals in the latest PATTERN revalidation study (Table 5).⁶

Table 5: One-, Two-, and Three-Year Recidivism Rates for the PATTERN Revalidation Sample

Risk Level	Total (n)	One-Year Recidivism Rate	Two-Year Recidivism Rate	Three-Year Recidivism Rate
Minimum	4,766	5.12%	7.57%	9.48%
Low	16,453	16.93%	27.32%	33.03%
Medium	8,638	37.53%	53.54%	60.91%
High	8,017	56.62%	73.36%	79.28%

ASSUMPTION 3:

Follow-up periods vary continuously when we study a release cohort (like the 29,946 people released under the FSA). However, if we assume that the FSA releasees can be grouped into three samples with discrete follow-up periods (approximately one-, two-, and three-years) and we assume that the three annual reports provide estimated sizes of those groups, then we can compute an approximate share of the different follow-up periods for people released under the FSA.⁷ That is, among the 29,946 total FSA releases in the 2023 OAG First Step Act Annual Report, roughly 7,251 FSA releases had a three-year follow-up period, 2,540 had a two-year follow-up period, and the remaining 20,155 had a one-year follow-up period. This suggests that the 12.4% estimate is a weighted

⁶ See Appendix D, Labrecque, 2023: *supra* note 3.

⁷ See OAG annual reports: Office of the Attorney General. (2020). *The attorney general's first step act Section 3634 annual report*. Washington, D. C.: United States Department of Justice. <https://www.ojp.gov/Attorney-Generals-First-Step-Act-Section-3634-Annual-Report-December-2020>; Office of the Attorney General. (2022). *First step act annual report*. Washington, D. C.: United States Department of Justice. <https://www.ojp.gov/first-step-act-annual-report-april-2022>; Office of the Attorney General, 2023: *supra* note 5.

average of one-, two-, and three-year recidivism rates, with respective weights of 67.3%, 8.48%, and 24.21% each (Table 6).

Table 6: Number of People Released Under the FSA by Length of Follow-Up

	One-Year Follow-Up	Two-Year Follow-Up	Three-Year Follow-Up	Full Sample
Total (n)	20,155	2,520	7,251	29,946
Weights	67.31%	8.48%	24.21%	100%

This assumption allows us to apply these weights to the one-, two-, and three-year recidivism rates reported for the PATTERN revalidation sample within risk level and estimate risk-level specific recidivism rates for people with different follow-up periods. And, finally, by aggregating these risk-level specific estimates by the number of people released under the FSA at each risk level, we arrive at an estimated recidivism rate for people in the PATTERN revalidation sample who have similar risk profiles AND who also have similar follow-up periods to those released under the FSA.

The estimated overall recidivism rate among people in the PATTERN revalidation sample who have the same risk profiles and follow-up periods as the 29,946 people released under the FSA is 19.8% (Table 7). This estimate is more comparable to the 12.4% recidivism of people released under the FSA as it accounts for the risk profile and follow-up period imbalances noted above.

Table 7: Comparison of Recidivism Rate by Risk Level

Risk Level	Total (n)	People Released Under the FSA	People from the PATTERN Revalidation Sample
Minimum	11,203	4.7%	6.4%
Low	15,237	11.6%	21.7%
Medium	1,749	30.6%	44.5%
High	1,757	50.1%	63.5%
Overall	29,946	12.4%	19.8%

COMPARABLE NUMBER OF INCURRED ARRESTS

In this section, we extend the analysis conducted above to convert recidivism rates into estimates of incurred arrests. While recidivism rates typically only count a single arrest (per person), it is possible that persons may be arrested multiple times if they are not removed from the risk pool after that initial re-arrest. Without looking at individual-level data, it is impossible to determine how many times a person is re-arrested. However, we can make two extreme assumptions and proceed with calculations. First, we can assume that each person who is re-arrested is re-arrested only once. In other words, once a

person is re-arrested, we assume that they are reincarcerated and therefore no longer at risk of further re-arrest. We refer to this below as the “Lower Bound.” Second, we can assume that each person who is re-arrested is allowed to remain in the risk pool (i.e., is not returned to BOP custody) and can therefore be re-arrested multiple times. We refer to this below as the “Upper Bound.” Clearly, both assumptions are extreme, and reality lies somewhere in between.

ASSUMPTION 4:

To compute the Upper Bound value for incurred arrests, we assume that no person is removed from the risk pool and therefore all people in the sample can contribute to multiple arrests after their initial release from prison. Under this assumption, a simple relationship between the survival probability up to a certain point (or 1 minus the risk of failure up to that point) and the cumulative hazard (or an estimate of the count of multiple events) is given by the equation:

$$S(t) = \exp\left(-\int^t h(z)dz\right) = \exp(-C(t))$$

Where $C(t)$ is an estimate of the count (up to point t) and $S(t)$ is the survival probability up to that point. Rearranging terms we get:

$$C(t) = -\ln(1 - P(t))$$

Where \ln is the natural log and $P(t)$ is the risk of recidivism (up to point t). This suggests that the number of repeatable events $C(t)$ up to a certain follow-up period is an increasing function of $P(t)$ (the probability of any event up to that point). For example, a group of 100 people with a 3-year recidivism rate of 50% can be expected to have 50 people with at least one re-arrest but can be expected to produce 69 total re-arrests (events) if none of the 50 people are removed from the risk pool for the entire three-year period. The same 100 people with a recidivism rate of 75% can be expected to have 75 people with at least one re-arrest but produce a total of 138 total re-arrests if all people remain in the risk pool. To use this calculation, we need to create an estimate of the number of people released under the FSA at different risk levels and different follow-up periods.

To compute the Lower Bound value for incurred arrests, we assume that each arrest results in a person’s reincarceration, thus removing them from the risk pool. For example, among the group of 100 people with a three-year recidivism rate of 75%, we expect 75 people to generate 75 arrests (one arrest each), since we assume that people cannot be rearrested more than once.

ASSUMPTION 5:

To compute recidivism rates by different follow-up periods for people released under the FSA, we use the RR of different follow-up recidivism rates from the PATTERN revalidation sample. This RR, with respect to the three-year recidivism rate, is provided in the Table 8.

Table 8: Recidivism Rates and Relative Risk by Risk Level and Follow-Up Period in the PATTERN Revalidation Sample

Risk Level	Total (n)	One-Year Recid Rate	Two-Year Recid Rate	Three-Year Recid Rate	1 to 3 Year RR	2 to 3 Year RR	3 Year RR
Minimum	4,766	5.12%	7.57%	9.48%	0.54	0.80	1.00
Low	16,453	16.93%	27.32%	33.03%	0.51	0.83	1.00
Medium	8,638	37.53%	53.54%	60.91%	0.62	0.88	1.00
High	8,017	56.62%	73.36%	79.28%	0.71	0.93	1.00
Overall	37,874	28.54%	40.56%	46.22%			

Note: RR = relative risk.

This table suggests that, among people identified by PATTERN as minimum risk, the one-year recidivism rate is 54% of the three-year rate and the two-year recidivism rate is 80% of the three-year rate. Similarly, for those at low risk, the RR is .51 and .83, respectively. For those at medium risk, the RR is .62 and .88, respectively and among those at high risk, they are .71 and .93, respectively. In other words, the one-, two-, and three-year recidivism rates are more similar for those at high-risk than for those at minimum- and low-risk.

We can now combine this assumption with the distribution of follow-up periods. For weights for each follow-up period, we use the same ratios assumed above (Assumption 3). That is, we assume that approximately 67.3% of people released under the FSA are followed for one year, another 8.48% are followed for two years, and remaining 24.21% are followed for three years. Let the one-, two-, and three-year recidivism rates for those at low-risk be denoted by x , y , and z . Then by our assumption:

$$x * 0.673 + y * 0.0848 + z * 0.2421 = 4.7\%$$

In other words, the weighted sum of the recidivism rates from three different follow-up periods should be the 4.7% recidivism rate calculated for low-risk people released under the FSA. But, by examining the RR values in the table above, we see that among those who are categorized as low risk:

$$x = 0.54 * z \text{ and } y = 0.8 * z$$

Therefore, if we assume that the RR among x, y, and z in the FSA sample is the same as the PATTERN revalidation sample, the equations above can be solved in terms of just z to get:

$$(0.54 * 0.673 + 0.8 * 0.0848 + 1 * 0.2421) * z = 4.7\%$$

This yields an estimate of z=6.9%. From this, we can estimate x and y as 3.7% and 5.5% respectively.

This means that the only recidivism rates that provide a weighted sum of 4.7% AND that have the same RR as the one-, two-, and three-year recidivism rates reported for the PATTERN revalidation sample are 3.7%, 5.5%, and 6.9%.

Similar calculations can be done for people allocated in the other risk levels to get one-, two-, and three-year recidivism rates for people released under the FSA. In a similar manner, the total number of people released under the FSA by risk level can also be allocated into groups with different follow-up periods (Table 9).

Table 9: Estimated Recidivism Number and Rate for People Released Under the FSA by Follow-Up Period

Risk Level	Total (n)	One-Year	Two-Year	Three-Year
Minimum	11,203	7,540	950	2,713
Low	15,237	10,255	1,292	3,689
Medium	1,749	1,177	148	423
High	1,757	1,183	149	425
	Recidivism Rate	One-Year	Two-Year	Three-Year
Minimum	4.7%	3.7%	5.5%	6.9%
Low	11.6%	9.1%	14.7%	17.7%
Medium	30.6%	25.8%	36.7%	41.8%
High	50.1%	44.6%	57.8%	62.5%

This table allows us to use the link between recidivism counts and rates (derived above) to estimate the Upper Bound number of arrests attributable to the 29,946 people released under the FSA. Using $C(t) = -\ln(1 - P(t))$ for each cell from the table above, we can get the average number of arrests per person in that cell and multiply that by the expected number of persons in that cell, which yields a count of the total number of arrests from that cell (Table 10).

Table 10: Upper Bound of Arrests Incurred by People Released Under the FSA by Follow-Up Period

Risk Level	One-Year Follow-Up	Two-Year Follow-Up	Three-Year Follow-Up
Minimum	287.1	54.0	194.6
Low	976.5	204.9	719.8
Medium	350.6	68.0	229.2
High	699.3	128.7	417.4

The Lower Bound number of arrests attributable to the 29,946 people released under the FSA is presented below (Table 11).

Table 11: Lower Bound of Arrests Incurred by People Released Under the FSA by Follow-Up Period

Risk Level	One-Year Follow-Up	Two-Year Follow-Up	Three-Year Follow-Up
Minimum	281.7	52.5	187.7
Low	931.4	189.5	653.9
Medium	303.2	54.5	177.0
High	527.9	86.2	265.9

Adding arrests by risk level and follow-up period yields the final estimate of the Upper Bound and the Lower Bound numbers of arrests that people released under the FSA could have incurred in the community (Table 12).

Table 12: Upper and Lower Bound Arrests Incurred by People Released Under the FSA

Risk Level	People Released under the FSA (n)	Upper Bound # of Arrests Incurred	Lower Bound # of Arrests Incurred
Minimum	11,203	536	522
Low	15,237	1,901	1,775
Medium	1,749	648	535
High	1,757	1,245	880
Total	29,946	4,330	3,712

To produce a comparable number of arrests incurred for people released from federal prison prior to the implementation of the FSA, we repeat the above calculations using the recidivism rates of people in the PATTERN revalidation sample with risk level distributions adjusted to reflect the risk profiles of FSA releases (Tables 13 and 14).

Table 13: Upper Bound of Arrests Incurred by 29,946 People in the PATTERN Revalidation Sample with Adjusted Risk Profiles by Follow-Up Period

Risk Level	One-Year Follow-Up	Two-Year Follow-Up	Three-Year Follow-Up
Minimum	396.3	74.8	270.3
Low	1901.8	412.4	1479.4
Medium	553.9	113.7	397.7
High	987.5	197.1	669.7

Table 14: Lower Bound of Arrests Incurred by 29,946 People in the PATTERN Revalidation Sample with Adjusted Risk Profiles by Follow-Up Period

Risk Level	One-Year Follow-Up	Two-Year Follow-Up	Three-Year Follow-Up
Minimum	386.0	72.0	257.3
Low	1735.9	353.1	1218.7
Medium	441.8	79.4	257.9
High	669.5	109.3	337.3

Adding arrests by risk level and follow-up period yields the final estimate of the Upper Bound and the Lower Bound numbers of arrests that people in the adjusted PATTERN revalidation sample could have incurred in the community (Table 15).

Table 15: Upper and Lower Bound Arrests Incurred by People in the PATTERN Revalidation Sample

Risk Level	Adjusted PATTERN Revalidation Sample (n)	Upper Bound # of Arrests Incurred	Lower Bound # of Arrests Incurred
Minimum	11,203	741	715
Low	15,237	3,794	3,308
Medium	1,749	1,065	779
High	1,757	1,854	1,116
Total	29,946	7,455	5,918

COMPUTING TOTAL ARRESTS AS A PERCENTAGE OF NATIONWIDE ARRESTS

Finally, we can situate the arrest numbers calculated above within all arrests made in the U.S. over the same period (i.e., 2020, 2021, and 2022). The FBI provides annual estimates of the total number of arrests reported by law enforcement agencies around the nation. The latest data are available through 2021 under the National Incident-Based

Reporting System (NIBRS). However, the FBI previously collected summarized data under the Uniform Crime Reporting (UCR) program for several decades. While national arrest numbers from the UCR have traditionally been the most accurate and comprehensive, the FBI stopped collecting summarized arrest data under this program in 2021 due to the greater granularity of the NIBRS system. Unfortunately, this change resulted in the FBI collecting arrest data from fewer law enforcement agencies (as not all agencies participate in NIBRS), which led to an undercount of national arrests. This discrepancy is detailed in Table 16, which shows the number of arrests reported by both NIBRS and UCR starting 2013, as well as the percentage of law enforcement agencies reporting data to NIBRS.⁸

In addition to not having UCR arrest data for 2021, the follow-up period was impacted by responses to the COVID-19 pandemic which reduced the number of national arrests. Therefore, we cannot create a trend line based on UCR reports from previous years to estimate arrests 2021. Rather, we need to employ a combination of updated NIBRS reports and a comparison of previous NIBRS and UCR counts to create an estimate for the total number of national arrests in 2021 and 2022. This process is detailed below.

ASSUMPTION 6:

To obtain accurate national arrest estimates for 2021, we need to correct for the undercount reported by NIBRS relative to the more accurate and comprehensive UCR count. First, we must first examine the percentage of law enforcement agencies reporting their arrest numbers to NIBRS. The FBI indicates that 63% of agencies reported in 2021, leading to a reported total of 4.3 million arrests (Table 16, Column 3). To account for this underreporting, we can divide this reported number by 0.63 (representing the 63% reporting rates from 2021), which gives us a scaled estimate of 6.9 million arrests in 2021 (Table 16, Column 4).

While this estimate is useful, a simple scaled estimate based on underreporting is likely to overstate the number of arrests, as seen in the difference between Columns 4 and 5 in Table 16. Therefore, we evaluated how these scaled estimates compare to the number of arrests reported by UCR in past years (Table 16, Column 6). Taking the average of the data presented in Column 6 indicates that the UCR arrest count is roughly 85% (on average) of the NIBRS scaled estimate. To account for this average gap, we multiply the scaled estimate of NIBRS arrests for 2021 (6.9 million) by 85%, providing us with a final estimate of 5.8 million arrests in 2021.

⁸ For more information on the transition to NIBRS, see: Department of Justice. (2023). *Review of the transition of law enforcement agencies to the national incident-based reporting system (NIBRS)*. <https://www.justice.gov/media/1268971/dl?inline#:~:text=The%20transition%20to%20the%20richer,and%20connections%20among%20these%20facets>

Table 16: Calculating National Arrest Estimates

Year	Reported arrests: NIBRS (#)	Agencies reporting to NIBRS (%)	Scaled Estimate of NIBRS Arrests (#)	Reported arrests: UCR (#)	UCR Arrests as a Percentage of NIBRS Scaled Estimate
2013	9,571,926	68%	14,153,453	11,302,102	79.9%
2014	8,999,719	70%	12,901,993	11,205,833	86.9%
2015	8,791,455	73%	12,042,275	10,797,088	89.7%
2016	8,896,308	74%	11,993,247	10,662,252	88.9%
2017	9,412,123	74%	12,660,239	10,554,985	83.4%
2018	8,571,086	71%	12,150,120	10,310,960	84.9%
2019	8,384,851	68%	12,381,239	10,085,207	81.5%
2020	5,991,651	67%	8,984,583	7,636,373	85.0%
2021	4,343,654	63%	6,926,128	N/A	N/A

Notes: Scaled estimate of NIBRS arrests was generated by dividing reported arrests in NIBRS by the percent of agencies reporting data. Data were drawn from: Federal Bureau of Investigation. (n.d.). *Crime data explorer*. <https://cde.ucr.cjis.gov/>

As of August 2023, a 2022 estimate of arrests from NIBRS is not yet available. Therefore, to generate an estimate for 2022 arrests, we average the 2020 and 2021 estimates, which results in an estimate of 6.8 million national arrests in 2022. Taken together, this gives us a three-year national arrest count of approximately 20.3 million (Table 17).

Table 17: Number of National Arrests, 2020-2022

	National Arrests (#)
2020 (actual)	7,636,373
2021 (estimated)	5,886,806
2022 (estimated)	6,761,589
Three-Year Estimate	20,284,768

Using the counts of all arrests nationwide over the three-year period (2020, 2021, and 2022), we see that the Upper Bound of estimated arrests by people released under the FSA (4,330) comprises 0.021% of all national arrests over three years (4,330/20,284,768). For people in the PATTERN revalidation sample with similar risk levels and follow-up periods, the Upper Bound of estimated arrests (7,455) comprises 0.037% of all arrests nationwide (7,455/20,284,768).