



Formal Statement of the American Civil Liberties Union

For a Stakeholder Engagement Session on

First Step Act Implementation

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On behalf of the American Civil Liberties Union (“ACLU”) and its more than 1.5 million members, supporters, and activists, and 53 nationwide affiliates, we thank you for the invitation to participate in this stakeholder engagement session regarding the PATTERN risk assessment built as a result of the First Step Act of 2018. The American Civil Liberties Union (ACLU) is dedicated to the principles of liberty, justice, and equality embodied in our nation’s Constitution and civil rights laws, and to protecting the civil liberties of all people in the United States. For years, the ACLU has been at the forefront of the fight against mass incarceration and its devastating impact on the people and their families who become ensnared in the criminal legal system, the failure to increase a proportional increase in public safety, and its disproportionate effect on communities of color.

The ACLU has serious concerns about PATTERN. We have repeatedly expressed these concerns over the last several years, along with other civil rights and legal organizations.¹ We believe PATTERN 1.3² continues to suffer from many of the systemic issues that affected previous versions of the tool. More than three years since PATTERN was first developed, the repeated failure to address these issues is unacceptable for many reasons, but most importantly because it unfairly prevents incarcerated people from benefitting fully from the earned time credit program. These continued problems underscore the inherent difficulties with using risk assessments to make consequential decisions about human liberty.

I. “Layers of Bias” in the PATTERN Risk Assessment Tool

The Department has asked for feedback on three important issues regarding the design and use of PATTERN. These topics are interrelated; thus, we apply a variant of the “layers of bias” framework for risk assessments,

¹ See, e.g., *Comment Letter to Department of Justice on PATTERN First Step Act*, available at <https://civilrights.org/resource/comment-letter-to-department-of-justice-on-pattern-first-step-act/> (Sept. 3, 2019); *Coalition Letter on the Use of PATTERN Risk Assessment in Prioritizing Release in Response to the COVID-19 Pandemic*, available at <https://www.aclu.org/letter/coalition-letter-use-pattern-risk-assessment-prioritizing-release-response-covid-19-pandemic> (April 3, 2020).

² See U.S. Department of Justice, *2021 Review and Revalidation of the First Step Act Risk Assessment Tool*, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021).

where the concerns raised in one layer build on and exacerbate the concerns raised in previous layers.³

- In the first layer, we highlight continuing concerns about errors in the tool and the definition of recidivism that PATTERN employs.
- These problems compound issues in the next layer of bias, which is focused on concerns with the inputs used in PATTERN and PATTERN's scoring scheme.
- Finally, in the last layer, we discuss concerns related to algorithmic fairness. We emphasize that debates about whether PATTERN is “fair” cannot be resolved until the Department also addresses the concerns raised in the previous points.

II. First Layer of Bias: Errors with PATTERN and PATTERN's Recidivism Definition

In the first layer of analyzing a risk assessment like PATTERN, it is critical to understand whether the tool actually works as designed. Since it was developed, PATTERN has been plagued by repeated and serious errors with both the technical systems and human processes used to calculate risk scores.⁴ These errors have led to the misclassification of tens of thousands of people who are incarcerated – and those are just the errors we know about.⁵ As people who are incarcerated continue to report issues with the awarding of Earned Time Credits (ETCs) and release timelines,⁶ and as reports released by the

³ The “layers of bias” framework we use here to contextualize issues with PATTERN is a variation of the framing of Eckhouse et al. (2018) regarding layers of bias in quantitative risk assessments. See Eckhouse et al. (2018), *Layers of Bias: A Unified Approach for Understanding Problems with Risk Assessment*, available at <https://journals.sagepub.com/doi/abs/10.1177/0093854818811379>.

⁴ For a summary of the technical errors and human errors associated with PATTERN, see Grawert and Richman, *The First Step Act's Prison Reforms, Uneven Implementation and the Path Forward*, The Brennan Center for Justice, available at <https://www.brennancenter.org/our-work/research-reports/first-step-acts-prison-reforms> (Sept. 23, 2022).

⁵ See Carrie Johnson, “Flaws plague a tool meant to help low-risk federal prisoners win early release,” NPR, available at <https://www.npr.org/2022/01/26/1075509175/justice-department-algorithm-first-step-act> (Jan. 26, 2022).

⁶ See Erik Ortiz, “Thousands of Federal Inmates still await early release under Trump-era First Step Act,” NBC News, available at

Department every few months about PATTERN continue to identify new errors,⁷ we would urge the Department to seriously consider whether this tool works currently and how it and the public can be confident the tool will work in the future.

In this layer of bias, the Department must also evaluate the appropriate definition of recidivism it wants the tool to predict and whether the tool can actually predict that outcome.⁸ As we have stated in the past, PATTERN does not directly predict recidivism – PATTERN estimates the likelihood of rearrest or return to BOP custody following release.⁹ That distinction is critical. Overwhelming research has demonstrated that arrest is more reliably a measure of policing practices and priorities than actual crime, making arrest a racially-biased proxy for recidivism.¹⁰ For example, when it comes to traffic stops – the most common form of interaction between police and the public – study after study has demonstrated that police engage in persistent racial discrimination when making stops, frisks, searches and arrests.¹¹ Moreover, a

<https://www.nbcnews.com/news/us-news/thousands-federal-inmates-still-await-early-release-trump-era-first-st-rcna35162> (July 3, 2022).

⁷ See U.S. Department of Justice, *2021 Review and Revalidation of the First Step Act Risk Assessment Tool*, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021).

⁸ PATTERN includes four separate tools. Two of these tools focus on “general recidivism,” which is defined as “as a return to BOP custody or a rearrest within three years of release from BOP custody, excluding all traffic offenses except driving under the influence and driving while intoxicated.” The other two tools focus on “violent recidivism,” defined as “a rearrest for a suspected act of violence within three years of release from BOP custody.” See pg. 10, U.S. Department of Justice, *2021 Review and Revalidation of the First Step Act Risk Assessment Tool*, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021).

⁹ U.S. Department of Justice, *2021 Review and Revalidation of the First Step Act Risk Assessment Tool*, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021).

¹⁰ See, e.g., American Civil Liberties Union, *A Tale of Two Countries: Racially Targeted Arrests in the Era of Marijuana Reform*, available at <https://www.aclu.org/report/tale-two-countries-racially-targeted-arrests-era-marijuana-reform> (April 2020); Lum & Isaac (2018), *To Predict and Serve*, available at <https://rss.onlinelibrary.wiley.com/doi/pdf/10.1111/j.1740-9713.2016.00960.x>.

¹¹ See Baumgartner et al., (2016), *Targeting young men of color for search and arrest during traffic stops: evidence from North Carolina, 2002-2013*, available at <https://fbaum.unc.edu/articles/PGI-2016-Targeting.pdf>; Pierson et al., (2020), *A*

large percentage of arrests do not result in convictions.¹² Though focusing on arrests for suspected acts of violence is sometimes portrayed as a less biased or more accurate proxy, recent research has also called into question the reliance on arrests as a proxy for violent crime in risk assessment instruments.¹³ Taken together, this evidence suggests multiple, fundamental issues with using arrests as a proxy for recidivism.

These problems are compounded for people on post-release supervision, who are aggressively surveilled and often re-incarcerated for minor or technical violations of their conditions of release.¹⁴ In addition, judges are mandated to impose supervised release on the overwhelming majority of convicted individuals.¹⁵ This creates a severe risk that many on supervised release are “overconditioned.” Research consistently shows that placing more intrusive conditions on individuals than necessary increases their likelihood of recidivism.¹⁶

large-scale analysis of racial disparities in police stops across the United States, available at <https://www.nature.com/articles/s41562-020-0858-1>.

¹² For a discussion of the data from various jurisdictions about what percentage of arrests result in convictions, see Ames Grawert, *Brennan Center’s Public Comment on the First Step Act’s Risk and Needs Assessment Tool*, available at <https://www.brennancenter.org/our-work/research-reports/brennan-centers-public-comment-first-step-acts-risk-and-needs-assessment> (Sept. 3, 2019).

¹³ See, e.g., Fogliato et al. (2021), *On the validity of arrest as a proxy for offense: Race and the likelihood of arrest for violent crimes*. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society* (pp. 100-111), available at <https://dl.acm.org/doi/abs/10.1145/3461702.3462538>.

¹⁴ See, e.g., Jacob Schuman, *America’s Shadow Criminal Justice System*, The New Republic (2018), <https://newrepublic.com/article/148592/americas-shadow-criminal-justice-system>, providing an overview of supervised release system and how it often leads to revocation and re-incarceration, including for minor conduct and absent due-process protections.

¹⁵ U.S. Sentencing Comm’n, *Overview of Federal Criminal Cases: Fiscal Year 2019 at 10* (Apr. 2020), [https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2020/FY19 Overview Federal Criminal Cases.pdf](https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2020/FY19%20Overview%20Federal%20Criminal%20Cases.pdf).

¹⁶ See, e.g., Jennifer L. Doleac, “Study after Study Shows Ex-Prisoners Would be Better Off Without Intense Supervision,” Brookings Institution, available at <https://www.brookings.edu/blog/up-front/2018/07/02/study-after-study-shows-ex-prisoners-would-be-better-off-without-intense-supervision/> July 2018, for a literature review finding that more intense supervision for those on probation or parole results in worse outcomes.

In short, PATTERN’s definitions of recidivism more accurately predict systemic failures in our racially-biased systems of policing and post-release supervision than the risks posed by those seeking relief under the First Step Act. One critical but partial solution—repeatedly suggested by the ACLU and many other advocates and experts¹⁷—would be to limit PATTERN’s focus to convictions for new crimes, rather than arrests or returns to BOP custody for technical violations.

The Department’s stated reasoning in 2020 for refusing to adjust the definitions of recidivism in PATTERN fail to address these concerns. The Department has cited a lack of available data as one reason it cannot narrow PATTERN’s definition of recidivism to only focus on convictions.¹⁸ It also cited the fact that other federal agencies use a similar definition of recidivism, thus allowing for better comparisons of recidivism data.¹⁹ These are inadequate justifications for using a tool that is known to unfairly bar individuals from leaving prison early. We urge the Department to continue exploring ways to address data limitations. We also highlight that the Department should have access to data about *why* an individual is returned to BOP custody, and could limit the definition of general recidivism to exclude returns to custody for technical violations and minor offenses. If it has not already, the Department should immediately analyze this potential change and publicly share the results.

¹⁷ See, e.g., *Comment Letter to Department of Justice on PATTERN First Step Act*, available at <https://civilrights.org/resource/comment-letter-to-department-of-justice-on-pattern-first-step-act/> (Sept. 3, 2019), Ames Grawert, *Brennan Center’s Public Comment on the First Step Act’s Risk and Needs Assessment Tool*, available at <https://www.brennancenter.org/our-work/research-reports/brennan-centers-public-comment-first-step-acts-risk-and-needs-assessment> (Sept. 3, 2019).

¹⁸ See pg. 12-14, U.S. Department of Justice, *The First Step Act of 2018: Risks and Needs Assessment System – UPDATE*, available at <https://www.bop.gov/inmates/fsa/docs/the-first-step-act-of-2018-risk-and-needs-assessment-system-updated.pdf> (Jan. 2020).

¹⁹ See pg. 12-14, U.S. Department of Justice, *The First Step Act of 2018: Risks and Needs Assessment System – UPDATE*, available at <https://www.bop.gov/inmates/fsa/docs/the-first-step-act-of-2018-risk-and-needs-assessment-system-updated.pdf> (Jan. 2020).

III. Second Layer of Bias: Inputs to PATTERN and PATTERN's Scoring Scheme

In the second “layer” of bias, the inputs to PATTERN and the way the tool is scored add to the problems created by the previous layer. Here, the Department must recognize that every decision made in PATTERN's design process is a policy choice laden with values judgments, and must be analyzed as such.²⁰ It is a policy choice to set cut points for risk level categories.²¹ It is a policy choice with dangerous ramifications to use biased data – fueled by the systemic under-investment in and over-policing of marginalized communities – as inputs to the tool.²² It is even a policy choice to decide how and where to slice up specific data used as inputs to the tool.²³

The policy choices built in to PATTERN pose a high risk of discouraging incarcerated people from seeking rehabilitative programming, in direct opposition to the goals of the First Step Act. In its recent reports, the Department has highlighted the presence of dynamic variables as inputs to PATTERN.²⁴ Yet, despite the inclusion of some dynamic inputs, PATTERN is still largely dominated by static factors. For one stark example, *it appears to be mathematically impossible for men under the age of 26 to qualify as “minimum” risk – the lowest possible risk category – on both the general and*

²⁰ For further discussion of how PATTERN encodes policy choices, see Grawert and Richman, *The First Step Act's Prison Reforms, Uneven Implementation and the Path Forward*, The Brennan Center for Justice, available at <https://www.brennancenter.org/our-work/research-reports/first-step-acts-prison-reforms> (Sept. 23, 2022).

²¹ See pg. 12-13, U.S. Department of Justice, *First Step Act Annual Report, April 2022*, available at <https://www.ojp.gov/first-step-act-annual-report-april-2022> for information about the risk level categories and their cut points.

²² Information about the data used for PATTERN's input variables is described in <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool>.

²³ For a discussion of how methods for measuring data are not always value-neutral processes, see Harper et al. (2010), *Implicit Value Judgements in the Measurement of Health Inequalities*, available at <https://onlinelibrary.wiley.com/doi/10.1111/j.1468-0009.2010.00587.x>

²⁴ See, e.g., U.S. Department of Justice, *2021 Review and Revalidation of the First Step Act Risk Assessment Tool*, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021).

*violent recidivism scales of PATTERN 1.3.*²⁵ Imagine a 25-year-old male, who scores the lowest number of points possible on every aspect of each recidivism tool, including every dynamic input to the tool. Even if this person had completed 10 programs, or 100 programs, or 1000 programs, they will still not be considered “minimum risk” by PATTERN – on the basis of their age alone.

The Department must continue to expand the pool of individuals who qualify as minimum or low risk, both by adjusting the risk level cut points and by placing greater relative emphasis on dynamic inputs that lower a risk classification. These *policy choices* would help shape PATTERN into a tool that is more consistent with the First Step Act’s goals of incentivizing rehabilitation, increasing release from BOP custody, and protecting public safety.

IV. Third Layer of Bias: Algorithmic Fairness Implications of PATTERN

Finally, in the last “layer” of bias, we address the Department’s request for information on improving the “fairness” of PATTERN. Even if the Department resolves all of the concerns we have already highlighted, there would still be fundamental issues with trying to make PATTERN “fair.”

To illustrate, there are several issues with the methodological choices the Department has made in measuring whether the tool is “fair,” as well as choices made in evaluating the “predictive validity” and the “racial and ethnic neutrality” of the tool.²⁶ For instance, grouping by race and computing the Area

²⁵ See U.S. Department of Justice, *2021 Review and Revalidation of the First Step Act Risk Assessment Tool*, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021); also see U.S. Department of Justice, *First Step Annual Act Report, April 2022*, available at <https://www.ojp.gov/first-step-act-annual-report-april-2022>, for the most current cut points for the general recidivism tool. Using Tables 2.3 and 2.4 of the December 2021 report and Table 2a of the April 2022 report, we see that a male under 26 would receive 35 points based on their age alone under the general recidivism tool. If they received the minimum possible number of points on every other input, including the programs inputs, the lowest possible score they could receive is 13 – too high to be considered “minimum risk” on this scale of PATTERN. A similar logic follows with respect to the violent recidivism scale, where the lowest possible score a male under 26 could receive is 9, and scores of 7 or lower are required to be considered “minimum risk.”

²⁶ “Predictive validity” and “racial neutrality” are terms used throughout the Department’s reports about PATTERN, and relate to requirements of the First Step Act of 2018. See, e.g., U.S. Department of Justice, *2021 Review and Revalidation of*

Under the Curve (AUC) metric as the Department does presents an incomplete and potentially misleading picture of racial disparities.²⁷ In addition, the Department has measured and published separate results about the general recidivism and the violent recidivism tools – but in reality, risk level categories from the violent recidivism tool override those of the general recidivism tool. The tool’s evaluation by the Department should mirror its deployment in this regard.

More fundamentally, the Department should evaluate ways to immediately and equitably expand access to earned time credit. For example, the Department could consider classifying individuals as minimum or low risk based on their violent recidivism score, and only excluding individuals the general recidivism tool classifies as high risk. If properly restricted to convictions, as discussed above, this approach would use violent recidivism—the weightier public safety concern—as the primary risk consideration, rather than as an override.

V. Conclusion: The Department must act immediately to address these concerns.

Together, these layers of bias within PATTERN build upon and exacerbate each other. They must all be addressed to ensure the mandates of the First Step Act are realized. We urge the Department to act immediately to resolve these issues.

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We thank the Office of Access to Justice for considering and including our comments on this critical subject. If you have any question, please contact ACLU Data Scientist Marissa Gerchick at mgerchick@aclu.org, or CLRP Director Brandon Buskey at bbuskey@aclu.org.

the First Step Act Risk Assessment Tool, available at <https://nij.ojp.gov/library/publications/2021-review-and-revalidation-first-step-act-risk-assessment-tool> (December 2021).

²⁷ For further discussion of this issue, see, e.g., Kallus & Zhou (2019), *The Fairness of Risk Scores Beyond Classification: Bipartite Ranking and the xAUC Metric*, available at <https://proceedings.neurips.cc/paper/2019/file/73e0f7487b8e5297182c5a711d20bf26-Paper.pdf>.