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THE FIRST STEP ACT—CONSTITUTIONALIZING PRISON RELEASE POLICIES

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TABLE OF CONTENTS

I. BRIEF HISTORY OF FEDERAL RELEASE POLICIES 635
A. Mechanics of Federal Parole 636
B. Criticism of Discretionary Parole Systems 640
C. The Federal Phaseout of Parole 641
D. The First Step Act 642
II. CONSTITUTIONAL RAMIFICATIONS 648
A. Due Process 648
1. Right to Individual Determination of Future Dangerousness 648
a. Right to Present Individualized Information in Other Contexts 652
b. Eligibility Determination under PATTERN 655
c. Informal Hearing Requirements 657
d. Other Possible Challenges to DOJ's Algorithmic Determination 661
2. Right to Consider Inputs Used to Determine Statutory and PATTERN Eligibility 664
3. Right to "Earned" Credits 667
B. Ex Post Facto Issues 670
III. CONCLUSION 676

Predictions of future violence play a central role in most systems of criminal justice. Such assessments help determine the amount of bail imposed, the length of sentence an offender receives after conviction, the type of prison to which they are assigned, and whether offenders are released before the end date of their sentence.[1] There are both subjective

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1. *See* Jodi L. Viljoen et al., *Impact of Risk Assessment Instruments on Rates of Pretrial Detention, Postconviction Placements, and Release: A Systematic Review and Meta-Analysis*, 43 L. & HUM. BEHAV. 397, 397–98 (2019).

and objective determinants of future dangerousness, including an offender's prior record, behavior in prison, education level, and more.[2] To determine future dangerousness at the beginning of the last century, we relied upon experts to analyze those factors.[3] Indeed, legislation predicated parole on the belief that criminal justice experts could ascertain who should be released early because they no longer posed a threat to society.[4]

Given the wide latitude afforded to such predictions, criminologists grew concerned that similarly situated offenders were not being treated alike.[5] Moreover, others critiqued parole on the ground that the rehabilitation goal was not realistic.[6] Disenchantment with the subjectivity in the process led Congress to end the federal parole system through the Comprehensive Crime Control Act of 1984.[7] Even when there was little chance of recidivism, inmates had to serve their complete sentences, shortened only modestly through good time credits.[8] The Act manifested Congress's turn away from rehabilitation as a central pillar of the federal criminal justice system.[9]

Criminologists outside of the parole context recently turned to more objective assessments of future dangerousness, based not upon the judgment of experts, but rather upon a computerized assessment of factors gleaned from field studies of large numbers of offenders.[10] The

2. For a discussion on the range of determinants used in risk assessments made in sentencing, see NATHAN JAMES, CONG. RSCH. SERV., R44087, RISK AND NEEDS ASSESSMENT IN THE FEDERAL PRISON SYSTEM 3–4 (2018). For a discussion of the determinants considered in the parole hearing setting, see Joel M. Caplan, *What Factors Affect Parole: A Review of Empirical Research*, 71 FED. PROB. 16, 16 (2007).

3. *See, e.g.*, Act of June 25, 1910, Pub. L. No. 61-259, 36 Stat. 819, 819 (legislation establishing federal parole).

4. *See id.* §§ 2–3.

5. For example, as a result of the subjectivity, people of color received higher bail, longer sentences, and more restrictive prison sentences. *See generally* David Arnold et al., *Racial Bias in Bail Decisions*, 133 Q.J. ECON. 1885 (2018) (discussing racial bias in bail decisions); *see also* M. Marit Rehavi & Sonja B. Starr, *Racial Disparity in Federal Criminal Sentences*, 122 J. POL. ECON. 1320, 1321–23 (2014) (discussing observable racial disparity in federal sentencing).

6. TODD R. CLEAR ET AL., AMERICAN CORRECTIONS IN BRIEF 22–23 (1st ed. 2012).

7. *See* Comprehensive Crime Control Act of 1984, Pub. L. No. 98-473, 98 Stat. 1976.

8. *Fourteenth Annual Review of Criminal Procedure: United States Supreme Court and Courts of Appeals 1983-84: IV. Sentencing, Parole, and Probation*, 73 GEO. L.J. 671, 672 (1984) ("The Act establishes a determinate sentencing system with no parole and limited credit for good time . . . .").

9. There has been a corresponding move away from subjectivity in state systems as well, with many states abolishing parole or predicating it on objective factors. *See* Kimberly Thomas & Paul Reingold, *From Grace to Grids: Rethinking Due Process Protection for Parole*, 107 J. CRIM. L. & CRIMINOLOGY 218, 239–44 (2017).

10. *Id.* at 244.

goal of these efforts was to create greater uniformity and minimize the possibility of racism in determining the length of a sentence or amount of bail.[11] Accordingly, in most states today, the prediction of future dangerousness turns not on evaluation of the particular offender alone, but on assessment of whether offenders with similar characteristics in the past have re-offended.[12] In particular, a number of states now rely on algorithmic and Artificial Intelligence ("AI") systems to fine tune the assessment of future dangerousness.[13] These states have deployed such algorithmic tools as a means to inform various decisions in the criminal justice process, including both bail and sentencing.[14] Although several of the systems deployed have had a shaky start due to questionable methodologies, algorithms generally hold promise for more uniform and less biased results.[15]

In the First Step Act of 2018, Congress directed the Department of Justice ("DOJ" or "the Department") to develop a tool, subsequently called Prisoner Assessment Tool Targeting Estimated Risk and Needs ("PATTERN"), to make such an algorithmic assessment of recidivism risk based on static factors such as the nature of the underlying offense, prior substance abuse, and education level.[16] Congress determined that inmates, dependent on such recidivism assessment, be permitted to shorten their stay in prison.[17] For instance, by pursuing vocational courses or by electing to take classes in preventing substance abuse, offenders can now earn credits to qualify for early release or to garner other privileges.[18] Moreover, the Act facilitates release for (almost) all offenders by awarding enhanced good time credits.[19] The First Step Act thus links the length of confinement in part to predictions of future crime as in the past, but also attempts to parlay a prison stay into an

11. *See* Arnold et al., *supra* note 5, at 1890, 1929.

12. *See* Saul Levmore & Frank Fagan, *Competing Algorithms for Law*, 88 U. CHI. L. REV. 367, 369–70 (2021). Forty-six states currently employ computerized risk assessment tools in criminal sentencing. Natalia Mesa, *Can the Criminal Justice System's Artificial Intelligence Ever Be Truly Fair?*, MASSIVE SCI. (May 13, 2021), https://massivesci.com/articles/machine-learning-compas-racism-policing-fairness/.

13. *See* Levmore & Fagan, *supra* note 12, at 369–74; *see also* Rehavi & Starr, *supra* note 5, at 1322–23, 1346–47 (discussing such usage in the federal system); *infra* text accompanying notes 144–49 (discussing the usage of these systems at the state level).

14. *See* Levmore & Fagan, *supra* note 12, at 368.

15. *See, e.g.*, Tim Simonite, *Algorithms Were Supposed to Fix the Bail System. They Haven't*, WIRED (Feb. 19, 2020, 8:00 AM), https://www.wired.com/story/algorithms-supposed-fix-bail-system-they-havent/.

16. First Step Act of 2018, Pub. L. No. 115-391, § 102, 132 Stat. 5194, 5196 (establishing the recidivism risk system that would become PATTERN).

17. *Id.*

18. *Id.*

19. *Id.*

opportunity to incentivize offenders to make adjustments in their lives to minimize the risk of future dangerousness. A generation after Congress in essence abandoned rehabilitation as a principal goal, rehabilitation once again has become one of the driving forces of our federal criminal justice system. Many have praised the Act for shortening prison stays and reintroducing rehabilitation as a goal of our penal system.[20]

But, commentators to date have not considered that, in revamping criminal justice policies, the First Step Act may have constitutionalized such early release measures. Unlike in most state systems that use algorithms as guidelines, the Act dictates that PATTERN alone determines eligibility for early release—no discretion on the part of prison authorities is involved.[21] Congress's decision to base eligibility on an algorithm accordingly raises the critical question of whether Due Process requires that individuals be permitted to show that facts not captured by the algorithm demand an adjusted outcome. In addition, by creating a system to encourage offenders to pursue certain opportunities in prison, Congress likely has created an entitlement based on liberty interests protected under the Due Process Clause. The First Step Act tells prisoners that, if they successfully attain certain educational goals, receive psychological counseling, etc., they will be released early.[22] As a consequence, prison authorities will need to ensure that prisoners who complete such programs *are* released early with only narrowly defined exceptions. Finally, Congress, in light of ex post facto principles, must respect the enhanced good time credit calculation in the Act for individuals who have already committed their offenses.

In Part I, we trace Congress's vacillations over the last century in implementing determinate and indeterminate sentencing systems. Then, we hone in on the innovations of the First Step Act, both in relying upon algorithms and AI to predict future dangerousness and in setting incentives to encourage prisoners to pursue measures that will reduce further the chance of recidivism.

In Part II, we then address the constitutional ramifications of entrenching early release policies. First, we consider the problem

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20. *See, e.g.*, Ames Grawert, *What Is the First Step Act — And What's Happening with It?*, BRENNAN CTR. FOR JUST. (June 23, 2020), https://www.brennancenter.org/our-work/research-reports/what-first-step-act-and-whats-happening-it ("The law we now know as the First Step Act accomplishes two discrete things, both aimed at making the federal justice system fairer and more focused on rehabilitation.").

21. *See* § 102, 132 Stat. at 5209–11; Amy B. Cyphert, *Reprogramming Recidivism: The First Step Act and Algorithmic Prediction of Risk*, 51 SETON HALL L. REV. 331, 342 (2020) ("[U]nlike COMPAS, PATTERN is not just one factor that is weighed in deciding who is eligible for benefits like early release, it is THE factor.").

22. *See* § 102, 132 Stat. at 5196.

endemic in all governmental benefit systems relying on algorithms—to what extent can an individual demonstrate that, despite whatever the algorithm dictates, data specific to the individual warrant a different outcome. The First Step Act presents one of the first instances in which an algorithm by itself governs eligibility for a government entitlement.[23] Based on current jurisprudence, we conclude that prison authorities must allow those prisoners excluded from eligibility based on the algorithm an opportunity, no matter how truncated, to argue that the risk of recidivism determined by the algorithm needs to be adjusted given the offender's specific context. Relatedly, we argue that Due Process dictates that prison authorities must disclose the static inputs that underlie the findings of ineligibility under both the statute and PATTERN.

Next, we analyze the dynamic features of the First Step Act by canvassing the Supreme Court's embrace under the Due Process Clause of an "entitlement" system under which individuals are invited to rely upon government pledges such that the government cannot deny those benefits without good cause. We apply that entitlement analysis to the First Step Act and conclude that Congress's encouragement of prisoners to pursue rehabilitative programming, such as education, counselling, etc. to reduce recidivism, has created an entitlement. Finally, we turn to the Ex Post Facto Clause and argue that the enhanced good time credit accumulation policy (but not the earned credits system) in the First Step Act must be offered to all offenders who have committed their offenses during pendency of the Act.

We conclude that such constitutionalization of release policies, though likely unintended, should prove beneficial in striking an enforceable bargain with offenders: if the offenders take steps to limit the chance of their own future recidivism, they can gain early release. Given the First Step Act's reintroduction of rehabilitative goals in the federal prison system,[24] the application of these constitutional requirements may further the Act's purpose in seeking to reduce the likelihood of inmate recidivism prior to reintroduction into society.

I. BRIEF HISTORY OF FEDERAL RELEASE POLICIES

Congress introduced indeterminate sentencing in the early twentieth century, building upon experiments led by Zebulon Brockway in New

23. Cyphert, *supra* note 21, at 342.
24. *See* § 102, 132 Stat. at 5209–11.

York.[25] As superintendent of Elmira Reformatory, Brockway innovated in predicating early release on inmate education[26] and urged that inmates could be rehabilitated in prison.[27] Under his approach, volunteer "guardians" supervised parolees after release and submitted written reports documenting parolees' behavior in the community.[28] Included in the early release system was a condition that the former inmate report to the guardian each month.[29]

Brockway's fundamental arguments for early release were that (1) indeterminate sentencing would "provide a release valve for managing prison populations," and (2) "it would be valuable in reforming offenders because they would be earning release by demonstrating good behavior."[30] Later in his career, he drafted New York's Indeterminate Sentence Law, which embodied many of his ideas and furthered these two tenets.[31] Seventy-eight percent of those released on parole under the New York system reportedly maintained "self-supporting and orderly lives."[32]

At the start of the twentieth century, as rehabilitation theory gained traction, the ideas of indeterminate sentencing and parole spread widely across jurisdictions.[33] By 1901, twenty states adopted parole statutes and, in 1910, Congress established the federal parole system.[34] Congress created the National Parole Board at the federal level in 1930, which set forth a uniform system.[35] Ultimately, by 1944, every state had enacted a parole system.[36]

A. *Mechanics of Federal Parole*

When the United States adopted a federal parole system, the law granted individual prisons significant flexibility and discretion in making

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25. *See* Thom Gehring, *Zebulon Brockway of Elmira: 19th Century CE Hero*, 33 J. CORR. EDUC. 4 (1982).
26. *Id.* at 4–5.
27. *Id.* at 5; *Probation and Parole: History, Goals, and Decision-Making*, L. LIBR. - AM. L. & LEGAL INFO., https://law.jrank.org/pages/1817/Probation-Parole-History-Goals-Decision-Making-Origins-probation-parole.html (last visited Feb. 24, 2022).
28. *Probation and Parole*, *supra* note 27.
29. *Id.*
30. *Id.*
31. Gehring, *supra* note 25, at 4.
32. *Id.* at 5.
33. Edward Lindsey, *Historical Sketch of the Indeterminate Sentence and Parole System*, 16 J. CRIM. L. & CRIMINOLOGY 9, 33–40 (1925).
34. *Probation and Parole*, *supra* note 27; Pub. L. No. 61-259 (1910).
35. ISAAC FULWOOD ET AL., U.S. PAROLE COMM'N, U.S. DEP'T OF JUST., HISTORY OF THE FEDERAL PAROLE SYSTEM 7 (2003).
36. *Probation and Parole*, *supra* note 27.

the parole determination.[37] Overall, the 1910 statute contained three key determinants:

> (1) . . . [an inmate] whose record of conduct shows he has observed the rules of such institution, and who has served one-third of the total of the term or terms for which he was sentenced, may be released on parole as hereinafter provided.
>
> (2) . . . each United States penitentiary shall constitute a board of parole for such prison, which shall establish rules and regulations for its procedure subject to the approval of the Attorney-General . . ..
>
> (3) That if it shall appear to said board of parole from a report by the proper officers of such prison or upon application by a prisoner for release on parole, that there is a reasonable probability that such applicant will live and remain at liberty without violating the laws, and if in the opinion of the board such release is not incompatible with the welfare of society, then said board of parole may in its discretion authorize the release of such applicant on parole, and he shall be allowed to go on parole outside of said prison, and, in the discretion of the board, to return to his home, upon such terms and conditions, including personal reports from such paroled person . . . . (original section numbers omitted). [38]

This early parole statute paralleled many of the key ideas of Brockway's system—federal parole rested on a subjective assessment of the inmate and imposed conditions such as post-release reporting.[39] In the 1930s, Congress standardized federal parole by implementing a single parole board within the Department of Justice but otherwise left the basic requirements of parole intact.[40] Ultimately, the only threshold requirement for federal parole was that inmates complete one-third of their sentence before becoming eligible.[41]

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37. Act of June 25, 1910, Pub. L. No. 61-259, § 3 (granting discretion in duties to parole boards).
38. Act of June 25, 1910 § 3.
39. *See id.*
40. FULWOOD ET AL., *supra* note 35, at 1.
41. Act of June 25, 1910 § 3.

Risk assessment in various forms has long been part of the parole determination in the federal and state criminal justice systems.[42] Prison authorities originally relied mostly on clinical judgments, particularly those made by probation officers.[43] A generation ago, however, prison authorities began to rely on a more quantitative assessment of risk based on statistical modeling drawn from evidence gleaned from prior offenders.[44] Static factors such as type of offence committed, history of substance abuse, and education level could be identified and then analyzed together to gauge the likelihood of future wrongdoing.[45] Additionally, researchers supplemented those predictions with needs assessments that factored in dynamic factors, such as pursuing education opportunities while incarcerated or attending programs in substance abuse prevention to help ensure productive lives post-release.[46]

The Model Penal Code published in 1962 highlights the prevailing subjective approach to parole, including risk assessment.[47] As stated in section 305.10, assessing whether an inmate was suitable for parole turned on a series of largely subjective factors, including:

> (1) a report prepared by the institutional parole staff, relating to [the prisoner's] personality, social history and adjustment to authority, and including any recommendations which the institutional staff may make;
>
> (2) all official reports of his prior criminal record, including reports and records of earlier probation and parole experiences;
>
> (3) the pre-sentence investigation report of the sentencing Court;
>
> (4) recommendations regarding his parole made at the time of sentencing by the judge or the prosecutor;
>
> (5) the reports of any physical, mental and psychiatric examinations of the prisoner;

42. *See, e.g.*, CHARLES D. STIMSON, HERITAGE FOUND., THE FIRST STEP ACT'S RISK & NEEDS ASSESSMENT PROGRAM: A WORK IN PROGRESS (2020); *see also* Cyphert, *supra* note 21, at 336–39.

43. STIMSON, *supra* note 42, at 4; Cyphert, *supra* note 21, at 336–37.

44. Cyphert, *supra* note 21, at 337–38.

45. *See id.*

46. *See id.* at 337.

47. *See* MODEL PENAL CODE § 305.10 (AM. L. INST., Proposed Official Draft 1962).

(6) any relevant information which may be submitted by the prisoner, his attorney, the victim of his crime, or by other persons;

(7) the prisoner's parole plan;

(8) such other relevant information concerning the prisoner as may be reasonably available.[48]

Studies show that, despite the litany of factors noted in the Model Penal Code, there were only a handful of factors that in practice determined whether parole authorities released an inmate.[49] Among these key factors were mental fitness, the severity/type of crime, history of other crimes, sentence length, and behavior while incarcerated.[50] Ultimately, however, consideration of these factors rested on human subjectivity.[51] Through subjective assessment of an inmate, prison authorities would determine whether such rehabilitation occurred during incarceration, thus warranting release on parole.

To aid in that determination at the federal level, authorities developed a tool in the 1970s termed the Bureau Risk Assessment Verification Observation ("BRAVO") to provide structure for offender risk assessment.[52] BRAVO initially served as a classification system for predicting inmate misconduct during incarceration, which helped authorities assign inmates to an appropriate security level during their incarceration.[53] A revised system ("BRAVO-R") added an assessment of an inmate's three-year recidivism rate.[54] BRAVO-R included a detailed history of the offender in comparison to others similarly situated, including factors such as age, substance abuse, history of violence, and nature of the offense, but its details were never released.[55]

48. *Id.*
49. Caplan, *supra* note 2, at 16.
50. *Id.* at 16–17.
51. *Id.*
52. *See* U.S. DEP'T OF JUST., THE FIRST STEP ACT OF 2018: RISK AND NEEDS ASSESSMENT SYSTEM 43–44 (2019).
53. *See id.* at 64 n.2.
54. American Civil Liberties Union et al., *Comment Letter to Department of Justice on PATTERN First Step Act*, LEADERSHIP CONF. ON CIV. & HUM. RTS., Sept. 2019, at 9 n.14, https://civilrights.org/resource/comment-letter-to-department-of-justice-on-pattern-first-step-act/.
55. *See id.*; U.S. DEP'T OF JUST., *supra* note 52, at 44.

B. Criticism of Discretionary Parole Systems

A generation after establishment of parole, outsiders critiqued the parole system in light of the excessive discretion exercised by parole authorities.[56] Parole rates were never uniform among the states,[57] and questions arose about the ability of parole authorities to accurately determine which offenders were most likely to recidivate.[58]

Despite the discretionary nature of the parole determination, critics and the general public viewed parole systems as too lenient, and perhaps even automatic, seemingly oblivious to the goal of making a case-by-case judgment of the likelihood of rehabilitation.[59] Outside observers came to view parole as an automatic step in the incarceration process with few inmates serving a complete sentence regardless of the severity of the crime.[60] No effort seemingly was made to determine whether offenders had successfully rehabilitated.[61] This led critics to allege that prison authorities granted parole routinely to minimize the number of people incarcerated in their facilities.[62] While the parole system at the federal level was not automatic, federal data shows that the vast majority of eligible inmates are eventually released on parole.[63]

Moreover, high recidivism rates thereafter generated additional criticism and led many to second-guess the very premise of rehabilitation.[64] Experts questioned how rehabilitation could ever be a rational goal given the grim existence within prison walls.[65] Some even argued that stays in prison would *exacerbate* the likelihood of recidivism thereafter,[66] given that the skill set to survive in prison did not translate

56. *See, e.g.*, Thomas & Reingold, *supra* note 9, at 214–15; Robert W. Kastenmeier & Howard C. Eglit, *Parole Release Decision-Making: Rehabilitation, Expertise, and the Demise of Mythology*, 22 AM. U.L. REV. 477, 483–84 (1973).

57. THE PEW CHARITABLE TRUSTS, PROBATION AND PAROLE SYSTEMS MARKED BY HIGH STAKES, MISSED OPPORTUNITIES 6, 11–12 (2018).

58. *See* Kastenmeier & Eglit, *supra* note 56, at 486–87.

59. *See generally* Ronald Burns, et al., *Perspectives on Parole: The Board Members' Viewpoint*, 63 FEDERAL PROBATION J. 16 (1999) (highlighting that the public viewed the indeterminate structure underpinning parole as too lenient); *see also*, MINISTER OF SUPPLY & SERVS. CAN., GOV'T OF CAN. NAT'L PAROLE BD., SOME PEOPLE SAY 1–2 (1987) (discussing common critiques and criticisms of parole systems more generally).

60. MINISTER OF SUPPLY & SERVS. CAN., *supra* note 59.

61. *See id.*

62. *See id.* at 3.

63. *See generally* TIMOTHY HUGHES & DORIS JAMES WILSON, BUREAU OF JUST. STAT., U.S. DEP'T OF JUST., REENTRY TRENDS IN THE UNITED STATES (2004).

64. *See, e.g.*, Kastenmeier & Eglit, *supra* note 56, at 495–97.

65. *See id.*

66. *See* Marvin E. Frankel, *Lawlessness in Sentencing*, 41 U. CIN. L. REV. 34 (1972). Judge Frankel opined that:

well to success upon release.[67] In fact, despite the success of the first reformers (such as Brockway), the Bureau of Justice Statistics ("BJS") in 1984 found that only approximately sixty percent of parolees successfully completed the terms of their release.[68]

C. The Federal Phaseout of Parole

In the end, the criticisms of parole and reform theory prevailed, at least at the federal level. In 1984, Congress passed the Comprehensive Crime Control Act, which overhauled administration of the federal prison system.[69] Among its many changes, Congress explicitly eliminated the federal parole system and adopted supervised release in its place.[70] This system of supervised release required the sentencing court to provide a period of supervised release, which by statute was not to exceed five years, at the time of sentencing.[71] Thus, Congress essentially delinked any goal of rehabilitation from behavior in prison; prison authorities were to base release decisions on an inmate's completion of a percentage of the court-imposed sentence, reflecting a return to a more determinate

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> The naive faith in the presumed expertise of penologists and parole officials effectively blots out some of the stark and familiar realities of prisons as they actually function. The notion that the unrehabilitated prisoner should be denied parole because he needs more treatment is not merely unsupported; it runs counter to considerable evidence and opinion concerning the effects of confinement. Taking prisons as they are, and as they are likely to be for some time, it is powerfully arguable that their net achievement is to make their inhabitants worse, not better.

Id.

67. *See, e.g.*, David J. Harding et al., S*hort- and Long-Term Effects of Imprisonment on Future Felony Convictions and Prison Admissions*, 114 PROC. NAT'L ACAD. SCIS. U.S. 11103 (2017) (discussing the correlation between length of incarceration and increased recidivism).

68. BUREAU OF JUST. STAT., U.S. DEP'T OF JUST., PROBATION AND PAROLE 1984 4 (1986). While the federal phaseout of parole began with the Comprehensive Crime Control Act that same year, BJS continues to track this data and, according to its more recent analyses, success rates fell to approximately 45% in the mid-1990s and have remained relatively stable since. LAUREN E. GLAZE & THOMAS P. BONCZAR, BUREAU OF JUST. STAT., U.S. DEP'T OF JUST., PROBATION AND PAROLE IN THE UNITED STATES, 2005 9 (2007). Interestingly enough, the data also show that federal probation was slightly more successful overall, with approximately 81% of probation exits in the 1984 dataset being classified as successful. BUREAU OF JUST. STAT., U.S. DEP'T OF JUST., PROBATION AND PAROLE 1984 3 (1986).

69. Comprehensive Crime Control Act of 1984, Pub. L. No. 98-473, 98 Stat. 1976.

70. Sentencing Reform Act of 1984, H.R. 5773, 98th Cong. (1984); Comprehensive Crime Control Act of 1984, Pub. L. No. 98-473, 98 Stat. 1976; 18 U.S.C. § 3583.

71. 18 U.S.C. § 3583.

sentencing structure.[72] The Comprehensive Crime Control Act marked the formal end of rehabilitation as a goal of the federal prison system.[73]

D. The First Step Act

The First Step Act of 2018 modified the early release structure in three principal ways. First, Congress directed that good time credits be recalculated for all offenders, except those serving life imprisonment or a sentence of less than one year, potentially shortening their stay behind prison walls.[74] Section 102(b)(1)(A) of the original Act provides that inmates can now earn up to 54 days for each year of the sentence imposed by the court, instead of for each year of actual time served.[75] Basing the award on the sentence length permits the offender to earn approximately an additional week of credit per year.[76] Perhaps because of prior adoption of harsh penalties or due to overcrowding in prisons, Congress embraced a new calculation of good time credits so as to facilitate earlier release of all inmates.[77]

Second, Congress jettisoned the pre-1984 subjective determination for determining inmates' risk of future dangerousness and replaced it with an objective assessment of whether offenders with similar characteristics in the past had committed offenses upon release. To that end, Congress directed the Attorney General to devise a system to assess objectively the likelihood of recidivism for offenders entering the system.[78] Congress specified that the tool separates offenders into categories of "minimum, low, medium, or high risk for recidivism,"[79] and that only those with a modest likelihood of recidivism could be released

72. *See The Sentencing Reform Act of 1984: Principal Features Affecting Guideline Construction*, U.S. SENT'G COMM'N, https://www.ussc.gov/research/research-and-publications/simplification-draft-paper-2 (last visited Feb. 24, 2022) (stating that "the [Sentencing] Commission was instructed to ensure that the guidelines reflect the inappropriateness of using prison sentences to achieve rehabilitative goals").

73. Although the Comprehensive Crime Control Act of 1984 abolished parole for new inmates, the federal system has been in the midst of a decades-long phase out. The U.S. Parole Commission and the system of parole itself has been extended by statute multiple times since 1984, primarily to serve those inmates who were grandfathered into parole (i.e., those sentenced prior to the enactment of the Comprehensive Crime Control Act). The most recent extension occurred in 2018, which extended the life of the federal parole system through 2021. *See* FULWOOD ET AL., *supra* note 35, at 6; United States Parole Commission Extension Act of 2018, H.R. 6896, 115th Cong. (2018).

74. *See* 18 U.S.C. § 3624(b)(1); *see also* NATHAN JAMES, CONG. RSCH. SERV., R45558, THE FIRST STEP ACT OF 2018: AN OVERVIEW 16 (2019).

75. 18 U.S.C. § 3624 (b)(1); JAMES, *supra* note 74, at 16.

76. *See* 18 U.S.C. § 3624(b)(1); JAMES, *supra* note 74, at 16.

77. *See* JAMES, *supra* note 74, at 1.

78. *See id.* at 1–3; *see also* U.S. DEP'T OF JUST., *supra* note 52, at 5.

79. 18 U.S.C. § 3632(a)(1).

before the end of their sentences: Congress provided that the algorithm be used, among other things, to "determine when a prisoner is ready to transfer into prerelease custody."[80] For perhaps the first time, a legislature provided that eligibility for early release would be governed principally by administration of an algorithm.

To effectuate that directive, DOJ developed an assessment tool called the Prisoner Assessment Tool Targeting Estimated Risk and Needs ("PATTERN").[81] In meeting the deadline set by Congress for the development of this system for evaluating recidivism risk, the DOJ acknowledged the limitation of the available data and time for validation of the tool.[82] Working within these constraints, the DOJ developed the initial version of PATTERN using seven years of federal prison data and designed the tool to be an effective predictor of recidivism over the initial three-year period after release of an inmate.[83] Notably, the First Step Act requires re-validation of the tool annually to add to the initial dataset, reassessment of its predictive performance, and then modifications as necessary.[84]

As in other contexts, PATTERN's AI-like approach promises efficiency, objectivity, and consistency.[85] Essentially, artificial intelligence seeks to transform decisions that were previously subjective into those capable of objective resolution based on data and inputs to

80. 18 U.S.C. § 3632(a)(7).

81. U.S. DEP'T OF JUST., *supra* note 52, at iv.

82. *Id.* at 70.

83. *Id.* at 84.

84. *Id.* at 84–85.

85. While there is ongoing debate as to the exact dividing line between algorithms and Artificial Intelligence, we accept the general proposition that AI is "the ability of a machine to perceive and respond to its environment independently and perform tasks that would typically require human intelligence and decision-making processes, but without direct human intervention." Christopher Rigano, *Using Artificial Intelligence to Address Criminal Justice Needs*, NAT'L INST. JUST. (OCT. 8, 2018), https://nij.ojp.gov/topics/articles/using-artificial-intelligence-address-criminal-justice-needs. Regardless of PATTERN's current application, Dr. Mir Emad Mousavi has eloquently explained the relationship between an algorithm and AI as equivalent to "the relationship between 'cars and flying cars.'" Kaya Ismail, *AI vs. Algorithms: What's the Difference?*, CMS WIRE (Oct. 26, 2018), https://www.cmswire.com/information-management/ai-vs-algorithms-whats-the-difference/#:~:text=According%20to%20Mousavi%2C%20we%20should,to%20make%20such%20a%20decision. AI tools almost inherently rely upon algorithms. While PATTERN is by no means currently a fully autonomous AI or machine-learning algorithm today, its algorithm nonetheless provides the foundation for greater application as a more AI-like tool, including for example, automatic updating independent of human intervention. *See generally* Cary Coglianese & Lavi M. Ben Dor, *AI in Adjudication and Administration*, 86 BROOKLYN L. REV. 791 (2021) (discussing the current limitations of tools such as PATTERN).

various algorithms.[86] To that end, PATTERN implemented a classification system which, as noted, sought to classify inmates based on an objective assessment of the potential for recidivism.[87] As discussed below, prison authorities are to use that classification system in providing for early release.

The initial release of PATTERN started a 180-day statutory clock for all federal inmates to be assessed for recidivism risk, with each inmate to be assigned a level of high, medium, or low risk.[88] By statute, the risk level of each federal inmate is then required to be re-assessed on a bi-annual basis, with new inmates to be initially assessed at the time of intake,[89] a formidable task given the well over 150,000 individuals in federal custody.[90]

As with prior tools to predict the risk of recidivism, PATTERN considers static factors that cannot be changed by the inmate, which include:

1. The age of the inmate at the time of assessment;

2. Whether the crime of conviction that resulted in the current incarceration was violent;

3. Whether the inmate is identified as a sex offender under the definition used by the Sex Offender Registration and Notification Act; and

4. A criminal history score based on BRAVO.[91]

The current revision of the PATTERN algorithm also includes the following dynamic factors, which are weighed differently in the male and female populations:

86. *See generally* MCKINSEY, DRIVING IMPACT AT SCALE FROM AUTOMATION AND AI (2019) (discussing the promises of AI).
87. *See* JAMES, *supra* note 2, at 5–6.
88. U.S. DEP'T OF JUST., *supra* note 52, at 71–73.
89. *Id.* at 71, 74.
90. *Statistics*, FED. BUREAU OF PRISONS (Jan. 20, 2022), https://www.bop.gov/about/statistics/population_statistics.jsp.
91. NAT'L INST. OF JUST., 2020 REVIEW AND REVALIDATION OF THE FIRST STEP ACT RISK ASSESSMENT TOOL 12–13 (2021) (listing all PATTERN variables); *see supra* Part I.A. (discussing BRAVO).

> 1. A count of the total number of infractions, resulting in a guilty finding, that the inmate incurred during the current incarceration.[92]
>
> 2. A count of the serious and violent infractions, resulting in a conviction, that the inmate has incurred during the current incarceration.[93] A serious or violent infraction is defined to be in the top two severity levels of the Bureau of Prison's Inmate Discipline Program.[94] This includes, but is not limited to, such infractions as homicide, assault, escape, and fighting.[95]
>
> 3. A score associated with the amount of time that the inmate has been infraction free during their current period of incarceration.[96]
>
> 4. A score associated with the amount of time that the inmate has spent free of serious and violent infractions during their current period of incarceration.[97]
>
> 5. A measure of the number of qualifying programs which have been completed by the inmate. These range from educational and vocational programs to drug treatment and parenting programs.[98]
>
> 6. Participation by the inmate in work programming during their current incarceration.[99]
>
> 7. A need-based factor for the inmate's participation in a drug treatment program while incarcerated.[100]

92. U.S. DEP'T OF JUST., *supra* note 52, at 53–56.
93. *Id.*
94. *See id.*
95. *Id.* at 45, 65 nn.13, 15.
96. *Id.* at 60.
97. *Id.* at 45.
98. *Id. See generally* FED. BUREAU OF PRISONS, U.S. DEP'T OF JUST., FIRST STEP ACT: APPROVED PROGRAMS GUIDE (2020).
99. NAT'L INST. OF JUST., *supra* note 91, at 6.
100. U.S. DEP'T OF JUST., *supra* note 52, at 45; NAT'L INST. OF JUST., *supra* note 91, at 3, 13.

> 8. The inmate's compliance with financial responsibility. For example, their willingness to use income earned during incarceration as payment toward victim restitution.[101]
>
> 9. The inmate's history of violence, factoring in the elapsed time since the violent behavior.[102]
>
> 10. The inmate's history of escapes, factoring in the elapsed time since the escape. This score is based on BRAVO.[103]
>
> 11. An education score based on the inmate's completion of High School education or a GED. This score is based on BRAVO.[104]

Third, in addition to enhancing good time credits and calling for an AI assessment of risk recidivism, the Act implemented a system of earned credits.[105] The Act directs the Bureau of Prisons ("BOP") to offer inmates "recidivism reduction programs," with most prisoners who successfully complete recidivism reduction programming eligible to earn up to ten days of time credits for every thirty days of program participation.[106] Minimum and low-risk prisoners under PATTERN who successfully complete recidivism reduction or productive activities and whose assessed risk of recidivism has not increased over two consecutive assessments earn an additional five days of time credits for every 30 days of successful participation.[107] DOJ directed that inmates who have a medium to high risk of recidivism receive priority for recidivism reduction programs, while those with minimum or low risk be afforded opportunities through work and other programs to earn credits.[108] Inmates released early are to serve out their sentences in home confinement or on supervised release, at least until eighty-five percent of the original sentence is served.[109]

101. U.S. DEP'T OF JUST., *supra* note 52, at 45; NAT'L INST. OF JUST., *supra* note 91, at 3, 12–13.

102. NAT'L INST. OF JUST., *supra* note 91, at 13 (describing how this variable is borrowed from the Bureau Risk and Verification Observation ("BRAVO"), which is the bureau of prisons' current classification system for predicting serious misconduct and assigning inmates to the appropriate security level during their incarceration).

103. *Id.*

104. *Id.*

105. First Step Act of 2018, Pub. L. No. 115-391, § 3632(d)(4), 132 Stat. 5194.

106. *Id.*

107. U.S. DEP'T OF JUST., *supra* note 52, at 79 (citing 18 U.S.C. § 3632(d)(4)(A)(ii)).

108. *See* First Step Act of 2018 § 102(a)(6).

109. 18 U.S.C. § 3624(g)(2)(A)(iv).

The First Step Act, however, precludes early release for a significant swathe of offenders, including those committing particularly violent offenses, sexual offenses, kidnapping, terrorist activities and others,[110] presumably on the ground that early release would unjustifiably jeopardize citizen safety.[111] Nonetheless, all such inmates can participate and earn other "credits," such as greater phone privileges, email access, visitation rights and commissary purchases. [112]

In constructing the classification system, DOJ focused on the "average rate" of recidivism for the Bureau of Prisons population and set cutoff points based on various deviations from that base rate.[113] The final score reflects a combination of scores based on (1) the likelihood of recidivism in general and (2) the likelihood of violent recidivism.[114] The Department set the highest risk category "roughly two-thirds above the base rate . . . for general recidivism and just over twice the base rate . . . for violent recidivism," with the minimal risk category set at "half the base rate . . . for general recidivism" and "one third of the base rate for violent recidivism."[115] DOJ explained that it chose those cutoffs to maximize "the number of inmates eligible to earn early release time credits . . . while also considering public safety and the risk of recidivism."[116]

Those inmates who have accrued sufficient time credits and fall into either the minimal or low risk category based on the PATTERN score are then eligible for early release.[117] As noted, inmates within the medium and high risk categories can, however, participate in the recidivism reduction/incentive programs to lower the score calculated under PATTERN and qualify for a lower risk classification.[118] Then, once the inmate has accrued sufficient time credits, the inmate can become eligible for early release.[119]

According to DOJ, 99 percent of offenders have the potential to become eligible for early release under PATTERN.[120] In other words, the

110. *Id.* § 3632(d)(4)(D).
111. *See* NAT'L INST. OF JUST., *supra* note 91, at 17.
112. *See* 18 U.S.C. § 3632(d).
113. *See id.*; U.S. DEP'T OF JUST., *supra* note 52, at 51.
114. U.S. DEP'T OF JUST., *supra* note 52, at 51.
115. *Id.* at 50–52.
116. *Id.* at 51.
117. *Id.*
118. *Id.* at 57–58.
119. *Id.*
120. *Id.* at 57. For a critique that the DOJ's estimate is overly optimistic and discussion that certain inmates will be perpetually classified as ineligible for early release under PATTERN by virtue of the static factors alone, regardless of what remains subject to the inmate's control under the dynamic factors, see Sarah Anderson, Federal Affairs Manager,

application of PATTERN makes only a subset of inmates *ineligible* for early release.[121] This result is by virtue of the fact that an inmate's score based on PATTERN's static factors alone can be so high as to preclude a sufficient classification change through the dynamic factors.[122]

Through the First Step Act, Congress thus sought to leverage the prison stay into an opportunity to work with inmates to facilitate their reentry into society. In doing so, the First Step Act has reintroduced rehabilitation as a central goal of our federal criminal justice system.

II. CONSTITUTIONAL RAMIFICATIONS

The First Step Act may well usher in a salutary change in the nation's approach to criminal justice, dialing back the clock to focus once again on potential rehabilitation while an offender is incarcerated. Its implementation, however, raises three sets of constitutional issues. First, conditioning liberty on the basis of an algorithm's prediction of recidivism resembles the use of a conclusive presumption, which should entitle the offenders to an opportunity to present evidence that the prediction is *not* accurate as applied to their own circumstances.[123] Second, offering offenders early release predicated on satisfactory completion of education and treatment programs creates a liberty interest, which prison authorities must then respect.[124] Third, at least part of the First Step Act must be seen to amend the governing sentencing structure and, consistent with the Ex Post Facto Clause, cannot be altered for those who commit federal offenses thereafter.[125]

A. *Due Process*

1. Right to Individual Determination of Future Dangerousness

Congress need not grant early release at all, or it could grant parole across the board to all offenders who serve three-quarters of their

FreedomWorks, Statement at the U.S. Department of Justice Listening Session: Prisoner Assessment Tool Targeting Estimated Risk and Needs (PATTERN) Listening Session 2 (Sept. 11, 2019). Moreover, DOJ reports that, of the 131,386 inmates assessed under PATTERN as of August 27, 2020, over one-third were assessed as high risk. Many, but not all of those, are precluded from early release due to the nature of the offense committed. Good Conduct Time Credit Under the First Step Act, 87 Fed. Reg. 29,7938, 29,7940 (Jan. 13, 2022) (to be codified at 28 C.F.R. 523, 541).

121. *See* U.S. DEP'T OF JUST., *supra* note 52, at 57.
122. *See id.*; Anderson, *supra* note 120, at 2.
123. *See infra* Part II.A.
124. *See infra* Part II.A.3.
125. *See infra* Part II.B.

sentences. Indeed, Congress in the First Step Act determined that those convicted of delineated crimes such as kidnapping and murder, no matter the circumstances, are ineligible for early release.[126] Offenders therefore should be able to challenge whether they in fact committed a listed crime, but not introduce evidence that, despite committing the crime, they pose little risk of future dangerousness.[127] Inmates have no right to a due process hearing when the legislature itself determines when release is appropriate or leaves that determination to the unfettered discretion of prison authorities.[128] For years, Congress and state legislatures routinely left the release decision to the judgment of parole authorities.[129]

However, once Congress determines that release turns on evaluation of an objective factor—here, the risk of future dangerousness—then Due Process is triggered. The Supreme Court has held that, if the government creates an expectation that an individual will be granted parole absent misconduct or a finding of future dangerousness, the individual is entitled to a hearing to determine whether the statutory condition has been satisfied.[130] In *Greenholtz v. Inmates of Nebraska Penal and Correctional Complex*, the Court stated that statutory and regulatory language can create an "expectancy of release . . . entitled to some measure of constitutional protection."[131] The Court elaborated in *Kentucky Department of Corrections v. Thompson* that "the most common manner in which a State creates a liberty interest is by establishing 'substantive predicates' to govern official decision-making . . . and, further, by mandating the outcome to be reached upon a finding that the relevant criteria have been met."[132] Conversely, if a statute confers unbridled discretion upon decisionmakers to determine whether to grant parole, no liberty interest is created, and the Due Process Clause is not triggered.[133]

In deciding whether a decision to revoke parole similarly triggered a protected liberty interest, the Court in *Morrissey v. Brewer* explained that:

126. See *supra* notes 110–11 and accompanying text.
127. *See infra* Part II.A.2.
128. *See* Greenholtz v. Inmates of Neb. Penal and Corr. Complex, 442 U.S. 1, 7–8, 16 (1979).
129. *See id.* at 6–8 ("[T]he state may be specific or general in defining the conditions for release and the factors that should be considered by the parole authority.").
130. *See id.* at 12 (citing Wolff v. McDonnell, 418 U.S. 539 (1974)).
131. *Id.* at 7–9, 12; *see also* Bd. of Pardons v. Allen, 482 U.S. 369, 381 (1987) (holding that mandatory language in statutes and regulations governing parole could create a liberty interest).
132. Ky. Dep't of Corr. v. Thompson, 490 U.S. 454, 462 (1989).
133. *See id.* at 462–65 (holding that prison administrators' guidelines for who could visit prisoners was discretionary).

> The parolee has been released from prison based on an evaluation that he shows reasonable promise of being able to return to society and function as a responsible, self-reliant person. Subject to the conditions of his parole, he can be gainfully employed and is free to be with family and friends and to form the other enduring attachments of normal life . . . The parolee has relied on at least an implicit promise that parole will be revoked only if he fails to live up to the parole conditions.[134]

Moreover, in *Wolff v. McDonnell*, the Court applied the liberty interest rationale to a Nebraska statute affording inmates the ability to earn good time credits, which by statute could only be revoked for misconduct.[135] The Court held that the statute created a liberty interest through its conferral of a benefit, the deprivation of which would constitute a significant loss to the inmate.[136] At the required hearing, inmates can present evidence that they had not engaged in misconduct and therefore their good time credits should be restored.[137] The Court found that, because there is a liberty interest stemming from the state statute, credits already earned could not be revoked without minimum due process requirements.[138]

The Court has since scaled back its liberty interest analysis in the prison context. In *Sandin v. Conner*, the Court found that only restrictions of liberty that result in "atypical and significant hardship on the inmate in relation to the ordinary incidents of prison life" trigger due process scrutiny.[139] It held that regulatory restrictions on when an inmate could be placed in thirty days' segregation for misconduct did not give rise to a liberty interest because prison authorities frequently need to place inmates in segregation for various reasons.[140] Prisoners now cannot claim a liberty interest in a particular exercise period or nutritious meals, for instance, irrespective of mandatory statutory or regulatory language.[141] *Sandin* should not affect prisoner claims focused

134. Morrissey v. Brewer, 408 U.S. 471, 482 (1972).
135. Wolff v. McDonnell, 418 U.S. 539, 558 (1974).
136. *Id.* at 558–61.
137. *See id.* at 566.
138. *Id.* at 557–58.
139. Sandin v. Conner, 515 U.S. 472, 484 (1995).
140. *Id.* at 485–86.
141. The Court in *Sandin* noted that such mandatory language may in fact benefit prisoners by permitting prison authorities to impose uniform goals without thereby constitutionalizing procedures. *Id.* at 482. Prison authorities have reacted to the liberty interest line of cases by modifying mandatory language in regulations to make administration of prisons more discretionary. *See, e.g.*, Harold J. Krent, *Reviewing Agency*

on the liberty at stake with earned credits, however, because credits equate to earlier release from prison confinement, implicating the most basic understanding of liberty.[142]

Given Congress's decision to permit early release only for those with minimal or low risk of recidivism, can DOJ through PATTERN exclude inmates from *eligibility* without holding any type of hearing?[143] Courts have held that statutory or regulatory creation of "fixed eligibility criteria" give rise to entitlements, even if another component of the broader regulatory scheme remains discretionary.[144] For instance, applicants for public housing may enjoy an entitlement based on existence of objective regulatory criteria such as financial need, even if the availability of housing is not guaranteed.[145] PATTERN therefore represents one of the first instances in which a legislature has decided that eligibility for early release be governed exclusively by an algorithm.

Although the algorithmic determination may be far more accurate than prior subjective assessments as to future dangerousness, PATTERN may nevertheless omit key variables. For instance, an individual's marriage after committing an offense might make it less likely that recidivism will occur, as can a severe illness or, in extreme cases, a sex offender may undergo an operation to blunt their sexual drive.[146] Alternatively, the material prospects of an offender's family may improve to the point where there is less risk of recidivism upon release.[147] Must

Action for Inconsistency with Prior Rules and Regulations, 72 CHI.-KENT L. REV. 1187, 1207–13 (1997).

142. *See Sandin*, 515 U.S. at 477–78. Courts on occasion have applied the *Sandin* limitation expansively. *See, e.g.*, Chappell v. Mandeville, 706 F.3d 1052, 1061, 1069 (9th Cir. 2013) (finding that six-day confinement on contraband watch during which inmate was shackled, closely monitored, and had no mattress did not give rise to a Due Process claim).

143. *See The First Step Act's Risk Assessment Tool*, URB. INST. (Apr. 30, 2021), https://apps.urban.org/features/risk-assessment/ (explaining that those in high-risk category of PATTERN are not eligible for early release).

144. *See* Kapps v. Wing, 404 F.3d 105, 114 (2d Cir. 2005).

145. *See id.* at 114–15 (holding that, by defining eligibility criteria for utility benefits should federal aid be forthcoming, New York had created an entitlement); Ressler v. Pierce, 692 F.2d 1212, 1215–16 (9th Cir. 1982) (recognizing entitlement in the public housing context).

146. *See, e.g.*, K.S. Kendler et al., *The Role of Marriage in Criminal Recidivism: A Longitudinal and Co-Relative Analysis*, 26 EPIDEMIOLOGY & PSYCHIATRIC SCIS. 655, 655–63 (2017) (discussing the relationship between marriage and reduction in recidivism). For a discussion of chemical castration, see Alan Blinder, *What to Know About the Alabama Chemical Castration Law*, N.Y. TIMES (June 11, 2019), https://www.nytimes.com/2019/06/11/us/politics/chemical-castration.html.

147. *See, e.g.*, Kristy Holtfreter et al., *Poverty, State Capital, and Recidivism Among Women Offenders*, 3 CRIMINOLOGY & PUB. POL'Y 185, 185–86 (2008) (discussing the relationship between poverty status and recidivism).

the decisionmaker factor in those developments, which evidently are not captured by PATTERN, when determining eligibility for early release?[148]

a. Right to Present Individualized Information in Other Contexts

In *State v. Loomis*, the Wisconsin Supreme Court considered a comparable Due Process challenge to the use of an algorithm to predict dangerousness, which arose out of the trial court's refusal to permit probation for Mr. Loomis based in large part on an algorithmic score.[149] Loomis had pleaded guilty to operating a vehicle without the owner's permission and attempting to flee from a traffic officer.[150] In a post-conviction proceeding, an expert witness testified for Loomis that reliance on the tool at issue, Correctional Offender Management Profiling for Alternative Sanctions ("COMPAS"), posed a significant risk of overpredicting risk and therefore biased the sentencing court's judgment.[151] The court upheld the sentence, reasoning that (1) the trial court relied on more than the algorithm in rejecting probation, and (2) the information upon which the algorithm was based was in the public domain, subject to Loomis's review.[152] Nevertheless, in dicta, the court stated that reliance on the algorithm could not be "the determinative factor in deciding whether an offender can be supported safely and effectively in the community."[153]

The First Step Act's reliance on PATTERN to determine eligibility for early release brings the *Loomis* court's dicta into sharp focus. Although Congress need not provide for early release, if it determines that release will only be permitted for those who statistically are unlikely to commit a new offense, must it then permit individualized consideration despite what the algorithm concludes? The algorithm resembles a conclusive (or irrebuttable) presumption.[154] Several analogies are informative.

First, in cases such as *Cleveland Board of Education v. LaFleur*, the Supreme Court has held that, when significant liberty interests are at stake, the government cannot condition that liberty on conclusive

148. Over time, the algorithm could include such factors in its assessment.
149. State v. Loomis, 881 N.W.2d 749, 753, 755 (Wisc. 2016).
150. *Id.* at 754.
151. *Id.* at 756. COMPAS is a computerized tool developed in the private sector and generated from a 137-item questionnaire filled out by prison authorities. For a brief discussion of COMPAS, see *infra* Part II.A.1.d.
152. *Loomis*, 881 N.W.2d at 761, 770.
153. *Id.* at 769.
154. *See The First Step Act's Risk Assessment Tool*, *supra* note 143.

presumptions.[155] There, the school board had long followed a rule that only "fit" teachers could serve in the classroom, and also had determined that all pregnant teachers were no longer "fit" several months before the end of their term of pregnancy.[156] The Court held that such an irrebuttable presumption was unconstitutional, and that the school district had to consider individualized medical determinations rather than relying on the objective determination of fitness tied to a specific moment in the term of pregnancy.[157] The government's interest in "speed and efficiency" did not outweigh the right to individualized consideration.[158] Although the Court has since signaled that the irrebuttable presumption approach cannot be extended wholesale into the social welfare state,[159] the Court has never disavowed its core, namely that when significant liberty is at stake, the government cannot cut off the right of those involved to present information about their own circumstances when liberty is predicated on regulatory factors such as being "fit" for work.[160]

Second, consider an offender's constitutional right to present mitigating factors in a capital punishment case. The Supreme Court has held that an offender enjoys the right to present any relevant mitigating evidence before the sentence is imposed.[161] In *Lockett v. Ohio*, the Court stated that "the sentencer, in all but the rarest kind of capital case, [can]not be precluded from considering, as a mitigating factor, any aspect of a defendant's character . . . and . . . circumstances of the offense that the defendant proffers as a basis for a sentence less than death."[162] Although the Court pegged its analysis on the Eighth Amendment, it

155. *See* Cleveland Bd. of Educ. v. LaFleur, 414 U.S. 632, 651 (1974).
156. *Id.* at 636–37.
157. *See id.* at 644–46; *see also* Vlandis v. Kline, 412 U.S. 441, 452–54 (1973) (holding unconstitutional an irrebuttable presumption that those students applying to Connecticut universities from out of state remained out of state residents throughout their college years).
158. *LaFleur*, 414 U.S. at 646–47 (quoting Stanley v. Illinois, 405 U.S. 645, 656 (1972)).
159. *See* Weinberger v. Salfi, 422 U.S. 749, 774–77 (1975) ("[T]he question raised is not whether a statutory provision precisely filters out those, and only those, who are in the factual position which generated the congressional concern reflected in the statute. . . . The question is whether Congress, its concern having been reasonably aroused by the possibility of an abuse which it legitimately desired to avoid, could rationally have concluded both that a particular limitation or qualification would protect against its occurrence, and that the expense and other difficulties of individual determinations justified the inherent imprecision of a prophylactic rule.").
160. *Id.* at 803–04 (Douglas, J., dissenting); *see also* United States v. Klein, 80 U.S. 128, 147 (1871) (holding unconstitutional congressional determination that accepting a pardon after the Civil War conclusively demonstrated disloyalty).
161. *See* Lockett v. Ohio, 438 U.S. 586, 608 (1978).
162. *Id.* at 604.

later clarified that Due Process requires individualized consideration as well.[163] Lower courts soon thereafter began extending the requirements of individualized consideration to other settings like parole decisions.[164] Where the decision to revoke parole is not automatic, but rather requires assessment of future dangerousness, lower courts have held that Due Process mandates individualized consideration.[165] In *John v. U.S. Parole Commission*, for instance, the Ninth Circuit held that Due Process affords parole offenders the right to introduce information that might bear upon the decision to reincarcerate the individual.[166] Given that the parole authority must "[make] a prediction as to the ability of the individual to live in society without committing antisocial acts," the individual "is entitled to identify circumstances in mitigation of his violation so that he might demonstrate to the Commission that parole revocation was an inappropriate disposition."[167] The liberty interest in staying out of prison dictated individualized consideration before remand back to prison. To the extent that an algorithm cuts off that opportunity, Due Process may be violated.[168]

The irrebuttable presumption and the right to present mitigating evidence contexts are specialized applications of a more basic administrative law doctrine recognizing that, when government decisionmakers make individualized decisions pursuant to objective legislative factors, they can rely upon generalized information but must permit some room for individualized consideration. In *Heckler v. Campbell*, at stake was the Department of Health and Human Services' creation and use of a grid to determine whether an applicant for disability could perform any gainful work in the economy.[169] Instead of determining

163. *See* Skipper v. South Carolina, 476 U.S. 1, 5 n.1, 8 (1986).

164. *See* Pickens v. Butler, 814 F.2d 237, 240–41 (5th Cir. 1987) (finding that where state law automatically revoked parole upon subsequent felony conviction, further individualized consideration was not required).

165. *See* John v. U.S. Parole Comm'n, 122 F.3d 1278, 1282 (9th Cir. 1997).

166. *Id.*

167. *Id.* (citation omitted); *see also* Caton v. Smith, 486 F.2d 733, 735–36 (7th Cir. 1973) (similarly holding right to present mitigating evidence); Preston v. Piggman, 496 F.2d 270, 274 (6th Cir. 1974) (same); Williams v. Johnson, 171 F.3d 300, 307 (5th Cir. 1999) (same); *cf.* Kelly v. Parole Bd., No. 334960, 2017 WL 3316951, at *36 (Mich. Ct. App. Aug. 3, 2017) (affirming right of inmate to see file before parole hearing).

168. Courts have long mandated that offenders be permitted to introduce a wide range of individuated information before a sentence is imposed. *See, e.g.*, Williams v. New York, 337 U.S. 241, 247 (1949) ("And modern concepts individualizing punishment have made it all the more necessary that a sentencing judge not be denied an opportunity to obtain pertinent information. . . . The belief no longer prevails that every offense in a like legal category calls for an identical punishment without regard to the past life and habits of a particular offender.").

169. *See* Heckler v. Campbell, 461 U.S. 458, 458 (1983).

whether such work was available based on an in-depth analysis of the claimant's medical history, residual capacity, and the demands of particular jobs in the economy, the agency conducted a rulemaking to establish, based on countless prior determinations, whether individuals with particular ages, education level, and medical limitations could find jobs.[170] Based on that rulemaking, the grid resembled an unsophisticated pre-AI framework based not explicitly on the characteristics of the individual claimant, but rather on data culled from countless similarly placed claimants.[171]

In upholding use of the grid, the Court noted that, as with the use of PATTERN, relying on the grid would enhance uniformity and objectivity.[172] Nonetheless, the Court explained that the agency under the system must "assess each claimant's individual abilities . . . on the basis of evidence adduced at a hearing. We note that the regulations afford claimant ample opportunities to present evidence relating to their own abilities and offer evidence that the guidelines do not apply to them."[173] When Congress directs that the administrative determination turns on factors specific to an individual, an algorithm—just like any other rule—cannot preclude all opportunity to present individualized information. [174] In accordance with *Heckler v. Campbell*, the question in considering the Department's use of PATTERN is whether that requirement of individualized consideration, despite the algorithm, is constitutionally required.[175]

b. Eligibility Determination under PATTERN

There is little question that a substantial liberty interest is at stake in determining eligibility for early release.[176] Congress itself determined that all federal inmates, with the exception of those committing one of a

170. *Id.* at 461–62.

171. *Id.*

172. *Id.* at 468; *see also* Am. Hosp. Ass'n v. NLRB, 499 U.S. 606, 612 (1991) ("[T]he decisionmaker has the authority to rely on rulemaking to resolve certain issues of general applicability unless Congress clearly expresses an intent to withhold that authority.").

173. *Campbell*, 461 U.S. at 467 (finding that the ability of agencies to craft rules of general applicability plainly limits individuals' ability to present information to protect their entitlements); *see also* Daniel B. Rodriguez, *Whither the Neutral Agency? Rethinking Bias in Regulatory Administration*, 69 BUFF. L. REV. 375, 427–28 (2021).

174. *See* DAVID FREEMAN ENGSTROM ET AL., ADMIN. CONF. OF THE U.S., GOVERNMENT BY ALGORITHM: ARTIFICIAL INTELLIGENCE IN FEDERAL ADMINISTRATIVE AGENCIES 80 (2020) ("Is an algorithm that uses 1,000 features . . . 'individualized' or is it 'mechanical?'").

175. For an examination of the use of AI generally throughout the federal government, see generally *id.*

176. *See* Young v. Harper, 520 U.S. 143, 143 (1997) (finding that Congress has recognized a liberty interest in a pre-parole program).

long list of offenses, would be eligible for early release.[177] To that end, it called for an objective determination of recidivism risk for eligible inmates through PATTERN.[178] Congress directed DOJ to create classifications of high, medium, low and minimal risk, with those in the medium and high category having the opportunity to lower their classification through the dynamic factors.[179] DOJ, in turn, implemented Congress's delegation to preclude early release for those with an exceptionally high risk of recidivism, who mathematically could not qualify for early release even if they were able to pursue the recidivism reduction programs.[180] Thus, based solely on "static" factors under PATTERN, DOJ has determined that a subset of the inmate population is not eligible for early release.[181]

The group excluded by virtue of PATTERN should, however, enjoy a limited right under Due Process to provide information unique to them as to why the exclusion overstates their risk for recidivism. For an analogy, assume that individuals with a property interest in government employment are discharged based on metrics culled by the employer from an algorithm indicating that the employees' work was substandard. Even if the employer's algorithm violates no regulation or collective bargaining provision, the employees should nonetheless be able to introduce information that the algorithm for unique reasons did not capture the realities of their employment efforts.[182] When an entitlement is at stake, across the board rules cannot cut off all right to present individualized information relevant to the entitlement determination.[183]

In the same way, the liberty interest implicated by PATTERN militates for at least an informal opportunity for those whose liberty is at stake to present information that may well be unique to them. An algorithm cannot fully determine whether an entitlement should be

177. 18 U.S.C. § 3632(d)(4)(D).

178. *See id.*

179. *Id.* § 3632(a)(1).

180. *See* U.S. DEP'T OF JUST., *supra* note 52, at 57—58; Anderson, *supra* note 120, at 2.

181. *See* U.S. DEP'T OF JUST., *supra* note 52, at 57—58; Anderson, *supra* note 120, at 2; LEADERSHIP CONF. ON CIV. & HUM. RTS., *supra* note 54.

182. In Hous. Fed. of Tchrs. Loc. 2415 v. Hous. Indep. Sch. Dist., 251 F. Supp. 3d 1168, 1176–80 (S.D. Tex. 2017), the court considered a Due Process challenge to use of an algorithm to assess teacher effectiveness. Although the court stated that it was likely to rule that Due Process required disclosure of the algorithm itself to enable the teachers to attack it more effectively, it could have also concluded that Due Process required that the teacher be able to demonstrate that the algorithm's assessment of effectiveness was not applicable given that the algorithm had not captured the teacher's unique situation.

183. *Id.* at 1179–80.

granted.[184] Viewed through this lens, although algorithms and AI may end up playing a revolutionary role in making governmental decisions more accurately and efficiently, individuals whose liberty interests are affected should be entitled to present individualized information not captured by the algorithm. Thus, those inmates excluded from the possibility of earned credits by virtue of their PATTERN score should be able to present individualized information to the decisionmaker that may, in the future, unlock the doors to the prison before expiration of the original sentence.

Inmates might argue, with some force, that factors that the algorithm omitted caused them not only to be assessed for too great a recidivism risk, but also that such factors were weighed in such a fashion that unfairly prejudiced them. However, general rules may always cause some unfairness in particular cases; the virtue of a general rule is to limit discretion and try to ensure that likes are treated alike. The very function of AI and algorithms, especially machine-learning algorithms, is to improve accuracy over time as more factors are identified and previously identified factors are re-weighed.[185] Thus, hearings should be reserved for those inmates who argue that the algorithm did not take into account their unique situations, not that the algorithm failed to weigh the factors appropriately in their situation.

c. Informal Hearing Requirements

To be sure, to hold hearings for the approximately 150,000 inmates in federal custody each year would impose a hardship upon the Bureau of Prisons.[186] The expense and distraction would be substantial.[187] But, given that PATTERN to date has only excluded a small fraction of inmates from ever being considered for early release, the administrative burden should be manageable.[188] And, given that inmates would be hard-pressed to present unique information as in the examples sketched earlier[189] to persuade the prison decisionmakers that the algorithm's

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184. *Id.* at 1177–79 ("Algorithms are human creations, and subject to error like any other human endeavor.").

185. *E.g.*, Sara Brown, *Machine Learning, Explained*, MIT (Apr. 21, 2021), https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained.

186. *Statistics*, *supra* note 90; CHARLES COLSON TASK FORCE ON FED. CORR., TRANSFORMING PRISONS, RESTORING LIVES vii (2016) [hereinafter TRANSFORMING PRISONS].

187. *See* TRANSFORMING PRISONS, *supra* note 186, at vii.

188. If we assume that the DOJ is correct in stating that 99% of inmates would be eligible, only approximately 1,500 inmates would fall into the excluded category. *See* STATISTICS, *supra* note 90.

189. *See supra* Part II.A.

predictions do not apply in their situation, required hearings would be few and far between. Indeed, too many exceptions would introduce the very subjectivity that the algorithm in part was designed to avoid.

Moreover, the hearings themselves could be quite informal—inmates would have the right to bring information to the attention of the authorities—and no witnesses would be needed. The Supreme Court in *Wilkinson v. Austin* held that such an informal hearing was sufficient in the prison context to permit inmates to contest placement in Ohio's Supermax prison.[190] The Court determined that Ohio had created a liberty interest in providing that only those inmates posing a significant risk of danger should be housed in the prison, which greatly restricted individual freedoms.[191] As the Court explained, prison authorities assigned all Ohio inmates entering the system a numerical security classification from level one through level five, with one as the lowest security risk and five the highest.[192] Much like PATTERN, level five inmates were assigned to Supermax prison according to their initial security classification, which "is based on numerous factors (e.g., the nature of the underlying offense, criminal history, or gang affiliation) but is subject to modification . . . [if the inmate] engages in misconduct or is deemed a security risk."[193] The Court readily concluded that liberty was so constricted in the Supermax prison that the *Sandin* hurdle was no obstacle to finding a liberty interest.[194] Nonetheless, in light of the prison context, "informal, nonadversary [sic] procedures" were all that was required to challenge the classification decision.[195] The Court explained that "[r]equiring prison officials to provide a brief summary of the factual basis for the classification review and allowing the inmate a rebuttal opportunity" satisfied the Due Process Clause.[196]

Supreme Court decisions in other contexts have also held that the Due Process Clause can be satisfied by an informal hearing.[197] Perhaps

190. *See* Wilkinson v. Austin, 545 U.S. 209 (2005).
191. *Id.*
192. *Id.* at 215.
193. *Id.* (citing Austin v. Wilkinson, 189 F. Supp. 2d 719, 728 (N.D. Ohio 2002)).
194. *Id.* at 223–24.
195. *Id.* at 228–29 (citing Greenholtz v. Inmates of the Neb. Penal & Corr. Complex, 442 U.S. 1 (1979); Hewitt v. Helms, 459 U.S. 460 (1983)).
196. *Id.* at 226. The Court in *Greenholtz* found that, even when states created liberty interests, informal parole hearings were constitutionally sufficient. Greenholtz v. Inmates of the Neb. Penal & Corr. Complex, 442 U.S. 1, 1–2 (1979). According to the Court, the key was for prison authorities to afford an opportunity to be heard and if parole was denied, to provide the inmate a statement of the reasons why parole was denied. *Id.* at 16. "The Constitution," the Court stated, "does not require more." *Id.*
197. *See* Goss v. Lopez, 419 U.S. 564 (1975).

most notably, the Court in *Goss v. Lopez*[198] held that, under the Due Process Clause, all that is required before school authorities can suspend a student is an "informal give–and–take between student and disciplinarian."[199] Due Process guaranteed the student "the opportunity to characterize his conduct to put it in what he deems the proper context" to reduce the risk of error.[200] In contexts as varied as in *Wilkinson* and *Goss*, therefore, the Court has upheld informal mechanisms to allow individuals affected to, in essence, tell their side of the story before an adverse action is taken.[201] Accordingly, inmates challenging exclusion from early release should be entitled to notice, an opportunity to confer with an outside advisor or attorney, and an opportunity to present information that their situation was not contemplated by the algorithm.[202]

Due Process, however, would not likely protect the vast majority of inmates who can pursue the recidivism reducing programs provided in the First Step Act in order to lower their recidivism category and thereby make early release more likely. Due Process protects the eligibility decision, but not the pace at which eligible inmates can receive credits.[203] BOP reserves sufficient discretion in offering programs and in determining which inmates get priority to defeat any settled expectation under *Wolff* and *Sandin*.[204] Neither the First Step Act nor the current Bureau of Prisons guidance require provision of any specific recidivism

198. *Id.*

199. *Id.* at 584.

200. *Id.* Furthermore, Mathews v. Eldridge, 424 U.S. 319 (1976), permits such an informal process when the risk of error is low and the burden on the government great, particularly in contexts in which greater reliance is placed on the specialized knowledge of government decisionmakers; *cf.* Latif v. Holder, 28 F. Supp. 3d 1134 (D. Or. 2014) (approving informal mechanism to challenge placement on no–fly list).

201. *Goss*, 419 U.S. at 579; Wilkinson v. Austin, 545 U.S. 209 (2005).

202. *See Mathews*, 424 U.S. at 344 ("[P]rocedural due process rules are shaped by the risk of error inherent in the truthfinding process as applied to the generality of cases, not the rare exceptions."). While we find that an informal hearing is likely to be sufficient, BOP could afford due process by providing an informal hearing conducted by a variety of means. *See id.* For example, BOP could establish a standardized form that allows an inmate to provide documentation challenging the factual inputs used in PATTERN. *See id.* The warden would be responsible for reviewing the form to determine whether the inmate provided facts that warrant changes to the inmate's assessment. *See id.* Alternatively, BOP maintains the Administrative Remedy Program, which could be utilized to address PATTERN-related issues. *See* 28 C.F.R. § 542.10 (2020). The Program provides a comprehensive process for inmates "to seek formal review of an issue relating to any aspect of his/her own confinement," and provides for multiple layers of appeals. *Id.* However, this would likely require some modification to afford for at least a brief appearance before the warden to comport with the interests at stake.

203. Wolff v. McDonnell, 418 U.S. 539, 558–61 (1974).

204. First Step Act of 2018, Pub. L. No. 115–391, 132 Stat. 5194.

reduction programming to inmates based on their PATTERN scores.[205] Thus, the classification system—whether the inmate is placed in high, medium, low, or the minimal category—does not by itself trigger a hearing right at this time, no matter how important. As the Supreme Court stated in *Moody v. Daggett*:

> We have rejected the notion that every state action carrying adverse consequences for prison inmates automatically activates a due process right. In Meachum v. Fano, 427 U.S. 215 (1976), for example, no due process protections were required upon the discretionary transfer of state prisoners to a substantially less agreeable prison, even where that transfer visited a "grievous loss" upon the inmate. The same is true of prisoner classification and eligibility for rehabilitative programs in the federal system.[206]

Even in situations in which an inmate has been identified as suitable for recidivism reduction programs that have the potential to result in the award of earned credits, at most, the current system merely affords an opportunity to be placed on a "waitlist" for such programs.[207]

Accordingly, although we believe that inmates should have the right to present individualized information to determine "eligibility," prevailing Due Process doctrine cannot be extended beyond that.[208] In short, those deemed ineligible by PATTERN should have a limited right under Due Process to present individualized information, but Due Process does not mandate that prison authorities consider individualized information bearing on which classification—high, medium, low, or minimal—inmates should be placed because DOJ has not guaranteed

205. Currently, DOJ does not appear to utilize PATTERN in such a manner and the lack of available programming is one of the common critiques of the First Step Act. *See, e.g.*, *Comment Letter to Department of Justice on PATTERN First Step Act*, LEADERSHIP CONF. ON CIVIL & HUM. RTS. (Sept. 4, 2019), https://civilrights.org/resource/comment-letter-to-department-of-justice-on-pattern-first-step-act/. Should the recidivism reduction programs be implemented more formulaically, it is possible that similar Due Process protections should be extended to all inmates, not just to those currently deemed ineligible by virtue of PATTERN.

206. Moody v. Daggett, 429 U.S. 78, 88 n.9 (1976).

207. Sari Horwitz, *U.S. Official Says Prison System's Best Reentry Program Cut 'Dramatically'*, WASH. POST (Oct. 29, 2015), https://www.washingtonpost.com/world/national-security/deputy-attorney-general-prison-systems-best-re-entry-program-has-dramatically-shrunk/2015/10/29/8d96713a-7e66-11e5-beba-927fd8634498_story.html.

208. Nonetheless, they might be able to utilize the grievance system that the BOP by regulation has provided for all inmates. *See* 28 C.F.R. § 542.10(b) (2002); *see also* FED. BUREAU OF PRISONS, U.S. DEP'T. OF JUST., LEGAL RESOURCE GUIDE TO THE FEDERAL BUREAU OF PRISONS (2019) [hereinafter BOP LEGAL GUIDE].

any inmate specific opportunities to earn credits towards early release. Although the distinction between "eligibility" for early release and placement in a category from which one can work to obtain early release may seem artificial, the Supreme Court's decisions in *Sandin* and in *Moody v. Daggett* signal discomfort with opening up the courts to Due Process suits when the prospect of early release is uncertain.

d. Other Possible Challenges to DOJ's Algorithmic Determination

Inmates might argue in addition that, as in *Loomis*, the PATTERN algorithm is unfair or that it has not been constructed properly. The danger of conditioning liberty on probabilistic data in sentencing is highlighted by the evidence-based sentencing adopted by over twenty states.[209] Those states use predictive analytics to predict the likelihood of recidivism, which affects both bail determination and sentences.[210] The algorithms used rely on factors such as the offender's socioeconomic status and level of education.[211] Predicating liberty on statistics, particularly when the statistics derive from individual characteristics beyond the offender's control, departs from fundamental notions of moral desert, and the risk of using factors that disproportionately disadvantage individuals based on race or poverty is high.[212]

For one specific example, *ProPublica* released a study of risk assessment under the Correctional Offender Management Profiling for Alternative Sanctions ("COMPAS") algorithm used in a number of state court systems—including Wisconsin as discussed in *Loomis*—to predict the risk of recidivism.[213] It investigated application of COMPAS to 7,000 people in Broward County, Florida for the purpose of determining whether to release those individuals on bail.[214] According to the subsequent report, the data revealed that race played a substantial factor in the recidivism projection, which then led to greater jail time for Black inmates who committed similar offenses to white inmates.[215] *ProPublica*

209. *See* Sonja B. Starr, *Evidence-Based Sentencing and the Scientific Rationalization of Discrimination*, 66 STAN. L. REV. 803, 804–05 (2014).
210. *See id.*
211. *See id.*
212. Fred Feldman & Brad Skow, *Desert*, STAN. ENCYCLOPEDIA OF PHIL. (Sept. 22, 2020), https://plato.stanford.edu/entries/desert/.
213. Julia Angwin et al., *Machine Bias*, PROPUBLICA (May 23, 2016), https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.
214. *Id.* For a more recent critique of *ProPublica*'s study, see Cynthia Rudin et al., *The Age of Secrecy and Unfairness in Recidivism Prediction*, HARV. DATA SCI. REV., Mar. 31, 2020.
215. Angwin et al., *supra* note 213.

tentatively concluded that the questions Florida law enforcement authorities asked about socio-economic status and demographic conditions, such as whether a parent had been in jail or the number of people known to have used illegal drugs, played a substantial role in the bond decisions, which led to a significant disproportionate impact on offenders of color.[216]

In another study of COMPAS, researchers found that Black inmates were nearly twice as likely as white inmates to be categorized as high risk but not actually re-offend.[217] At the same time, the algorithm disproportionately categorized white people as being lower risk when follow-up studies documented that they later re-offended.[218] Furthermore, aside from questions of race, the algorithms may not predict the risk of recidivism well.[219] An independent study from Dartmouth College found that COMPAS is no better at predicting an individual's risk of recidivism than random non-expert volunteers.[220] These examples demonstrate how algorithms assessing future dangerousness are driven by the underlying data, which may be linked to race or other classifications.[221]

216. *Id.*

217. Ed Yong, *A Popular Algorithm Is No Better at Predicting Crimes than Random People*, ATLANTIC (Jan. 17, 2018), https://www.theatlantic.com/technology/archive/2018/01/equivant-compas-algorithm/550646/ (citing Angwin et al., *supra* note 213).

218. Angwin et al., *supra* note 213.

219. *Id.*

220. *See* Julia Dressel & Hany Farid, *The Accuracy, Fairness, and Limits of Predicting Recidivism*, SCI. ADVANCES, Mar. 30, 2018, at 3. Complicating the issue, in contrast to PATTERN, the factors underlying COMPAS have not been released to the public. For a discussion of this issue, see Jason Tashea, *Courts Are Using AI to Sentence Criminals. That Must Stop Now*, WIRED (Apr. 17, 2017, 7:00 AM), https://www.wired.com/2017/04/courts-using-ai-sentence-criminals-must-stop-now.

221. The implementation of algorithmic and AI tools in other fields also provides illuminating lessons on how such tools can have negative, although unintended, consequences. For example, consider Amazon's use of AI to help with recruiting and hiring. *See* Jeffrey Dastin, *Amazon Scraps Secret AI Recruiting Tool that Showed Bias Against Women*, REUTERS (Oct. 10, 2018, 7:04 PM), https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G. The team behind the project created a learning AI that was trained by reviewing patterns present in the company's recruitment over the preceding ten-year period. *Id.* One factor the team failed to consider, however, was the gender gap in the company's workforce. *Id.* Through its training, i.e., the algorithm's review of previous employment decision data, the AI determined that men were more favorable to hire than women and thus eliminated qualified applicants from the pool in part based on gender. *Id.* Similarly, Optum Healthcare developed an AI to help hospitals predict patient care needs in order to drive the allocation of resources. *See* Carolyn Y. Johnson, *Racial Bias in a Medical Algorithm Favors White Patients over Sicker Black Patients*, WASH. POST (Oct. 24, 2019), https://www.washingtonpost.com/health/2019/10/24/racial-bias-medical-algorithm-favors-white-patients-over-sicker-black-patients. A study conducted shortly after

The decision to create categories by algorithm rests in the government's hands and should be subject to challenge only to the extent that governmental rules generally can be challenged, whether under the Administrative Procedure Act ("APA") or other mechanisms.[222] Indeed, courts in the past have scrutinized BOP rules to ensure conformance with the APA, with the Ninth Circuit decision in *Crickon v. Thomas* invalidating a rule excluding certain categories of prisoners from early release on the ground that "[t]he BOP offered absolutely no rationale for its decision to use the inmate's criminal history as a surrogate for early release ineligibility."[223] In addition to possible APA challenges,[224] any inmate claims of unconstitutionality are cognizable, as they were in *Loomis*.[225] But, inmates cannot thereafter challenge the administration

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implementation of the AI determined that it underestimated healthcare needs of black patients. *See id.* Conversely, it overestimated the needs of white patients, resulting in the misallocation of scarce and critical medical resources. *See id.* After release of the study, Optum released a statement expressly cautioning against the removal of human oversight over AI tools, stating:

> Predictive algorithms that power these tools should be continually reviewed and refined, and supplemented by information such as socio-economic data, to help clinicians make the best-informed care decisions for each patient . . . . As we advise our customers, these tools should never be viewed as a substitute for a doctor's expertise and knowledge of their patients' individual needs.

Id. For another article discussing the Optum algorithm, see Charlotte Jee, *A Biased Medical Algorithm Favored White People for Health-Care Programs*, MIT TECH. REV. (Oct. 25, 2019), https://www.technologyreview.com/2019/10/25/132184/a-biased-medical-algorithm-favored-white-people-for-healthcare-programs/.

222. *See* Administrative Procedure Act, 5 U.S.C. § 570 ("Any agency action relating to establishing, assisting, or terminating a negotiated rulemaking committee under this subchapter shall not be subject to judicial review . . . . [unless] such judicial review is otherwise provided by law.").

223. Crickon v. Thomas, 579 F.3d 978, 984 (9th Cir. 2009); *see also* Elwood v. Jeter, 386 F.3d 842, 847 (8th Cir. 2004) (invalidating BOP rule limiting early release); Goldings v. Winn, 383 F.3d 17, 28–29 (1st Cir. 2004) (invalidating BOP rule limiting early release); Arrington v. Daniels, 516 F.3d 1106, 1116 (9th Cir. 2008) (invalidating similar exclusion from early release under the APA); *cf.* Handley v. Chapman, 587 F.3d 273, 282–83 (5th Cir. 2009) (reviewing BOP rule under APA but disagreeing with *Arrington* court on the merits).

224. Others have argued that, at least in the sentencing context, those convicted should have a right to understand the methodologies that are guiding imposition of their final sentences, even if no discrimination is involved. *See* Michael Brenner et al., *Constitutional Dimensions of Predictive Algorithms in Criminal Justice*, 55 HARV. CIV. RTS.-CIV. LIBERTIES L. REV. 267, 283–87 (2020). Other than in a broad challenge under the APA, however, we do not believe that prison authorities need to explain the algorithm's methodology to each prisoner.

225. From its inception, PATTERN's factors and algorithm have been based on statistical models, which leverage historical federal prison data, and DOJ has been mindful to avoid any disproportionate impact based on race. *See* E. ANN CARSON, BUREAU OF JUST. STAT., U.S. DEP'T OF JUST., DATA COLLECTED UNDER THE FIRST STEP ACT, 2019 6 (2020). In

of the algorithm.[226] At the end of the day, the key for inmates should be their ability to introduce information that their unique situations fall outside of PATTERN, that such information indicates a low likelihood of future dangerousness, and thus, that they should be *eligible* for early release.[227]

2. Right to Consider Inputs Used to Determine Statutory and PATTERN Eligibility

Offenders will only rarely be able to persuade prison authorities of the uniqueness of their situation. In most contexts, the results of the algorithm as to future dangerousness will govern. In light of the liberty interest created, however, offenders who are excluded by statute or by operation of PATTERN from earning credits should enjoy a limited right to challenge the data used in reaching that statutory or regulatory exclusion.[228] First, with respect to the statutory exclusion, an inmate in an extraordinary case may have reason to believe that he or she did not commit the disqualifying offenses listed in the Act.[229] For instance, perhaps there was a dispute as to whether their offense qualifies as a sexual offense that precludes "earned" credits, or whether a conviction

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response to stakeholder concerns that certain factors in the algorithm serve as proxies for race, the Department removed two statistical factors: first, the offender's age at first arrest or conviction, and second, whether the inmate voluntarily surrendered. NAT'L INST. OF JUST., *supra* note 91, at 9. Although each factor appears neutral on its face, critics argued that reliance on those factors would plainly result in racially disproportionate stays in prison. *Id.* The Department noted that the reduction in algorithmic accuracy was outweighed by risk of actual or perceived bias that these factors posed. *Id.* PATTERN should survive any Equal Protection Clause challenge based on race. PATTERN's algorithm applies a separate and distinct model for men and for women and as a result has been subject to allegations of unconstitutionality. *Id.* at 16. Citing statistical evidence and gender specific pathways to crime, the Department determined that applying the same algorithm to men and women would yield unfairly elevated results for women, inaccurately reflecting their recidivism risk. *Id.* at 17. To be constitutional, a government policy which expressly discriminates based on gender must be shown to serve important governmental objectives and to employ a means which is substantially related to those objectives. Norman T. Deutsch, Nguyen v. INS *and the Application of Intermediate Scrutiny to Gender Classifications: Theory, Practice, and Reality*, 30 PEPP. L. REV. 185, 187 (2003). As it relates to PATTERN, the Department of Justice is on strong ground that explicit gender differences in PATTERN serve the important government objective of ensuring that female offenders not be incarcerated longer than their predicted risk of recidivism.

226. *See* 5 U.S.C. § 570.

227. *See* CARSON, *supra* note 225, at 1–2.

228. *See* DANIELLE KEHL ET AL., ALGORITHMS IN THE CRIMINAL JUSTICE SYSTEM: ASSESSING THE USE OF RISK ASSESSMENTS IN SENTENCING 22 (2017).

229. *See* 18 U.S.C. § 3632(d)(4)(D) (providing list of convictions making a prisoner "ineligible to receive [earned] credits").

for false imprisonment should be tantamount to one for "kidnapping."[230] Prison authorities may base assessment of historical factors on data in the pre-sentence report, but errors may persist and, in some contexts,[231] the report may be withheld from the offender.[232] Arguably, in such rare contexts, liberty interest analyses should allow inmates a right to request disclosure of the inputs that led to the statutory disqualification and an informal opportunity to present information that the input was incorrect.[233] *Eligibility* for earned credits creates a liberty interest, so the First Step Act should afford inmates the opportunity to review "the data—input variables—collected about [their disqualifying offenses] to verify that they are accurate."[234]

Similarly, for those deemed ineligible by virtue of PATTERN, disclosure of the inputs should be constitutionally required. Given that PATTERN's assessment of risk initially is based on the listed static factors, prison authorities should disclose those factors upon request, and the inmate should be afforded a limited opportunity to challenge an error—whether the nature of a prior offense or education level.[235]

230. *See id.*

231. *See* Administrative Procedure Act, 5 U.S.C. § 570 ("Any agency action relating to establishing, assisting, or terminating a negotiated rulemaking committee under this subchapter shall not be subject to judicial review . . . [unless] such judicial review is otherwise provided by law.").

232. *See* KEHL ET AL., *supra* note 228, at 15 (discussing how the use of algorithms in the sentencing context can implicate constitutional concerns such as the "right to review and challenge the evidence used to determine guilt and punishment" independent of a statutorily created liberty interest).

233. *See id.* at 5. Nonetheless, in Bloom v. Bureau of Prisons, No. 19-21589, 2022 U.S. Dist. LEXIS 20624 (D.N.J. Feb. 4, 2022), the inmate challenged his classification as a sex offender, which made him ineligible to earn good time credits under the Act. The court refused to consider the claim on the ground that Congress's early release program in the First Step Act did not create an entitlement. We believe that Congress's intent was plainly to the contrary. *See infra* Part II.A.3 (text and accompanying notes, specifically notes 246–51).

234. Cary Coglianese & David Lehr, *Transparency and Algorithmic Governance*, 71 ADMIN. L. REV. 1, 41 (2019) (arguing that Due Process protects the right of individuals to gain access to the inputs).

235. *Id.* at 42 (arguing that procedural due process encourages "[a]gencies that deploy machine learning in the adjudicatory context" to "afford individuals or entities subject to adjudication access to information to ensure that the algorithms were correctly applied."). The inmate need not, however, be entitled to receive any confidential information upon which a static factor is based. *See, e.g.*, Harrison v. Shaffer, No. 18-cv-04454-CRB-PR, 2019 U.S. Dist. LEXIS 236681, at *5–6 (N.D. Cal. Aug. 20, 2019) (canvassing cases upholding government's right not to disclose confidential information).

Required disclosure represents a key check to ensure against errors in algorithmic decision-making.[236]

Congress previously directed prison authorities to disclose files pertaining to an upcoming parole decision to allow the inmate a chance to respond before the decision is finalized: "At least thirty days prior to any parole determination proceedings, the prisoner shall be provided . . . reasonable access to a report or other document to be used by the Commission in making its determination."[237] The Supreme Court as well has noted the importance of parole authorities sharing information with the inmate that is in their file.[238] Thus, even though the PATTERN tool limits the issues to be resolved at a hearing, Due Process should extend to disclosure of the inputs upon which the decision is based.

Consider the analogous decision by the Kansas appellate court in *State v. Walls*.[239] Walls pleaded no contest to a low-level felony, but his assessment score indicated that he was a high-risk, high-needs candidate for probation.[240] Based largely on the assessment, the trial court placed him in a restrictive probation setting.[241] On appeal, the appellate court reversed, holding in part that the trial court committed reversible error in failing to disclose the data upon which the assessment was based.[242] Given that the court could not have imposed the restrictive conditions in the absence of the assessment, it was incumbent upon the court to disclose the data to permit the defendant to challenge the data used in the assessment, even though he could not challenge how the assessment was structured.[243] Accordingly, prison authorities should have the duty, upon request, to furnish inmates the relevant data upon which the statutory or PATTERN exclusion is based.[244]

236. Coglianese & Lehr, *supra* note 234, at 41–42 (arguing that by disclosing data, "government officials can verify that predictions resulting from their algorithmic systems are working as intended.").
237. 18 U.S.C. § 4208(b), *repealed by* Pub. L. No. 98-473, § 218(a)(5), 98 Stat. 2027 (1984).
238. *See* Swarthout v. Cooke, 562 U.S. 216, 220 (2011) (finding the fact that prisoners "were afforded access to their records in advance" was one of the indicators of adequate procedural Due Process); *see also* Tasker v. Mohn, 165 W. Va. 55, 65–66 (1980) ("Permitting the prisoner to access his own file is one means of accomplishing the [Due Process-required] notice.").
239. No. 116,027, 2017 Kan. App. Unpub. LEXIS 487, at *1 (June 23, 2017).
240. *Walls*, 2017 Kan. App. Unpub. LEXIS 487, at *2.
241. *See id.* at *4.
242. *Id.* at *12–13.
243. *Id.* at *13.
244. *See id.*

3. Right to "Earned" Credits

The earned credit system in PATTERN also has created a limited liberty interest under the *Morrissey* and *Wolff* analyses. The First Step Act provides that credits can be earned by inmates for successful completion of qualified educational and treatment programs.[245] The congressional language is clear: Section 101 provides that "a prisoner *shall* earn 10 days of time credits for every 30 days of successful participation"[246] and "*shall* earn an additional 5 days of time credits for every 30 days of successful participation in evidence-based recidivism reduction programming."[247] Moreover, Congress determined that inmates "at a minimum or low risk of recidivating . . . [as determined by their last two assessments] *shall* be" credited toward early release.[248] Indeed, Congress provided that any reduction in credits "shall require written notice to the prisoner" and "a procedure to restore time credits that a prisoner lost as a result of a rule violation."[249] Through PATTERN, DOJ plainly wanted to alter inmate behavior to reduce the risk of recidivism.[250] By offering early release and other benefits to participants in programming aimed to reduce recidivism after incarceration, the government hoped to elicit participation.[251]

Contrast the First Step Act to the facially similar program operated by the Bureau of Prisons a generation earlier to encourage nonviolent inmates to pursue drug treatment programs while incarcerated. The key statutory provision stated "[t]he period a prisoner convicted of a nonviolent offense remains in custody after successfully completing a treatment program *may* be reduced by the Bureau of Prisons."[252] The Supreme Court in *Lopez v. Davis* stressed that, in light of such permissive language, "[w]hen an eligible prisoner successfully completes drug treatment, the Bureau thus has the authority, but not the duty, . . . to

245. *See* First Step Act of 2018, Pub. L. No. 115-391, § 101, 132 Stat. 5194; *see also supra* Part II.A.1 (notes 134–35 and accompanying text).

246. 18 U.S.C. § 3632(d)(4)(A).

247. *Id.* § 3632(d)(4)(A).

248. *Id.* § 3632(d)(4)(c).

249. *Id.* § 3632(e)(2)–(3).

250. *See id.* § 3624(g)(1)(D)(i)(II)(bb) (allowing prerelease custody or supervised release where an inmate's prison warden determines that "the prisoner has made a good faith effort to lower their recidivism risk through participation in recidivism reduction programs or productive activities . . . .").

251. *See id.* Indeed, a psychological theory called the Hawthorne effect also supports the premise that those observed likely will alter their behavior because they know someone is observing them. *See generally* ABRAHAM ZALEZNIK, HARV. BUS. SCH., THE "HAWTHORNE EFFECT" (1984).

252. 18 U.S.C. § 3621(e)(2)(B) (emphasis added).

reduce his term of imprisonment."[253] In contrast, the directive in the First Step Act is clear—the prisoner "shall earn" the credits, and if that prisoner has previously been classified as "low" or "minimal" risk, the prisoner must be released once sufficient credits have been earned.[254]

Thus, in light of *Morrissey*, inmates must be afforded a hearing if the government refuses to award the credits after completion of the program or attempts thereafter to revoke them.[255] Although courts have yet to recognize a liberty interest in the earned credit system,[256] the First Step Act invites inmates to rely on the dynamic traits to reap the benefits of their action.[257] Even if Congress decides to scrap the dynamic factors, inmates who relied on those factors to obtain the education and treatment previously thought to be necessary to reduce the risk of recidivism would be entitled to the early release they otherwise would have earned.[258] The Due Process Clause demands as much.[259]

The government might argue that no liberty interest can be created until the inmate receives the credits.[260] To be sure, the Supreme Court has not squarely decided whether the Due Process Clause applies to applicants for government entitlements such as benefit programs, as opposed to individuals already receiving benefits who are at risk of losing them.[261] In other words, the Court has yet to resolve whether applicants for Social Security Disability or public housing have a right to a hearing under the Due Process Clause if their applications are denied.[262] Lower courts, however, have reasoned that Due Process applies in such contexts.[263] Whatever the result in other administrative contexts, a Due

253. Lopez v. Davis, 531 U.S. 230, 241 (2001); *see also* Morales v. Francis, No. Civ.A. H-05-2955, 2005 U.S. Dist. LEXIS 26253, at *5 (S.D. Tex. Oct 5, 2005) (rejecting challenge to BOP's limitation of inmates' ability to serve out sentences in half-way house in light of similar permissive language).

254. First Step Act of 2018, Pub. L. No.115-391, § 101, 132 Stat. 5194.

255. *See* Mathews v. Eldridge, 424 U.S. 319, 332–36 (1976) (discussing the requirement of an impartial hearing when due process protections are found based on a statutorily created interest).

256. *See, e.g.*, Allen v. Hendrix, No. 2:19-CV-00107-BSM-JTR, 2019 U.S. Dist. LEXIS 227971, at *7 n.6 (E.D. Ark. Dec. 13, 2019); Wren v. Watson, No. 2:19-cv-00554-JPH-MJD, 2020 U.S. Dist. LEXIS 21282, at *4–5 (S.D. Ind. Feb. 7, 2020).

257. *See* First Step Act of 2018 § 101.

258. *See* Cushman v. Shinseki, 576 F.3d 1290, 1296 (Fed. Cir. 2009) (analyzing due process rights in the context of federal benefits afforded to veterans).

259. *See Mathews*, 424 U.S. at 333 (reiterating the Supreme Court's "consistent" view that "some form of hearing is required before an individual is finally deprived of a property interest"); *Cushman*, 576 F.3d at 1296 ("Due process of law has been interpreted to include notice and a fair opportunity to be heard.").

260. *See Wren*, 2020 U.S. Dist. LEXIS 21282, at *4–5.

261. *Cushman*, 576 F.3d at 1296.

262. *See id.*

263. *See, e.g.*, *id.* at 1298–1300; Kapps v. Wing, 404 F.3d 105, 118–25 (2d Cir. 2005).

Process analysis seems particularly appropriate to apply in the prison context when the opportunity to earn credits to gain early release is at stake.[264] Under the First Step Act, those offenders hoping to earn credits pursue the vocational and treatment programs in reliance on the government's pledge, and that reliance should remove any doubt but that Due Process protects the inmate's interest when he or she completes the educational or treatment programs.

The government might also argue that no liberty interest is created because the First Step Act conditions earned release credits on "successful" completion of certain education and treatment programs.[265] On the one hand, to the extent that "successful" refers to technical completion of an educational or treatment program, a liberty interest is created.[266] Inmates know that, through completion, credits are earned.[267] The statutory language strongly suggests that "successful" incorporates an objective standard as to whether the inmate attended a treatment program, held down a prison job, or pursued vocational training, not how well they performed such tasks.[268] Should prison authorities deem that the inmate's efforts are not successful, some brief hearing under *Mathews v. Eldridge* would need to be convened to determine if the credits should be awarded.[269] On the other hand, if prison authorities retain the ability to subjectively assess whether the offender's participation in the program was "successful," then the liberty interest only arises after the official deems the offender's participation "successful."[270] In light of Congress's intent to persuade offenders to pursue the recidivism reduction measures, "successful" appears to be a technical requirement.[271] Therefore, "successful" construed within the context of the earned credit

264. *See Mathews*, 424 U.S. at 333 (quoting Joint Anti-Fascist Comm. v. McGrath, 341 U.S. 123, 168 (1951) (Frankfurter, J., concurring)) ("The 'right to be heard before being condemned to suffer grievous loss of any kind, even though it may not involve the stigma and hardships of a criminal conviction, is a principle basic to our society.'").

265. 18 U.S.C. § 3632(d)(4)(A)(i).

266. *See Mathews*, 424 U.S. at 333–35.

267. 18 U.S.C. § 3632(d)(4)(A).

268. *Id.* § 3632(d)(5) ("A prisoner who successfully participates in evidence-based recidivism reduction programming or productive activities shall receive periodic risk reassessments not less often than annually[.]").

269. *Mathews*, 424 U.S. at 335–40. As addressed in note 202, *supra*, BOP could create a process that affords for a brief appearance before the warden, who would then be responsible for determining whether credits should be awarded based on factual evidence. We set forth that Due Process requires some form of an informal hearing, but BOP could meet the requirements of Due Process in this regard through a variety of means. *See supra* notes 186, 202.

270. 18 U.S.C. § 3632(d)(5).

271. *See id.*

system suggests that an objective standard is contemplated, triggering a right to a hearing if the credits are denied.

The First Step Act thus creates a liberty interest in creating an "earned credit system."[272] Once earned, such credits cannot be withheld or rescinded absent a hearing.[273] Although the earned credits under the First Step Act do not reduce the length of the sentence *per se*, they entitle the inmate to release from the prison setting to home confinement or other types of supervised release.[274] Such release roughly equates to release on parole, which the *Greenholtz* and *Allen* Courts held are subject to a liberty interest analysis.[275]

In contrast, more violent offenders are only eligible for relatively minor privileges, such as additional phone or visitation privileges.[276] Those privileges, while incredibly important to the inmate, are not currently protected under the Due Process Clause in line with *Sandin*, as the denial of such benefits would not constitute the requisite atypical hardship.[277]

B. Ex Post Facto Issues

The Constitution's Ex Post Facto Clause prevents federal and state governments from increasing punishment after an offender is convicted of a given offense.[278] This means that, because the enhanced ability to accumulate *good time* (as opposed to *earned*) credits under the First Step Act effectively modifies the sentence imposed on the offender, Congress may not change the credit system retroactively.[279] Just as the Due Process Clause limits the government's ability to deny release to particular inmates without, at times, affording a hearing, so too the Ex Post Facto Clause prevents the government from retroactively changing release policies built into the sentence.[280]

The Supreme Court addressed an analogous situation in *Weaver v. Graham*, holding that a state's retroactive change in its good time policy violates the Ex Post Facto Clause as long as the change "constricts the

272. *See Mathews*, 424 U.S. at 333–35.
273. *Id.* at 333.
274. 18 U.S.C. § 3632(d)(4)(C).
275. *See* Greenholtz v. Inmates of Neb. Penal & Corr. Complex, 442 U.S. 1, 10–12 (1979); Bd. of Pardons v. Allen, 482 U.S. 369, 376–80 (1987).
276. Sandin v. Conner, 515 U.S. 472, 476 n.2 (1995).
277. *Id.* at 486.
278. U.S. CONST. art. I, § 9, cl. 3.
279. *See id.*
280. *See* Weaver v. Graham, 450 U.S. 24, 33–34 (1981) (reviewing constitutionality of "a retrospective law which can be constitutionally applied to petitioner only if it is not to his detriment.").

inmate's opportunity to earn early release."[281] Similarly, in *Greenfield v. Scafati*, the Court prohibited Massachusetts from retrospectively altering its good time credit system so that any inmate violating parole would be unable to accumulate good time credits upon return to prison.[282] When Congress increased the number of good time credits offenders could earn via the First Step Act, it locked in that benefit until Congress alters the program.[283] A straightforward application of *Weaver* precludes the government from making it more difficult for offenders to earn good time credits after they have committed the underlying offense.[284]

Whether the government could eliminate the "earned" credit system for offenders who have already offended presents a closer question. On the one hand, the earned credit system, unlike the good time credits, may not be considered part of the sentence given that the credits turn on dynamic factors.[285] Inmates earn credits toward release based on what they do *after* reaching prison.[286]

Lower courts have held that the Ex Post Facto Clause does not protect inmates from changes in discretionary application of factors bearing on early release. For instance, the Eighth Circuit in *Ellis v. Norris* permitted repeal of a statute allowing for discretionary awards of good time credits.[287] The fact that the change left the inmates worse off did not persuade the court.[288] Similarly, the Fourth Circuit in *Burnette v. Fahey* held that Virginia's change from a discretionary parole system based on risk assessment to one based principally on the seriousness of the original offense did not violate the Ex Post Facto Clause, even though some inmates undoubtedly would be treated less favorably.[289]

On the other hand, offenders could plausibly argue that they factored in the prospect of such "earned credits" when entering their pleas. Even

281. *Id.* at 35–36.

282. Greenfield v. Scafati, 277 F. Supp. 644, 644–45 (D. Mass. 1967), *aff'd per curiam*, 390 U.S. 713 (1968).

283. 18 U.S.C. § 3632(d)(4).

284. *Weaver*, 450 U.S. at 35–36. The government need not apply *enhanced* good time credits retroactively, as specified in the Act. *See* 18 U.S.C. § 3632(d)(4)(B).

285. *Cf. Weaver*, 450 U.S. at 36–37 (Blackmun, J., concurring) ("'[G]ood time' or 'gain time' is something to be earned and is not part of, or inherent in, the sentence imposed.").

286. *See* 18 U.S.C. § 3632(d)(4)(B)(i) and (ii).

287. Ellis v. Norris, 232 F.3d 619, 623–24 (8th Cir. 2000).

288. *Id.* at 622–23.

289. Burnette v. Fahey, 687 F.3d 171, 185–86 (4th Cir. 2012); *see also* Morales v. Francis, No. H-05-2955, 2005 U.S. Dist. LEXIS 26253, at *14–16 (S.D. Tex. Oct. 5, 2005) (holding that retroactively limiting right to serve out sentence in halfway house does not violate the Ex Post Facto Clause). Taking away discretionary credits, however, clearly violates the Ex Post Facto Clause. *See* Lynce v. Mathis, 519 U.S. 433, 445 (1997) (holding that retroactive cancellation of discretionary credits violates the Ex Post Facto Clause).

when release programs are "discretionary," they may influence offenders who rely on their potential.[290]

The First Step Act apparently does not guarantee that education and treatment programs will be offered, although the issue is not free from doubt.[291] Criminal justice leaders and reformers have criticized DOJ for not making such programs available, thereby blunting the underlying purpose of the First Step Act: encouraging inmates to pursue programming that will diminish the likelihood of their recidivism.[292] At this time, the programming which drives the dynamic factors of PATTERN remains discretionary.[293] The opportunity to "earn" credits through work and education programs thus cannot be considered part of the original sentence and is not therefore protected by the Ex Post Facto Clause.[294] In short, given that the sentence length formally will not change and that the prospect of earning credits remains speculative, Congress can alter the earned credit program without running afoul of the Ex Post Facto Clause.

In any event, Ex Post Facto principles would not likely prevent the Bureau of Prisons from altering its PATTERN methodology. The Court invalidated retroactive application of a change in sentencing regulations in *Miller v. Florida*, which would have presumptively increased the offender's sentence.[295] In contrast to *Miller*, however, an update of PATTERN might result in finding that recidivism is more likely for some inmates, but less for others. The very purpose of algorithms and AI is to improve accuracy and efficiency with greater information.[296] Changes to

290. *See* Paul D. Reingold & Kimberly Thomas, *Wrong Turn on the Ex Post Facto Clause*, 106 CAL. L. REV. 593, 620–21 (2018) (arguing that the presence of discretion should not be dispositive for ex post facto analysis, but rather the potential for earlier release).

291. Ames Grawert, *What Is the First Step Act — And What's Happening with It?*, BRENNAN CTR. FOR JUST. (June 23, 2020), https://www.brennancenter.org/our-work/research-reports/what-first-step-act-and-whats-happening-it ("Within a few years, the BOP must have 'evidence-based recidivism reduction programs and productive activities' available for *all* people in prison.").

292. *See id.* (discussing concerns raised by various parties that DOJ and BOP provide insufficient programming opportunities and that those that are available are often under-resourced and understaffed).

293. Peter J. Tomasek, *The BOP Has Discretion Under the First Step Act, but How Much?*, INTERROGATING JUST. (May 26, 2021), https://interrogatingjustice.org/ending-mass-incarceration/the-bop-has-discretion-under-the-first-step-act-but-how-much/ (discussing the BOP's discretionary authority to implement said programs, potentially even after the statutory "phase[-]in" period).

294. *See id.*; *see also* Ellis v. Norris, 232 F.3d 619, 622–24 (8th Cir. 2000); Burnette v. Fahey, 687 F.3d 171, 185–86 (4th Cir. 2012); Morales v. Francis, No. H-05-2955, 2005 U.S. Dist. LEXIS 26253, at *14–16 (S.D. Tex. Oct. 5, 2005).

295. Miller v. Florida, 482 U.S. 423, 432–36 (1987).

296. *See supra* notes 85–86 and accompanying text.

the methodology in PATTERN after an offender commits a relevant offense would not violate the ex post facto prohibition, even if the prediction of future dangerousness increases for some inmates. Indeed, DOJ has already altered PATTERN scores for some inmates based on a change in methodology.[297] The Supreme Court's decision in *Garner v. Jones* suggests that the Ex Post Facto Clause would only be violated if such change in methodology has created "a significant risk of prolonging . . . incarceration" within the "whole context of the parole system."[298] In *Garner*, the Court upheld a Georgia law extending the interval between periods of parole consideration.[299] Although Congress cannot abolish the First Step Act's enhanced good time credits policy retroactively,[300] it can alter how the government calculates the likelihood of recidivism, which it employs in the *earned* credit program. Thus, Ex Post Facto principles may prevent the government from retroactively removing the enhanced good time credits and, while Due Process principles in part constrain the government from rescinding the dynamic aspects of the First Step Act, the ex post facto prohibition likely does not come into play.

* * * *

If courts hold, as we have argued, that the First Step Act triggers Due Process protections, Congress or DOJ might react by inserting more discretion into the system. Instead of predicating early release on a low likelihood of future recidivism, Congress could determine that early release be permitted only when BOP officials deem it warranted, much like the parole system that existed for years.[301] No liberty interest would arise because the government would not have tied its own hands.[302] Nothing precludes Congress from altering the statutory scheme and

297. U.S. DEP'T OF JUST., FIRST STEP ACT IMPLEMENTATION: FISCAL YEAR 2020 90-DAY REPORT 1–3 (2020).

298. Garner v. Jones, 529 U.S. 244, 251–52 (2000).

299. *Id.* at 252–53, 256–57.

300. *See* Lynce v. Mathis, 519 U.S. 433, 445 (1997).

301. *See* FULWOOD ET AL., *supra* note 35, at 1 (stating that the Board of Parole created "explicit guidelines for parole-release decision making" prior to being phased out by the Comprehensive Crime Control Act of 1984).

302. Texas, for instance, created a roughly comparable risk assessment tool based on static and dynamic factors to govern parole, but explicitly vested discretion in parole authorities to disregard the guidelines when they deemed it appropriate. *Revised Parole Guidelines*, TEX. BD. OF PARDONS & PAROLES, https://www.tdcj.texas.gov/bpp/parole_guidelines/parole_guidelines.html (last visited Feb. 24, 2022) ("Parole panel members retain the discretion to vote outside the guidelines when circumstances of an individual case merit their doing so.").

changing PATTERN so as to avoid giving rise to the Due Process protections we have discussed.

Indeed, many states reacted to the Supreme Court's recognition of a liberty interest in parole by creating more discretionary parole decisions.[303] The response of Georgia is illustrative. Under the regulatory system, the Board of Pardons and Parole promulgated a Georgia Parole Decision Guidelines System, setting forth a step–by–step system to evaluate whether an inmate was entitled to parole.[304] The Board assigned an inmate a "Crime Severity Level," and a "Parole Success Likelihood Score."[305] Based on a combination of the two, the Board then established a target release date.[306] The parole statute directed that the "guidelines system shall be used in determining parole actions on all inmates."[307] Despite the seemingly objective standards, the Board added a note to its guidelines stating that "[t]he Board specifically reserves the right to exercise its discretion under Georgia law to deny parole even though Guidelines criteria are met by an inmate. It is not the intention of the Board to create a liberty interest of the type described in *Greenholtz v. Nebraska Penal Inmates*."[308]

Similarly, under a complicated point system, the District of Columbia formerly provided that certain offenders "shall" be granted parole.[309] In response to *Greenholtz* and its progeny, the City Council changed "shall" to "may."[310] Here, as well, BOP could make it clear that, despite the PATTERN algorithm, it retained the ultimate discretion whether to permit early release.

Such response, however, is inconsistent with the rehabilitative ideal underlying the First Step Act.[311] Congress made clear that it wanted inmates to enroll in programs that would reduce the risk of recidivism and facilitate offenders' reentry into society.[312] Congress presented

303. *See, e.g.*, GA. CODE ANN. § 42-9-40 (West 1980).
304. Sultenfuss v. Snow, 35 F.3d 1494, 1497 (11th Cir. 1994) (en banc).
305. *Id.*
306. *See id.*
307. *Id.* at 1496 (quoting GA. CODE ANN. § 42-9-40(a)).
308. *Id.* at 1503 (internal citation omitted).
309. *See* Ellis v. District of Columbia, 84 F.3d 1413, 1415–16 (D.C. Cir. 1996) (discussing generally D.C. Mun. Regs. tit. 28, § 204; App. 2–1 (1987) (amended 1994; repealed 1994)).
310. *See id.* at 1417 & n.4 (citing Technical Amendments Act of 1994, D.C. Act 10–302, §§ 52(c)–(e), 41 D.C. Reg. 5193, 5203 (July 25, 1994) (codified at D.C. Mun. Regs. tit. 28, §§ 204.19–.21 (1995) (repealed 2000)).
311. *See, e.g.*, Grawert, *supra* note 20 ("[T]he First Step Act . . . aim[s] at making the federal justice system . . . more focused on rehabilitation.").
312. *See, e.g.*, First Step Act of 2018, Pub. L. No. 115-391, § 102, 132 Stat. 5194, 5209–10 ("The Director of the Bureau of Prisons shall provide all prisoners with the opportunity to actively participate in evidence–based recidivism reduction programs or

inmates with a choice—take steps during the period of incarceration to reduce the likelihood of recidivism or serve out the sentence in prison as originally meted.[313] Changing to a discretionary system, as in the Georgia and D.C. contexts, would blunt the force of the congressional goal and reintroduce the ills of excessive discretion, which had led Congress to scrap the parole system in the first instance.[314] Inmates should be able to trust that successful completion of recidivism reduction programming is the quid pro quo for early release.[315] Otherwise, future inmates would have no reason to rely on promises of prison authorities and less reason to pursue the recidivism reduction programming, with a greater likelihood that they will recidivate in the future.

Indeed, many of the theories underlying rehabilitation focus on the importance of treating inmates with dignity.[316] Respectful interaction increases "inmates' motivation to work towards rehabilitation."[317] Part of

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productive activities, according to their specific criminogenic needs, throughout their entire term of incarceration.") (codified as amended at 18 U.S.C. § 3621(h)(6)).

313. *See* § 101, 132 Stat. at 5198 ("A prisoner . . . who successfully completes evidence–based recidivism reduction programming or productive activities shall earn time credits . . . .") (codified at 18 U.S.C. § 3632(d)(4)(A)). If a prisoner does not successfully complete such programming or activities, they do not get the time credits. *Id.*

314. Douglas A. Berman, *Reflecting on Parole's Abolition in the Federal Sentencing System*, 81 FED. PROB. J. 18, 18–19 ("[In the 1970s,] [j]udges, politicians, academics, and advocates became increasingly suspicious of the efficacy of efforts to rehabilitate offenders and increasingly concerned about discretionary sentencing procedures . . . .").

315. In 2014, Congress established a Task Force and directed it "to conduct an independent assessment of the federal [corrections] system to identify driving increases in the [BOP's] population and cost and produce recommendations for lasting reform." TRANSFORMING PRISONS, *supra* note 186, at vii. In 2016, the Task Force produced its report, and in 2018, Congress incorporated that report into a report of its own in support of H.R. 5682, the bill that would become the First Step Act. H.R. REP. NO. 115-699, at 22–24 (2018). The Task Force's report stated that "one's motivation to change can be enhanced through positive interactions with staff . . . ." TRANSFORMING PRISONS, *supra* note 186, at 36. Given that Congress commissioned this report and read it, it stands to reason that Congress was aware of the connection between treating inmates with respect and rehabilitation.

316. *See, e.g.*, Edgardo Rotman, *Do Criminal Offenders Have a Constitutional Right to Rehabilitation?*, 77 J. CRIM. L. & CRIMINOLOGY 1023, 1034 (1986); Jeremy Coylewright, *New Strategies for Prisoner Rehabilitation in the American Criminal Justice System: Prisoner Facilitated Mediation*, 7 J. HEALTH CARE L. & POL'Y 395, 406 (2004); Anita H. S. Hurlburt, *Building Constructive Prison Reform on Norway's Five Pillars, Cemented with Aloha*, 19 ASIAN–PAC. L. & POL'Y J. 194, 232–33 (2018) (focusing on Norway's prison policies in advocating for reform of Hawaii's criminal justice policies); Evan R. Seamone, *Reclaiming the Rehabilitative Ethic in Military Justice: The Suspended Punitive Discharge as a Method to Treat Military Offenders with PTSD and TBI and Reduce Recidivism*, 208 MIL. L. REV. 1, 62 (2011) ("[Those] who are fighting their way back to honor and self–respect . . . deserve favorable assistance and favorable consideration wherever they go." (citation omitted)); Amanda Ploch, Note, *Why Dignity Matters: Dignity and the Right (Or Not) to Rehabilitation from International and National Perspectives*, 44 N.Y.U. J. INT'L L. & POL. 887, 890 (2012).

317. Hurlburt, *supra* note 316, at 237 (footnote and citation omitted).

the First Step Act furthers that goal by encouraging offenders to take agency of their own futures. Thus, Congress should welcome the limited constitutionalization of early release because that very determination may well further the rehabilitative goals in the Act.

III. CONCLUSION

In sum, the First Step Act reaches into history to bring back rehabilitation as a goal of our federal criminal justice system.[318] The centerpiece of that effort—inclusion of dynamic factors to encourage inmates to pursue steps while incarcerated that should minimize the chances of recidivism—has yet to be fully implemented, but holds significant promise for the future.[319]

At the same time, Congress's efforts will straightjacket its own flexibility in the future to alter prison policies for those already in the system.[320] Prison authorities must disclose to offenders who are excluded from eligibility under both the statute and PATTERN, the inputs upon which the exclusion was based, and inmates excluded from eligibility under PATTERN must be afforded a limited opportunity to present information that they should be entitled to earn credits towards early release despite what the algorithm indicates.[321] Moreover, the earned credit system itself creates a liberty interest, which prison authorities must respect once the recidivism reduction programs have been completed.[322] And, while Congress can jettison both the static and dynamic factors prospectively, it must, pursuant to the ex post facto prohibition, honor the increase in good time credits for those who committed offences prior to the operative date.[323] Perhaps unwittingly, Congress's measures in the First Step Act have constitutionalized in part the former discretionary decision to release inmates before the end of their incarceration.[324] Such constitutionalization will result in greater administrative costs. That price seems more than reasonable to create a quasi-contract between the government and offender to help the offender take the steps needed to reenter society and avoid the trap of recidivism.

318. *See supra* Part I.
319. *See supra* Part I.D.
320. *See supra* Part II.
321. *See generally id.*
322. *See generally supra* Part II.A.
323. *See supra* Part II.B.
324. *Id.*