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Introducing Disruptive Technology to Criminal Sanctions

PUNISHMENT BY COMPUTER MONITORING TO ENHANCE SENTENCING FAIRNESS AND EFFICIENCY

Mirko Bagaric[†], Dan Hunter^{††}, and Colin Loberg^{†††}

INTRODUCTION

The United States has the most punitive criminal justice system on Earth. The total corrections population in the United States is more than 6,613,000 people,¹ consisting of approximately 3,673,100 offenders under probation,² 874,800 on parole³ and 2,162,400 undergoing incarceration in prisons and jails.⁴ Incredibly, this means about one in thirty-eight adults in the United States is undergoing correctional supervision.⁵ Focusing solely on parole and probation, it emerges that more offenders are undergoing these sanctions than “live in half of all U.S. states.”⁶ “Approximately [one] in [fifty-five] adults in the United States were under community supervision [i.e., parole or probation] at year-end 2016.”⁷ This is a staggering statistic. It is made all the more remarkable because no meaningful community dividend has been

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¹ DANIELLE KAEBLE & MARY COWHIG, U.S. DEP’T OF JUSTICE, NCJ 251211, CORRECTIONAL POPULATIONS IN THE UNITED STATES, 2016, at 1 (2018), <https://www.bjs.gov/content/pub/pdf/cpus16.pdf> [<https://perma.cc/D7ZZ-ZKES>].

² DANIELLE KAEBLE, U.S. DEP’T OF JUSTICE, NCJ 251148, PROBATION AND PAROLE IN THE UNITED STATES, 2016, at 1 (2018), <https://www.bjs.gov/content/pub/pdf/ppus16.pdf> [<https://perma.cc/S8HR-ZCYP>] [hereinafter PROBATION AND PAROLE].

³ *Id.*

⁴ KAEBLE & COWHIG, *supra* note 1, at 2.

⁵ *Id.* at 4.

⁶ Larry Krasner & Miriam Krinsky, *Larry Krasner: Time to Rethink Probation and Parole*, INQUIRER DAILY NEWS PHILLY.COM (May 25, 2018), <http://www.philly.com/philly/opinion/commentary/larry-krasner-probation-parole-community-corrections-criminal-justice-philadelphia-20180525.html> [<https://perma.cc/C39J-REHX>].

⁷ PROBATION AND PAROLE, *supra* note 2, at 1.

derived from this unprecedented restraint on human liberty. In particular, America is not safer.⁸ The only tangible effects of the massive increase in correctional numbers over the past four decades are the mountainous financial burdens on the taxpayer and the severe fragmentation of millions of family units.⁹

The focus of this article is to propose technological sanctions that can replace all forms of community supervision sanctions.¹⁰ These come in two main forms. Probation is a court-imposed order mandating correctional supervision in the community and is normally imposed as an alternative to incarceration.¹¹ Parole is a post-incarceration order that is normally made by a parole board and involves releasing the offender into the community.¹² Thus, probation is a front-end sanction, which is used instead of prison, while parole is a back-end sanction, which is invoked after an offender has served part of his or her prison term. Offenders who are placed on probation or released on parole are normally subjected to a number of restrictions.¹³

The conditions that are imposed as part of probation and parole are generally quite similar. The most important condition is not to commit any further offenses.¹⁴ Other requirements typically include geographical restrictions (for example, constraints on where an offender can reside and travel) and behavioral restrictions, including a prohibition against offending and consuming drugs and alcohol.¹⁵ A corrections officer non-pervasively monitors these orders.¹⁶ Generally, it consists of pre-organized meetings with staff.¹⁷

The key problem with monitoring offenders on probation and parole is that the supervision is only intermittent and hence there is ample opportunity for offenders to violate the conditions of their orders. Not surprisingly, reoffending rates are high¹⁸—the average failure of rate of parole is approximately twenty-eight percent.¹⁹ Moreover, studies show that placing offenders on parole after release from prison does not reduce the rate at which they

⁸ See *infra* INTRODUCTION.

⁹ *Id.*

¹⁰ This does not include prison.

¹¹ PROBATION AND PAROLE, *supra* note 2, at 2.

¹² See *infra* INTRODUCTION.

¹³ See *infra* INTRODUCTION.

¹⁴ See *infra* Part III.

¹⁵ See *infra* Part I.

¹⁶ See *infra* Part III.

¹⁷ See *infra* Part III.

¹⁸ See *infra* Part III.

¹⁹ Krasner & Krinsky, *supra* note 6.

are rearrested.²⁰ Another problem with these sanctions are their expense. It costs between \$1,000 to over \$4,000 annually to monitor each offender who is on probation or parole.²¹

The need for new forms of sanctions has been highlighted by a recent report which notes fundamental failings of probation and parole systems. Systemic problems with the systems relate to a lack of appropriate resourcing, leading to offenders being sent to prison for technical violations, such as missing curfews or socializing with forbidden associates. Thus, it has been claimed that “the parole and probation systems have become . . . a significant driver of recidivism.”²²

Moreover, it has been observed that while in recent years most of the focus in criminal justice reform in the United States has been on the mass incarceration problem, the massive increase in probation and parole numbers has gone largely unnoticed. It is an under-researched area of law and the sanctions are not properly designed to meet their objectives. To this end, a recent report by the Columbia University Justice Lab notes:

Originally designed as alternatives to incarceration, the authors find that probation and parole are a deprivation of liberty in their own right and have become key drivers of mass incarceration by serving as a trip wire to reincarceration for many of those under supervision. The authors argue that community corrections populations have risen alongside prison and jail populations but that community corrections has not been funded adequately to meet the needs of a population of individuals beset by poverty, unemployment, inadequate housing, mental illness and substance use.²³

In August 2017, more than forty community corrections executives and many other individuals and organizations working in the criminal justice industry across the United States noted that parole and probation are ineffective sanctions, which too often become significant contributors to “mass incarceration with nearly as many people entering prison for violations of

²⁰ Carl Reynolds et al., *Justice Reinvestment in Pennsylvania*, CSG JUST. CTR. (Sept. 2016), <https://csgjusticecenter.org/wp-content/uploads/2016/09/JR-in-Pennsylvania-Fourth-Presentation.pdf> [<https://perma.cc/4ZUH-H2RR>].

²¹ See *infra* Sections III.B, III.C.

²² The Editorial Board, *The Problem with Parole*, N.Y. TIMES (Feb. 11, 2018), <https://www.nytimes.com/2018/02/11/opinion/problem-parole.html> [<https://perma.cc/7G38-APQQ>]; see also Vincent Schiraldi & Jennifer Arzu, *Less is More in New York: An Examination of the Impact of State Parole Violations on Prison and Jail Populations*, COLUM. U. JUST. LAB 1 (Jan. 29, 2018), http://justicelab.iserp.columbia.edu/img/Less_is_More_in_New_York_Report_FINAL.pdf [<https://perma.cc/8BQW-Y3Q8>].

²³ *Too Big to Succeed: The Impact of the Growth of Community Corrections and What Should Be Done About It*, COLUM. U. JUST. LAB 1 (Jan. 29, 2018), https://justicelab.columbia.edu/sites/default/files/content/Too_Big_to_Succeed_Report_FINAL.pdf [<https://perma.cc/MTP8-G7U3>].

community corrections conditions as for new offenses.”²⁴ The group advocated that more resources should be directed towards rehabilitative measures, as opposed to continuing with the current parole and probation process.²⁵

Thus, there is a widespread recognition that the parole and probation systems have failed and require fundamental reform. Technology can facilitate all aspects of probation and parole far more effectively and efficiently than is currently the case. Motion sensors and surveillance tracking devices, which are already in use in the health sector (for example, to detect when people have falls) and in driverless cars can be adapted to record every movement of an offender.²⁶ This technology would not only greatly improve compliance with the conditions of community service orders, but it would also provide evidential data if offenders did reoffend, thereby saving considerable police and prosecution costs.

In this article, we propose a solution to deal with the main inadequacies associated with common forms of criminal sanctions in the nature of parole and probation. The key aspect of the solution involves resorting to an area of learning that is almost foreign to the criminal justice system, but commonplace in all other areas of society: new technological systems. Sentencing is the area of human society which has been least impacted by developments in science and technology.²⁷ The main manner in which we punish offenders has effectively remained unchanged for centuries. The mainstay of criminal punishment remains imprisonment, which involves confining offenders behind high concrete walls, as we have done for centuries. The most common sanction for less serious offenders in the United States is probation.²⁸ The United States Sentencing Commission has recognized the need for new criminal sanctions.²⁹

²⁴ *Statement on the Future of Community Corrections*, COLUM. U. JUST. LAB (Aug. 28, 2017), <http://justicelab.iserp.columbia.edu/statement.html> [<https://perma.cc/QL9L-RTN7>].

²⁵ See Krasner & Krinsky, *supra* note 6.

²⁶ See *infra* Part IV.

²⁷ Mirko Bagaric et al., *Technological Incarceration and the End of the Prison Crisis*, 108 J. CRIM. L. & CRIMINOLOGY 73, 77 (2018).

²⁸ See *infra* Part I.

²⁹ See generally U.S. SENTENCING COMM'N, FEDERAL ALTERNATIVE-TO- INCARCERATION COURT PROGRAMS (Sept. 2017), https://www.ussc.gov/sites/default/files/pdf/research-and-publications/researchpublications/2017/20170928_alternatives.pdf [<https://perma.cc/BPV4-NCX4>]. This is especially in relation to first offenders. See U.S. SENTENCING COMM'N, PROPOSED AMENDMENTS TO SENTENCING GUIDELINES 1 (2016), https://www.ussc.gov/sites/default/files/pdf/amendment-process/reader-friendly-amendments/20161219_rf_proposed.pdf [<https://perma.cc/893A-58FD>].

The reason for the gulf between technology and criminal justice, and in particular criminal sanctions, is unclear.³⁰ Irrespective of the explanation for this, we argue there is a need for a fusion between the two areas of learning and societal practice. This article recommends a new type of sanction (which we term the “monitoring sanction”) which can fundamentally alter and disrupt the nature of criminal sanctions. The aim is to develop economically affordable sanctions which punish offenders proportionately for their crimes, while limiting their capacity to reoffend during the period of the sanction. The fulcrum, around which the new sanction would be based, is the technological real-time monitoring of all the offenders’ actions.

In previous writings, we have recommended that most prisons terms should be replaced with a new sanction, which in essence consists of technological incarceration.³¹ The solution proposed in this article builds on this proposal and expands it to include the full range of criminal sanctions that are imposed for serious offenses.³² Part I of the article provides an overview of the crisis that currently exists in the criminal justice system, in the form of the overly punitive nature of criminal sanctions. We also outline the current momentum for wide-ranging reform. Part II examines the appropriate objectives of sentencing as a backdrop to the aims of the sanctions that we propose in the article. Part III provides an overview of the manner in which parole and probation are currently implemented in the United States. In Part IV, we detail the manner in which the new monitoring sanction would be developed and implemented. Possible criticisms of the monitoring sanction are dealt with in Part V. Our recommendations are summarized in our concluding remarks.

³⁰ Some explanations are offered in Bagaric et al., *supra* note 27, at 77, 98–102.

³¹ *Id.* at 73, 77–78.

³² The new sanctions we propose can also replace most fines that are issued by the courts. However, the priority is on substitutes to incarceration, parole and probation, given that incarceration alone comprises about 70% of all criminal sanctions. See Danielle Allen, *How Should We Deal with Wrongdoing? And You Can't Say 'Prison,'* WASH. POST (May 16, 2018), https://www.washingtonpost.com/opinions/how-should-we-deal-with-wrongdoing-and-you-cant-say-prison/2018/05/16/315751fe-5934-11e8-8836-a4a123c359ab_story.html [https://perma.cc/7HAA-GSVS].

I. THE CRIMINAL JUSTICE CRISIS

A. *The Over-Punitive Criminal Justice System*

More Americans are undergoing correctional sanctions than in any other country in the world.³³ Currently, there are more than 2.1 million Americans in prisons or local jails.³⁴ This rate has been steadily increasing over the past forty years,³⁵ and has more than doubled over the past two decades.³⁶ In recent years, incarceration levels have been declining but, as discussed further below, the decrease is very minor.³⁷ The imprisonment rate is 660 per one hundred thousand U.S. residents or, viewed slightly differently, 860 per one hundred thousand U.S. residents ages 18 or older.³⁸ The scale of this is illustrated by the fact that the United States is the world's biggest incarcerator. Its imprisonment rate is approximately ten times that of certain Scandinavian countries, including Sweden and Finland.³⁹ Prison rates in the United States are, however, far from uniform. Some states, such as Maine, Massachusetts, Minnesota and Vermont, have imprisonment numbers around three hundred per one hundred thousand adult residents.⁴⁰ Others, however, are staggeringly high. Oklahoma and Louisiana have 1,079 and 1,052 prisoners per one hundred thousand adult residents respectively.⁴¹

The price of incarcerating so many offenders in United States' prisons is more than \$1 trillion each year—almost six

³³ MELISSA S. KEARNEY ET AL., THE HAMILTON PROJECT, BROOKINGS INST., TEN ECONOMIC FACTS ABOUT CRIME AND INCARCERATION IN THE UNITED STATES 10 (2014), http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/v8_THP_10CrimeFacts.pdf [https://perma.cc/8DR2-P46S].

³⁴ DANIELLE KAEBLE & LAUREN GLAZE, U.S. DEP'T OF JUSTICE, NCJ 250374, CORRECTIONAL POPULATION IN THE UNITED STATES, 2015, at 1 (2016), <https://www.bjs.gov/content/pub/pdf/cpus15.pdf> [https://perma.cc/4LPV-AS7J].

³⁵ In fact, during this period it has quadrupled. See NAT'L RESEARCH COUNCIL, THE GROWTH OF INCARCERATION IN THE UNITED STATES: EXPLORING CAUSES AND CONSEQUENCES 34 (Jeremy Travis et al. eds., 2014).

³⁶ Albert R. Hunt, *A Country of Inmates*, N.Y. TIMES (Nov. 20, 2011), <http://www.nytimes.com/2011/11/21/us/21iht-letter21.html> [https://perma.cc/L45S-FAFC].

³⁷ See *infra* Part I.

³⁸ KAEBLE & GLAZE, *supra* note 34, at 12.

³⁹ KEARNEY ET AL., *supra* note 33, at 10. Incarceration rates in Organisation for Economic Co-operation and Development (OECD) countries range from forty-seven to 266 per 100,000 residents. John Pfaff and James Forman argue that the key reason for the increase in incarceration numbers is stricter prosecution practices, where felonies were charged at a higher rate and in larger numbers. See, e.g., JAMES FORMAN JR., LOCKING UP OUR OWN: CRIME AND PUNISHMENT IN BLACK AMERICA 129 (1st ed. 2017); JOHN F. PFAFF, LOCKED IN: THE TRUE CAUSES OF MASS INCARCERATION AND HOW TO ACHIEVE REAL REFORM (2017).

⁴⁰ Peter Wagner & Wendy Sawyer, *States of Incarceration: The Global Context 2018*, PRISON POL'Y INITIATIVE (June 2018), <https://www.prisonpolicy.org/global/2018.html> [https://perma.cc/VWR3-RNVN].

⁴¹ *Id.*

percent of America's Gross Domestic Product⁴² (this figure includes the raw monetary cost of prisons, which is around \$80 billion each year,⁴³ plus the indirect social costs incurred through mass incarceration). As these costs are met by government, expenditure on incarceration necessarily depletes the funds available for other social services.⁴⁴ Indeed, currently in some states, governments spend more on prisons than on higher education.⁴⁵ According to the National Research Council

⁴² Michael McLaughlin et al., *The Economic Burden of Incarceration in the U.S.* 4 (Fla. State Univ. Inst. for Justice Research & Innovation, Working Paper No. IJRD07, 2016.), https://ijrd.csw.fsu.edu/sites/g/files/upcbnu1766/files/media/images/publication_pdfs/Economic_Burden_of_Incarceration_IJRD072016_0.pdf [<https://perma.cc/9F38-4QWZ>]. The direct costs of the criminal justice system are \$270 billion annually. LAUREN-BROOKE "L.B." EISEN & INIMAI M. CHETTIAR, BRENNAN CTR. FOR JUSTICE, CRIMINAL JUSTICE: AN ELECTION AGENDA FOR CANDIDATES, ACTIVISTS, AND LEGISLATORS 1 (2018), https://www.brennancenter.org/sites/default/files/publications/2018_05_Agendas_CriminalJustice_pdf.pdf [<https://perma.cc/RF5Y-JWXR>].

⁴³ Barack Obama, *The President's Role in Advancing Criminal Justice Reform*, 130 HARV. L. REV. 811, 818 (2017).

⁴⁴ For an analysis of why mass incarceration is flawed from a financial perspective, see Jason Furman & Douglas Holtz-Eakin, *Why Mass Incarceration Doesn't Pay*, N.Y. TIMES (Apr. 21, 2016), <http://www.nytimes.com/2016/04/21/opinion/why-mass-incarceration-doesnt-pay.html> [<https://perma.cc/4764-FWRC>].

⁴⁵ See Adam Gopnik, *The Caging of America*, NEW YORKER (Jan. 22, 2012), <http://www.newyorker.com/magazine/2012/01/30/the-caging-of-america> [<https://perma.cc/8QZZ-TWYG>]. Reduced investment in education is also occurring at the more junior education level:

In recent . . . years states have cut education funding, in some cases by large amounts. At least [thirty] states are providing less general funding per student this year for K-12 schools than in state fiscal year 2008, before the Great Recession hit, after adjusting for inflation. In [fourteen] states, the reduction exceeds [ten] percent. The three states with the deepest funding cuts since the recession hit—Alabama, Arizona, and Oklahoma—are among the ten states with the highest incarceration rates.

Michael Mitchell & Michael Leachman, *Changing Priorities: State Criminal Justice Reforms and Investments in Education*, CTR. ON BUDGET & POL'Y PRIORITIES 10 (Oct. 28, 2014), <https://www.cbpp.org/sites/default/files/atoms/files/10-28-14sfp.pdf> [<https://perma.cc/X3RK-UC6P>]; see also Beatrice Gitau, *The Hidden Costs of Funding Prisons Instead of Schools*, CHRISTIAN SCI. MONITOR, (Oct. 3, 2015), <http://www.csmonitor.com/USA/Justice/2015/1003/The-hidden-costs-of-funding-prisons-instead-of-schools> [<https://perma.cc/FWK2-RE5R>] (noting that eleven states spend more on prisons than universities: "Michigan, Oregon, Arizona, Vermont, Colorado, Pennsylvania, New Hampshire, Delaware, Rhode Island, Massachusetts, and Connecticut"). More recently, it has been documented that

In the past [thirty] years, we've seen a shift in the way we allocate resources—spending on education has grown painfully slowly, compared to spending on incarceration. Between 1980 and 2013, education budgets grew by [fifty-eight] percent in West Virginia, [sixty-nine] percent in Oklahoma, and 102 percent in Kentucky; during that time there was an explosive growth of spending on incarceration with an increase of 483 percent in West Virginia, 341 percent in Oklahoma and 259 percent in Kentucky. Other states showed similar patterns during those years: Colorado saw a growth of 103 percent for education but 513 percent for corrections; Arizona spent 188 percent more for education but 491 percent more for corrections.

spending by many states on corrections has outpaced government spending on nearly all of other types of services.⁴⁶

Shouldering the financial burden of the criminal justice system has become increasingly difficult. As former President Barack Obama remarked, “We simply cannot afford to spend \$80 billion annually on incarceration.”⁴⁷ This massive sum has become ever more politically indefensible as the expense has failed to result in any tangible benefits to the community, and in particular, there has not been a demonstrated increase in public safety. Upon reviewing the effects that increased “tough on crime” measures have on crime rates, David Roodman surmised, “my best estimate is that the best estimate of the impact of additional incarceration on crime in the United States today is zero. And, while that estimate is not certain, there is as much reason overall to believe that incarceration increases crime as decreases it.”⁴⁸ In his comprehensive September 2017 study, Roodman lists two crucial reasons why he believes that increasing imprisonment rates do not reduce the number of crimes committed:

[P]utting more people in prison may cause more crime in prison [I]ncarceration may be more criminogenic than rehabilitative. Having been imprisoned may make it harder for people to find legal employment, may psychologically alienate them from society, or may strengthen their social bonds with criminals, all of which could raise recidivism.⁴⁹

While the focus of over-punishment in the United States has been on the growth in prison numbers, the sanctions where the “tough on crime” approach has manifested most extensively are probation and parole. A recent report by the Columbia University Justice Lab notes that while probation and parole have dropped slightly (by ten percent) from 2007 to 2015, in relative terms (as measured by the ratio of arrests to the imposition of parole or probation) the use of such sanctions has in fact increased to the point where one out of fifty-three American adults in 2015 was on parole or probation.⁵⁰

Marc Schindler, *Taxing Our Kids to Fund Prisons*, HILL (May 2, 2018), <http://thehill.com/opinion/education/385520-taxing-our-kids-to-fund-prisons> [<https://perma.cc/B89M-3GAY>].

⁴⁶ NAT'L RESEARCH COUNCIL, *supra* note 35, at 314–19; *see also* KEARNEY ET AL., *supra* note 33, at 13.

⁴⁷ Obama, *supra* note 43, at 815.

⁴⁸ DAVID ROODMAN, OPEN PHILANTHROPY PROJECT, *THE IMPACTS OF INCARCERATION ON CRIME* 7 (2017), https://www.openphilanthropy.org/files/Focus_Areas/Criminal_Justice_Reform/The_impacts_of_incarceration_on_crime_10.pdf [<https://perma.cc/2N9S-Y7BX>].

⁴⁹ *Id.*

⁵⁰ *Too big to Succeed*, *supra* note 23, at 2.

As noted by the above report, the number of adults under probation or parole has reduced by approximately ten percent since 2007 but the total number of adults under probation or parole remains remarkably high—more than four million people⁵¹—and hence, there is a strong need to reflect upon and review the efficiency and efficacy of the sanctions.

B. The Causes of Over-Punishment in the United States

Prior to examining the current momentum for sentencing reform in the United States, this article provides an overview of the causes of the harsh sentencing approach that currently exists in America. The move from the 1970s approach of discretionary sentencing to one with harsh fixed or presumptive sanctions is the largest contributor to the current high correctional population. Before this shift, American sentencing courts had considerable discretion in setting penalties.⁵² Judge Nancy Gertner observed the expanse of the courts' decision-making freedom at that time:

Consistent with this view of judges as the sentencing experts, Congress took a back seat, prescribing a broad range of punishments for each offense, and intervening only occasionally to increase the maximum penalty for specific crimes in response to public demand. Judges had substantial discretion to sentence, so long as it was within the statutory range. In effect, the breadth of the sentencing range left to the courts the task of “distinguishing between more or less serious crimes within the same category.”⁵³

The arguments voiced by those opposed to “indeterminate sentencing,” as Gertner described it, focused on its supposed opaqueness, inconsistency, and unreliability, which Gertner stated could be attributed to the following fundamental flaw:

⁵¹ *Id.*

⁵² Nancy Gertner, *A Short History of American Sentencing: Too Little Law, Too Much Law, or Just Right*, 100 J. CRIM. L. & CRIMINOLOGY 691, 695–97 (2010). As noted by William W. Berry III, Prior to 1984, federal judges possessed discretion that was virtually “unfettered” in determining sentences, guided only by broad sentence ranges provided by federal criminal statutes. The *Sentencing Reform Act of 1984* (the “Act”) moved the sentencing regime almost completely to the other extreme, implementing a system of mandatory guidelines that severely limited the discretion of the sentencing judge. William W. Berry III, *Discretion Without Guidance: The Need to Give Meaning to § 3553 After Booker and Its Progeny*, 40 CONN. L. REV. 631, 633 (2008) (emphasis added). They are also one of the key distinguishing aspects of the United States sentencing system compared to many other countries. See CONNIE DE LA VEGA ET AL., UNIV. S.F. SCH. OF LAW CTR. FOR LAW & GLOBAL JUSTICE, CRUEL AND UNUSUAL: U.S. SENTENCING PRACTICES IN A GLOBAL CONTEXT 46–47 (2012), <https://www.usfca.edu/sites/default/files/law/cruel-and-unusual.pdf> [<https://perma.cc/KN82-P2AN>] (noting that 137 of 168 surveyed countries had some form of minimum penalties, but none of the others were as wide ranging or severe as in the United States).

⁵³ Gertner, *supra* note 52, at 696.

[J]udges had no training in how to exercise their considerable discretion. Whatever the criminological literature, judges did not know about it. Sentencing was not taught in law schools; and to the extent there was any debate about deterrence and rehabilitation . . . it was not reflected in judicial training. It was as if judges were functioning as diagnosticians without authoritative texts, surgeons without *Gray's Anatomy*.⁵⁴

In 1973, Judge Marvin Frankel, in an influential commentary, asserted that this indeterminate system was “lawless.”⁵⁵ The push for prescriptive penalties dovetailed with the “tough on crime” political agenda, which was a response to increases in the crime rate and skepticism about the capacity of the criminal justice system to rehabilitate offenders.⁵⁶

The move toward guideline or mandatory sentencing grew quickly and today all U.S. jurisdictions to some degree have penalties of this nature.⁵⁷ Nineteen U.S. jurisdictions have *extensive* guideline sentencing systems.⁵⁸ These guidelines assign fixed or presumptive penalties,⁵⁹ with the two main determinants of penalty severity being the seriousness of the offense and the prior criminal history of the offender.⁶⁰ The main sentencing objective that underpinned these sentencing regimes was community protection.⁶¹

⁵⁴ *Id.* at 696–97.

⁵⁵ MARVIN E. FRANKEL, CRIMINAL SENTENCES: LAW WITHOUT ORDER 8 (1973). For a critique of his impact, see Lynn Adelman & Jon Deitrich, *Marvin Frankel's Mistakes and the Need to Rethink Federal Sentencing*, 13 BERKELEY J. CRIM. L. 239, 242, 245–54 (2008).

⁵⁶ See KIDEUK KIM & BRYCE PETERSON, URBAN INST., AGING BEHIND BARS: TRENDS AND IMPLICATIONS OF GRAYING PRISONERS IN THE FEDERAL PRISON SYSTEM 6 (2014), <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/413222-Aging-Behind-Bars-Trends-and-Implications-of-Graying-Prisoners-in-the-Federal-Prison-System.PDF> [<https://perma.cc/FF6R-Q468>].

⁵⁷ Mandatory or guideline sentences are also one of the key distinguishing aspects of the United States sentencing system compared to that of Australia's (and most other sentencing systems in the world). See CONNIE DE LA VEGA ET AL., *supra* note 52, at 42–45; Michael Tonry, *Remodeling American Sentencing: A Ten-Step Blueprint for Moving Past Mass Incarceration*, 13 CRIMINOLOGY & PUB. POL'Y 503, 517 (2014); see also Kevin R. Reitz, *introduction to AMERICAN EXCEPTIONALISM IN CRIME AND PUNISHMENT* 22–24 (Kevin R. Reitz ed., 2018).

⁵⁸ These jurisdictions include Alabama, Kansas, Oregon, Maryland, Pennsylvania, Arkansas, Massachusetts, Tennessee, Delaware, Michigan, Utah, District of Columbia, Minnesota, Virginia, Federal (US courts), North Carolina, Washington, Florida and Ohio. See Richard S. Frase & Kelly Lyn Mitchell, *What Are Sentencing Guidelines?*, U. MINN. ROBINA INST. CRIM. L. & CRIM. JUST. (Mar. 21, 2018), <http://sentencing.umn.edu/content/what-are-sentencing-guidelines> [<https://perma.cc/8ELF-7M5Q>].

⁵⁹ For the purposes of clarity, these forms of penalties both come under the terminology of fixed or standard penalties in this article.

⁶⁰ See NAT'L RESEARCH COUNCIL, *supra* note 35, at 325.

⁶¹ See *id.* at 9. The states' and federal government's other sentencing objectives are general deterrence, specific deterrence, rehabilitation, and retribution. See U.S. SENTENCING GUIDELINES MANUAL ch.1 pt. A (U.S. SENTENCING COMM'N 2016) [hereinafter GUIDELINES MANUAL]. For an overview of the flaws with the Federal Guideline system, see

As William W. Berry III notes, guideline sentencing systems have greatly diminished judicial discretion in sentencing:

Prior to 1984, federal judges possessed discretion that was virtually “unfettered” in determining sentences, guided only by broad sentence ranges provided by federal criminal statutes. The Sentencing Reform Act of 1984 . . . moved the sentencing regime almost completely to the other extreme, implementing a system of mandatory guidelines that severely limited the discretion of the sentencing judge.⁶²

Numerous studies have shown that the introduction of sentencing guidelines has led to a substantial increase in prison numbers and an increase in the length of prison terms for many offenses.⁶³ In 2012, the Pew Center reported that since 1990, the average length of prison terms had increased by thirty-six percent.⁶⁴ In 2013, more than ten percent of American prisoners were serving life sentences.⁶⁵ This is a four-fold increase from 1984, despite the decline in the crime rate since this time.⁶⁶ This is in keeping with the observations of the U.S. Sentencing Commission, which notes: “the average sentence length for offenders who were convicted of an offense carrying a mandatory minimum penalty was 110 months of imprisonment, nearly four times the average sentence (28 months) for offenders not convicted of an offense carrying a mandatory minimum penalty.”⁶⁷

It is important to emphasize that the increased penalties did not simply lead to more offenders in prison. Increasing numbers of

generally Jon O. Newman, *The Federal Sentencing Guidelines: A Good Idea Badly Implemented*, 46 HOFSTRA L. REV. 805 (2018).

⁶² Berry III, *supra* note 52, at 633; see also Lynn Adelman, *How Congress, the U.S. Sentencing Commission, and Federal Judges Contribute to Mass Incarceration*, LITIGATION, Fall 2017, at 1, 1–2.

⁶³ Mitchell & Leachman, *supra* note 45, at 2–6; see also *More Prison, Less Probation for Federal Offenders*, PEW CHARITABLE TR. (Jan. 12, 2016), <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2016/01/more-prison-less-probation-for-federal-offenders> [<https://perma.cc/B2YR-9DF4>]. Most recently, see U.S. SENTENCING COMM’N, MANDATORY MINIMUM PENALTIES FOR DRUG OFFENSES IN THE FEDERAL CRIMINAL JUSTICE SYSTEM 4, 6 (2017), where it is noted that “[m]andatory minimum penalties continued to have a significant impact on the size and composition of the federal prison population” and “[d]rug mandatory minimum penalties applied more broadly than Congress may have anticipated.”

⁶⁴ THE PEW CTR. ON THE STATES, THE PEW CHARITABLE TRS., TIME SERVED: THE HIGH COST, LOW RETURN OF LONGER PRISON TERMS 2 (June 2012), http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/sentencing_and_corrections/prison-timeserved.pdf [<https://perma.cc/Z2HD-WZAS>].

⁶⁵ ASHLEY NELLIS, SENTENCING PROJECT LIFE GOES ON: THE HISTORIC RISE IN LIFE SENTENCES IN AMERICA 1 (2013), <http://sentencingproject.org/wp-content/uploads/2015/12/Life-Goes-On.pdf> [<https://perma.cc/Y38H-FCLG>].

⁶⁶ *Id.*

⁶⁷ U.S. SENTENCING COMM’N, AN OVERVIEW OF MANDATORY MINIMUM PENALTIES IN THE FEDERAL CRIMINAL JUSTICE SYSTEM 6 (2017), https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2017/20170711_Mand-Min.pdf [<https://perma.cc/WWJ7-9WLJ>].

prisoners resulted in more offenders on parole (at the tail of their prison term) and also more offenders being placed on probation. Further, the “tough on crime” approach resulted in increasingly stringent conditions being imposed as part of parole and probation. To this end, the Report by the Columbia Justice Lab notes:

Probation and parole were swept up in the explosive national growth of imprisonment, the passage of mandatory sentencing and “three strikes” laws, and the increase in sentence lengths. As Corbett describes, “. . . no probation administrator could afford to ignore the shifting political winds. Accordingly, probation departments around the country raced to take on the look and feel and accoutrements of a ‘get tough’ agency.” These accoutrements included increasing numbers of conditions of community supervision, which are estimated at between [ten] to [twenty] conditions per person. These can range from fines, fees and restitution; to requirements to abstain from drugs and alcohol; to prohibitions from moving or associating with others with criminal convictions; to work and community service requirements. Violations can result in further restrictions, up to and including incarceration.⁶⁸

Thus, we see that over the past forty years in the United States there has been a striking increase in the severity of criminal sanctions. This change resulted in a marked increase in prison numbers and also a significant increase in the number of offenders on parole and probation.

C. *Recognition of Need for Reform*

The “tough on crime” approach that has been a mainstay of American politics and society more generally for much of the past forty years is no longer receiving unquestioned support. Individuals and a diverse range of institutions and groups are advocating for a softening of sanctions imposed for many types of offenses.

These views are no longer fringe but have been echoed among top government officials and politicians. Eric Holder, President Obama’s first Attorney General (and the first African-American AG)⁶⁹ stated in 2013 that “too many Americans go to too many prisons for far too long, and for no truly good law enforcement reason. It’s clear, at a basic level, that [twentieth]-century criminal justice solutions are not adequate to overcome our [twenty-first]-century challenges.”⁷⁰ After his time in office, Holder argued in *The*

⁶⁸ *Too big to succeed*, *supra* note 23, at 5 (citations omitted).

⁶⁹ See Carrie Johnson, *Holder Confirmed as Nation’s First Black Attorney General*, WASH. POST, <http://www.washingtonpost.com/wp-dyn/content/article/2009/02/02/AR2009020202581.html> [<https://perma.cc/A296-L3VG>].

⁷⁰ Eric Holder, Attorney General, U.S. Dep’t of Justice, Remarks at the Annual Meeting of the American Bar Association’s House of Delegates (Aug. 12, 2013), <http://www.justice.gov/iso/opa/ag/speeches/2013/ag-speech-130812.html> [<https://perma.cc/AC3K-8JCX>].

New York Times that the United States can reduce prison numbers without compromising community security.⁷¹

Many recent surveys reveal strong public support for sentencing reform. An American Civil Liberties Union (ACLU) survey conducted in late 2017 shows that seventy-one percent of respondents believe that the United States should reduce prison numbers. This was a bipartisan call for action, with “[e]ighty-seven percent of Democrats, [sixty-seven] percent of independents, and [fifty-seven] percent of Republicans” agreeing that America should reduce prison numbers.⁷² The ACLU poll also showed that “[t]wo in three Americans would be more likely to vote for candidates who supported reducing the prison population and using the savings to reinvest in drug treatment and mental health programs, including [sixty-five] percent of Trump voters.”⁷³

A more wide-ranging poll shows that three-quarters of Americans believe that the criminal justice system needs to be significantly improved, and eighty-seven percent of Americans agree that community money directed to imprisoning non-violent offenders should be shifted to alternatives such as electronic monitoring. Further, eighty-five percent of voters believe that the main objective of sentencing should be rehabilitation.⁷⁴ In a recent poll of supporters of President Trump, sixty-three percent of respondents agreed that judges should have more capacity to impose sanctions other than imprisonment.⁷⁵ More widely it has been reported that:

⁷¹ Eric H. Holder Jr., *Eric Holder: We Can Have Shorter Sentences and Less Crime*, N.Y. TIMES (Aug. 11, 2016), <http://www.nytimes.com/2016/08/14/opinion/sunday/eric-h-holder-mandatory-minimum-sentences-full-of-errors.html> [<https://perma.cc/8XK6-BU3Z>].

⁷² Udi Ofer, *ACLU Poll Finds Americans Reject Trump's Tough-on-Crime Approach*, ACLU (Nov. 16, 2017), <https://www.aclu.org/blog/mass-incarceration/smart-justice/aclu-poll-finds-americans-reject-trumps-tough-crime-approach> [<https://perma.cc/7AWE-CJV4>].

⁷³ *Id.*; see also *Reason-Rupe Public Opinion Survey: October 2014 Topline Results*, REASON.COM 4 (Oct. 9, 2014), <http://reason.com/assets/db/14128084586864.pdf> [<https://perma.cc/9NQE-VYT7>]. In one survey, even most victims of crime supported sentencing reforms which would lower prison numbers. See Timothy Williams, *Trump Wants to Get Tough on Crime. Victims Don't Agree.*, N.Y. TIMES (Aug. 11, 2017), <https://www.nytimes.com/2017/08/11/us/crime-victims-poll-trump-agenda.html> [<https://perma.cc/KL5K-7UZY>].

⁷⁴ Lydia Wheeler, *Poll: ¾ of Americans Support Criminal Justice Reform*, HILL (Jan. 25, 2018), <http://thehill.com/regulation/370692-poll-3-4-of-americans-support-criminal-justice-reform> [<https://perma.cc/55E2-3FBE>]. This increased acceptance of rehabilitation represents a vast change in polls over recent decades which traditionally showed that the vast majority of Americans were in favor of tougher sentences. See Amelia Thomson-DeVeaux, *Jeff Sessions Is Trying to Take Criminal Justice Back to the 1990s*, FIVETHIRTYEIGHT (Feb. 7, 2018), <https://fivethirtyeight.com/features/jeff-sessions-is-trying-to-take-criminal-justice-back-to-the-1990s> [<https://perma.cc/8D94-8LWR>].

⁷⁵ Vikrant P. Reddy, *The Conservative Base Wants Criminal-Justice Reform*, NAT'L REV. (May 8, 2017), <http://www.nationalreview.com/article/447398/criminal-justice-reform-donald-trump-supporters-conservative-base-want-fresh>

Crime is no longer a wedge issue, and voters desire reform. A 2017 poll from the Charles Koch Institute reveals that [eighty-one] percent of Trump voters consider criminal justice reform important. Another, from Republican pollster Robert Blizzard, finds that [eighty-seven] percent of Americans agree that nonviolent offenders should be sanctioned with alternatives to incarceration. And according to a 2017 ACLU poll, [seventy-one] percent of Americans support reducing the prison population — including [fifty] percent of Trump voters.⁷⁶

Notably, criminal justice reform is one of the few issues that has wide-ranging support: “criminal justice reform presents an issue—perhaps the *only* issue today—on which the left and the right can unite”⁷⁷ to reduce incarceration numbers and eliminate problems such as “ruthless mandatory penalties.”⁷⁸

In October 2017, Law Enforcement Leaders to Reduce Crime and Incarceration, an alliance of more than two hundred law enforcement officials, including police chiefs and attorneys general from all fifty states, agreed that reducing the incarceration rate could be done without leading to an increase in the crime rate. The group submitted an open letter to President Trump urging his White House to pivot from its stated “tough on crime” approach because the organization does not “believe that public safety is served by a return to tactics that punish without strong purpose.”⁷⁹

Since taking office, President Trump initially continued his harsh stance on criminal law adopted during his campaign and personally endorsed a “tough on crime” agenda.⁸⁰ The

[<https://perma.cc/FK3F-N3TY>]; see also Jasmine Heiss & Jack Norton, *United Toward Justice: Urban and Rural Communities Share Concerns About Incarceration, Fairness of the Justice System, and Public Spending Priorities*, VERA INST., JUST. (Apr. 19, 2018), <https://www.vera.org/blog/united-toward-justice-urban-and-rural-communities-share-concerns-about-incarceration-fairness-of-the-justice-system-and-public-spending-priorities> [<https://perma.cc/UX97-2KQU>] (discussing polling that exhibits united support for criminal justice reform from American citizens).

⁷⁶ EISEN & CHETTIAR, *supra* note 42, at 1.

⁷⁷ Erik Luna, *Is It Time for Criminologists to Step Outside the Ivory Tower?*, CRIME REP. (Nov. 7, 2017) (emphasis in original), <https://thecrimereport.org/2017/11/07/is-it-time-for-criminologists-to-step-outside-the-ivory-tower> [<https://perma.cc/85T3-UHK6>].

⁷⁸ *Id.*

⁷⁹ Press Release, Law Enft Leaders, Police and Prosecutors Urge Trump and Sessions to Join Bipartisan Movement for Criminal Justice Reform, (Oct. 18, 2017), <http://lawenforcementleaders.org/wp-content/uploads/2017/10/Crime-Summit-Press-Release.pdf> [<https://perma.cc/Q84V-LW27>]; see also Douglas A. Berman, *Notable New Group Advocating for Sentencing Reforms: Law Enforcement Leaders to Reduce Crime and Incarceration*, SENT’G L. & POL’Y (Oct. 21, 2015), http://sentencing.typepad.com/sentencing_law_and_policy/2015/10/notable-new-group-advocating-for-sentencing-reforms-law-enforce-ment-leaders-to-reduce-crime-and-inca.html [<https://perma.cc/LED4-ZH8U>]; Press Release, Law Enft Leaders, 60+ Top Law Enforcement to Congress: White House Criminal Justice Efforts Not Sufficient to Reduce Crime (Apr. 23, 2018), <http://lawenforcementleaders.org/wp-content/uploads/2018/04/LEL-April-2018-SRCA-Letter-Press-Release.pdf>.

⁸⁰ See Jenna Goff & Joan Greve, *Trump vs. Clinton: Criminal Justice Reform*, PBS: WASH. WK. (Sept. 19, 2016), <http://www.pbs.org/weta/washingtonweek/blog-post/trump-vs-clinton-criminal-justice-reform> [<https://perma.cc/67UN-D7AS>]; Michelle Mark,

Brennan Center for Justice analyzed developments in criminal justice in the first year of the Trump presidency and argues that during this period a harsher criminal justice system has evolved:

All told, President Trump and Attorney General Jeff Sessions have already left a significant mark on the Justice Department. They have used short memoranda or subtle changes in enforcement strategy to quietly undo much of President Barack Obama's criminal justice reform legacy. In its place, they have built a more draconian vision of law enforcement, centered around immigration.⁸¹

There is now, however, a growing number of influential Republican politicians agitating for softer sentences.⁸² The Trump administration has enacted legislation that aims to lower the federal prison number.⁸³ This sentiment has translated into meaningful legislative change with the passing of the FIRST STEP Act, which received overwhelming support from the Democrats and Republicans in Congress⁸⁴ in December 2018. The Act was praised by the U.S. Commission on Civil Rights, which noted that:

The *Sentencing Reform and Corrections Act* contains necessary and important steps towards more equitable punishments in the federal system, advancing the fair administration of justice by better fitting punishment to crime. If enacted, it would help reduce the outsize US prison population without jeopardizing public safety.⁸⁵

Here's What Hillary Clinton and Donald Trump Think About Criminal Justice, BUS. INSIDER AUSTR. (Sept. 27, 2016), <https://www.businessinsider.com.au/trump-and-clinton-on-issues-mass-incarceration-and-criminal-justice-2016-9> [<https://perma.cc/C83V-97JH>].

⁸¹ AMES GRAWERT & JAMES CULLEN, BRENNAN CTR. FOR JUSTICE, CRIMINAL JUSTICE ONE YEAR INTO THE TRUMP ADMINISTRATION 1 (2018), https://www.brennancenter.org/sites/default/files/publications/Criminal_Justice_One_Year_Into_the_Trump_Administration_0.pdf [<https://perma.cc/XZE7-H3P6>]; see also Justin George, *Trump Justice, Year One: The Demolition Derby*, MARSHALL PROJECT (Jan. 17, 2018), <http://www.themarshallproject.org/2018/01/17/trump-justice-year-one-the-demolition-derby> [<https://perma.cc/MQ83-LSQG>].

⁸² Amanda Marcotte, *Can Republicans Get Sentencing Reform Past Trump and His Base?*, SALON (Oct. 12, 2017), <https://www.salon.com/2017/10/12/can-republicans-get-sentencing-reform-past-trump-and-his-base> [<https://perma.cc/EDB4-RC58>].

⁸³ Alexander Bolton, *Trump Gives Thumbs Up to Prison Sentencing Reform Bill at Pivotal Meeting*, HILL (Aug. 3, 2018, 6:00 AM), <https://thehill.com/homenews/senate/400176-trump-gives-thumbs-up-to-prison-sentencing-reform-bill-at-pivotal-meeting>.

⁸⁴ Ames Grawert & Tim Lau, *How the FIRST STEP Act Became Law — and What Happens Next*, BRENNAN CTR. FOR JUST. (Jan. 4, 2019), <https://www.brennancenter.org/blog/how-first-step-act-became-law-and-what-happens-next>.

⁸⁵ Press Release, U.S. Comm'n on Civil Rights, U.S. Commission on Civil Rights Supports Sentencing Reform Legislation (Nov. 13, 2017), <http://www.usccr.gov/press/2017/11-13-statement.pdf>; see also Chuck Grassley, *Sen. Chuck Grassley: Sentencing Reform Bill Will Fight Crime*, FOX NEWS (Apr. 27, 2018), <http://www.foxnews.com/opinion/2018/04/27/sen-chuck-grassley-sentencing-reform-bill-will-fight-crime.html>. For an analysis of the likely impact of the Act, see U.S. SENTENCING COMM'N, SENTENCE AND PRISON IMPACT ESTIMATE SUMMARY S. 1917, THE SENTENCING REFORM AND CORRECTIONS ACT OF 2017, (Mar. 19, 2018), <https://www.uscc.gov/sites/default/files/pdf/research-and>

Professor Berman describes the Act as the most significant piece of sentencing legislation in decades:

President Donald J. Trump officially signed the FIRST STEP Act into law today, and I am so very excited that a significant piece of sentencing and prison reform finally became law after years and years and years of talk and effort by so many. I wish the reform was even more significant, especially on the sentencing side, but something is better than nothing and but for a modest reform to crack sentencing terms, we really have had nothing positive coming from Congress on the sentencing side in more than [twenty plus] years.⁸⁶

The Act deals with more aspects of prison reform than sentencing changes, but has several aspects that will reduce the length of prison terms of some offenders, thereby reducing federal prison numbers. The Act is expected to apply to approximately thirty percent of federal prisoners.⁸⁷

The Act will make substantial reforms to mandatory minimum sentencing policy. First, it will give judges more discretion in handing down mandatory minimum sentences by expanding so-called “safety valves.”⁸⁸ These give judges important decision-making authority for certain offenses, most notably those involving nonviolent drug crimes.⁸⁹ It also shortens the amount of time for mandatory minimum drug crime sentencing overall.⁹⁰ Second, the Act relaxes the “three strikes” rule, which subjected triple offenders to life sentences, by reducing the mandatory minimum amount from life to twenty-five years.⁹¹ While still a very high number, it is a substantial decrease from life. Finally, the Act takes the already successful reforms from the Fair Sentencing Act of 2010, which reduced the disparity between sentences for crack and powder cocaine offenses, and applies it retroactively to those convicted before that law’s passage in 2010.⁹² This will apply to some three thousand

publications/prison-and-sentencing-impact-assessments/March_2018_Impact_Analysis_for_CBO.pdf [https://perma.cc/N4BP-NPF6].

⁸⁶ Douglas A. Berman, *Prez Trump Signs Historic (Though Modest) FIRST STEP Act into Law . . . and Now Comes the Critical Work of Implementing It Well!!*, SENT’G L. & POLY (Dec. 21, 2018), https://sentencing.typepad.com/sentencing_law_and_policy/2018/12/prez-trump-signs-historic-though-modest-first-step-act-into-law-and-now-comes-the-critical-work-of-i.html [https://perma.cc/MJR5-5FE5].

⁸⁷ Gina Martinez, *The Bipartisan Criminal-Justice Bill Will Affect Thousands of Prisoners. Here’s How Their Lives Will Change*, TIME (Dec. 20, 2018), <http://time.com/5483066/congress-passes-bipartisan-criminal-justice-reform-effort/> [https://perma.cc/57DD-EQJ8].

⁸⁸ German Lopez, *The First Step Act, Explained*, VOX (Feb. 5, 2019), <https://www.vox.com/future-perfect/2018/12/18/18140973/state-of-the-union-trump-first-step-act-criminal-justice-reform> [https://perma.cc/9TA4-2JUJ].

⁸⁹ *Id.*

⁹⁰ Grawert & Lau, *supra* note 84.

⁹¹ *Id.*

⁹² *Id.*

inmates and make an important impact on the racial disparity that plagues drug conviction rates.⁹³

The Act also makes important changes for inmates after they are convicted. “Good-time credits” are awarded to inmates for good behavior during their incarceration periods and reduces the length of their stay in prison.⁹⁴ While this was previously capped at forty-seven days per year of incarceration, inmates can now earn up to fifty-four days for every year of their sentence.⁹⁵ This change will also apply retroactively, affecting some four thousand inmates.⁹⁶ It will vary widely based on the amount of time of an inmate’s sentence, but will have the effect of facilitating the release of some offenders from the day the bill takes effect.⁹⁷ It also expands the ability to get these credits by providing inmates with more options to accumulate them.⁹⁸ Prison inmates would now receive credits for taking vocational training courses, among other educational offerings.⁹⁹ Not only does this shorten the length of time spent in prison, but it can also potentially reduce recidivism rates by allowing inmates to spend less time in prison and more time in halfway houses and under community supervision.¹⁰⁰

Additionally, there are significant criminal justice reforms occurring in numerous states, which aim at lowering the punitiveness of the system. Bill Keller observed that between 2010 and 2015, thirty-one states reduced their rate of imprisonment *and* their state crime rates.¹⁰¹ In 2014 and 2015, forty-six states passed reform legislation with the intent to:

[C]reating or expanding opportunities to divert people away from the criminal justice system; reducing prison populations by enacting sentencing reform, expanding opportunities for early release from prison, and reducing the number of people admitted to prison for violating the terms of their community supervision.¹⁰²

⁹³ *Id.*

⁹⁴ Lopez, *supra* note 88.

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ Bill Keller, *Nine Lessons About Criminal Justice Reform*, MARSHALL PROJECT (July 19, 2017), <https://www.themarshallproject.org/2017/07/19/nine-lessons-about-criminal-justice-reform> [<https://perma.cc/L4BW-DYJK>].

¹⁰² REBECCA SILBER ET AL., VERA INST. OF JUSTICE, JUSTICE IN REVIEW: NEW TRENDS IN STATE SENTENCING AND CORRECTIONS 2014–2015, at 3, 6–7 (2016), https://storage.googleapis.com/vera-web-assets/downloads/Publications/justice-in-review-new-trends-in-state-sentencing-and-corrections-2014-2015/legacy_downloads/state-sentencing-and-corrections-trends-2014-2015-updated.pdf [<https://perma.cc/3VVL-RAMA>]. Wide ranging reforms are

The ten states with the largest reduction in prison numbers also enjoyed an average crime rate decrease of fourteen percent.¹⁰³ The so-called “Red States” have been especially active in implementing reforms which reduce incarceration numbers.¹⁰⁴ Holly Harris and Andrew Howard noted this phenomenon:

First and foremost, it is conservatives in big red states like Texas, Georgia, and South Carolina who have led the way on justice reform issues for a decade. These efforts yielded great success in safely reducing the prison population, saving significant taxpayer resources, and most importantly lowering crime and recidivism rate Surveys in states that will have hotly-contested Senate races such as Florida, Illinois, North Carolina, Nevada, and Speaker Ryan’s home state of Wisconsin show support for reform issues ranging from the 60s to high 80s. The smart political play is to embrace these reforms. Doing otherwise could backfire. Just ask Alaska’s then-incumbent Senator Mark Begich. In the state’s 2014 U.S. Senate race, Begich attacked his Republican opponent, Dan Sullivan, alleging he was soft on crime. Sullivan emerged victorious over Begich and is currently serving as the junior senator from Alaska.¹⁰⁵

occurring in Ohio and Michigan. See *Reforming the Nation’s Criminal Justice System: The Impact of 2015 and Prospects for 2016*, U.S. JUST. ACTION NETWORK 9 (Dec. 2015), <http://www.justiceactionnetwork.org/wp-content/uploads/2015/12/Justice-Action-Network-Year-End-Report.pdf> [<https://perma.cc/2WLV-HVJH>]. Texas, like Ohio and Michigan, is engaging in wide ranging criminal justice reforms. See Adam Brandon et al., *Congress Should Follow the Red States’ Lead on Criminal-Justice Reform*, NAT’L REV. (May 2, 2016), <http://www.nationalreview.com/article/434783/criminal-justice-reform-conservatives-have-led-way> [<https://perma.cc/MN7M-A3BM>]. For a summary of recent changes in some states to lower penalties for property, drunk driving and other low-level offenders, see Sarah Breitenbach, *Prisons, Policing at Forefront of State Criminal Justice Action*, PEW CHARITABLE TRS. (June 27, 2016), <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/06/27/prisons-policing-at-forefront-of-state-criminal-justice-action> [<https://perma.cc/X4FB-M6FG>]; see also *State Advances in Criminal Justice Reform, 2016*, SENT’G PROJECT (Jan. 2017), <http://www.sentencingproject.org/wp-content/uploads/2017/01/State-Advances-in-Criminal-Justice-Reform-2016-1.pdf> [<https://perma.cc/X7MD-P7RD>]; TEX. H.R., H. COMM. ON CORR., INTERIM REPORT TO THE 85TH TEXAS LEGISLATURE, 84th Sess. (2016), http://www.house.state.tx.us/_media/pdf/committees/reports/84interim/Corrections-Committee-Interim-Report-2016.pdf [<https://perma.cc/W2VP-HM3H>] [hereinafter INTERIM REPORT]; Adam Gelb & Jacob Denney, *National Prison Rate Continues to Decline Amid Sentencing, Re-Entry Reforms*, PEW CHARITABLE TRS. (Jan. 16, 2018), <http://www.pewtrusts.org/en/research-and-analysis/analysis/2018/01/16/national-prison-rate-continues-to-decline-amid-sentencing-re-entry-reforms> [<https://perma.cc/6P4F-DUYM>].

¹⁰³ Bill Keller, *Nine Lessons About Criminal Justice Reform*, MARSHALL PROJECT (July 19, 2017), <https://www.themarshallproject.org/2017/07/19/nine-lessons-about-criminal-justice-reform>.

¹⁰⁴ Red States are ones that traditionally support Republican candidates for president and skew conservative. Ron Elving, *The Color of Politics: How Did Red And Blue States Come to Be?*, NPR (Nov. 13, 2014, 5:00 PM ET), <https://www.npr.org/2014/11/13/363762677/the-color-of-politics-how-did-red-and-blue-states-come-to-be> [<https://perma.cc/Q6UJ-VAJ2>].

¹⁰⁵ Holly Harris & Andrew Howard, *Ryan’s victory Trumps Justice Reform Opponents*, HILL (Aug. 15, 2016), <http://thehill.com/blogs/pundits-blog/crime/291500-ryans-victory-trumps-justice-reform-opponents> [<https://perma.cc/BL26-VSNN>]; see also Grover Norquist, *Conservatives for Criminal Justice Reform*, WALL ST. J. (Sept. 26, 2017), <https://www.wsj.com/articles/conservatives-for-criminal-justice-reform-15064639>

The Brennan Center has observed that “[i]n fact, [twenty-seven] states have reduced both imprisonment and crime in the last decade.”¹⁰⁶

Former President Obama made clemency for minor drug offenses a theme in his final year in office and granted over 1,500 clemency approvals and pardons in his last months as president.¹⁰⁷ These efforts greatly exceeded clemency efforts undertaken by past presidents but made little change in overall prison numbers. Obama’s historic program “has affected less than one-tenth of one percent of the national prison and jail population.”¹⁰⁸ President Trump seems to be continuing this trend, and in June 2018 indicated that he was considering up to three thousand offenders for possible clemency.¹⁰⁹

Such efforts can reduce the prison population but attempts to roll back mass incarceration have been erratic and lacking a central ideological drive.¹¹⁰ Even with the limited federal reforms and the more comprehensive state movement, little difference has been made in total American prison numbers. The efforts to roll back “tough on crime” agendas from previous decades have led to minor reductions. 2011 and 2012 saw a slight decrease in total prison numbers (approximately

70 [https://perma.cc/7ZBB-AHJL]. Oklahoma has also recently passed legislation aimed to reduce prison numbers. Barbara Hoferock, *Criminal Justice Reform Bills Signed into Law by Oklahoma Governor*, TULSA WORLD (Apr. 28, 2016), http://www.tulsaworld.com/news/capitol_report/criminal-justice-reform-bills-signed-into-law-by-oklahoma-governor/article_842d52ae-4512-5311-899c-665f31f2e90b.html [https://perma.cc/37J4-BA2A]. The developments in Georgia are discussed in Greg Bluestein’s article, *Nathan Deal Aims to Cut ‘Extraordinarily High Number of Georgia Offenders on Probation*, AJC (Apr. 29, 2016), <https://www.ajc.com/blog/politics/nathan-deal-aims-cut-extraordinarily-high-number-georgia-offenders-probation/Q8WwM1Ssny7oIOPT68TVvN> [https://perma.cc/FSV3-4LRT].

¹⁰⁶ EISEN & CHETTIAR, *supra* note 42, at 1.

¹⁰⁷ See Gregory Korte, *Obama Grants 330 More Commutations, Bringing Total to a Record 1,715*, USA TODAY (Jan. 19, 2017), <http://www.usatoday.com/story/news/politics/2017/01/19/obama-grants-330-more-commutations-bringing-total-record-1715/96791186> [https://perma.cc/8WHA-PMZF]; The Editorial Board, *Mr. Obama, Pick Up Your Pardon Pen*, N.Y. TIMES (Jan. 16, 2017), <https://www.nytimes.com/2017/01/16/opinion/mr-obama-pick-up-your-pardon-pen.html> [https://perma.cc/H5LW-3YS9]. For analysis of this, see generally Paul J. Larkin, Jr., “A Day Late and a Dollar Short”: *President Obama’s Clemency Initiative 2014*, 16 GEO. J. L. & PUB. POL’Y 147 (2018).

¹⁰⁸ TASK FORCE ON MASS INCARCERATION, N.Y.C. BAR ASS’N, MASS INCARCERATION: WHERE DO WE GO FROM HERE?, at 1–3 (2017), http://documents.nycbar.org/files/mass_incarceration_where_do_we_go_from_here.pdf [https://perma.cc/KG9L-94EB].

¹⁰⁹ Doina Chiacu, *Muhammad Ali Family Lawyer to Trump: Thanks, but No Pardon Needed*, REUTERS (June 8, 2018), <https://www.reuters.com/article/us-usa-trump-pardons/trump-considering-3000-pardons-including-boxer-muhammad-ali-idUSKCN1J41SR> [https://perma.cc/76CN-AY5X].

¹¹⁰ Carrie Pettus-Davis et al., *Guideposts for the Era of Smart Decarceration: Smart Decarceration Strategies for Practitioners, Advocates, Reformers and Researchers*, INST. FOR JUST. RES. & DEV. (Feb. 2017), https://ijrd.csw.fsu.edu/sites/g/files/upcbnu1766/files/media/images/publication_pdfs/Guideposts_for_the_Era_of_Smart_Decarceration.pdf [https://perma.cc/88XF-6P5C].

three percent).¹¹¹ This trend was reversed the following year¹¹² only to dip again in 2014,¹¹³ 2015 and marginally in 2016.¹¹⁴ These changes are negligible and lack the expanse and focus that any impactful solution would require.¹¹⁵

According to a study by the Vera Institute in June 2018, at the current pace of the prison population decline it would take 149 years for U.S. incarceration rates to reach the levels they were at 1970 (i.e., before the mass incarceration era).¹¹⁶ The report also notes that there is no general move towards lower prison numbers:

At the same time, while aggregated national prison population data indicates slow decline, it cannot be the sole indicator used to measure the progress made in the nation's recent efforts to reduce incarceration. Prison populations are slow to change after the implementation of most policy or practice changes, and thus provide an inadequate metric by which to measure and adjust the immediate impact of reforms—or regressive legislation. Furthermore, a reliance on aggregate prison data fails to acknowledge or measure the tremendous variation in incarceration trends from state to state and within states, and ignores a significant locus of incarceration: local jails—county- or municipally-run facilities that primarily hold people arrested but not yet convicted of a crime. For example, while much of the country is locking fewer people in jails and prisons, Kentucky is doing the opposite. If jails and prisons continue to grow in Kentucky as they have since 2000, everyone in the state will be incarcerated in 113 years.¹¹⁷

¹¹¹ E. ANN CARSON & DANIELA GOLINELLI, U.S. DEP'T OF JUSTICE, PRISONERS IN 2012: TRENDS IN ADMISSIONS AND RELEASES, 1991-2012, at 1 (2014), <https://www.bjs.gov/content/pub/pdf/p12tar9112.pdf> [<https://perma.cc/97CJ-JPMM>].

¹¹² See Matthew Friedman, *Just Facts: The U.S. Prison Population Is Down (A Little)*, BRENNAN CTR. FOR JUST. (Oct. 29, 2015), <http://www.brennancenter.org/blog/us-prison-population-down-little> [<https://perma.cc/G55D-HFKW>].

¹¹³ In 2014, there was a slight decrease in federal and state prison numbers but this was partially offset by an increase in local jail numbers. See Friedman, *supra* note 112. State and federal prison numbers decreased by 15,400 people from December 31, 2013 to December 31, 2014. However, county and city jail numbers increased by 13,384 inmates from mid-year 2013 to mid-year 2014. While these time periods are not aligned, they are indicative of a larger trend. The increasing jail numbers are eclipsing the progress made by decreasing prison numbers. *Id.*

¹¹⁴ The number of prisoners fell by 51,300 to 2,136,600 (i.e. a drop of about 2.5%). KAEBLE & GLAZE, *supra* note 34, at 1–2.

¹¹⁵ There are no official statistics for prison numbers at years end 2017, but it is estimated that there was a reduction of approximately 1% (i.e. 19,400 people) from the previous year. See Oliver Hinds et al., *People in Prison in 2017*, VERA INST. JUST. 3 (May 2018), <https://www.vera.org/publications/people-in-prison-2017> [<https://perma.cc/69EG-PLAZ>].

¹¹⁶ JACOB KANG-BROWN ET AL., VERA INST. OF JUSTICE THE NEW DYNAMICS OF MASS INCARCERATION 5 (2018), https://storage.googleapis.com/vera-web-assets/downloads/Publications/the-new-dynamics-of-mass-incarceration/legacy_downloads/the-new-dynamics-of-mass-incarceration-report.pdf [<https://perma.cc/69TU-WXF5>].

¹¹⁷ *Id.* at 6.

While there has been a small reduction in the incarceration level in the United States in recent years, recent studies do not suggest that this has resulted in an increase in the crime rate. Violent crime did increase in the years 2015 and 2016, however, this trend has changed.¹¹⁸ The most recent data from the FBI shows that there were minor reductions in both violent crimes and property crimes in the second half of 2017 when compared with the first half of 2016.¹¹⁹ Most recently, in June 2018, Attorney General Jeff Sessions noted that preliminary data for 2018 indicated that there was a 3.8% drop in violent crime and a 4.7% decline in the number of murders.¹²⁰ This is supported by the findings of a Brennan Center report in June 2018, which notes that in 2017:

The overall crime rate in the [thirty] largest cities in 2017 declined slightly from the previous year, falling by 2.1 percent to remain at historic lows [and] [t]he violent crime rate declined as well, falling by [one] percent from 2016, essentially remaining stable. Violent crime remains near the bottom of the nation's [thirty]-year downward trend.¹²¹

The movements in probation and parole numbers have been on a downward trend since 2008, but the reductions have come against the backdrop of an enormous increase in the number of adults under community supervision orders, which went to over five million adults in 2007. The Bureau of Justice Statistics (BJS) report released in April 2018 notes that at year-end 2016, there were 4,537,100 adults under community supervision (probation or parole). This was down 1.1% (49,800 offenders) from the previous year. This meant that one in fifty-five adults in the United States were under probation or parole at the end of 2016.¹²²

Thus, the past four decades in the United States has witnessed a “tough on crime” agenda, but this is slowly wilting against the backdrop of an unsustainable public budget and a growing realization that tougher penalties do not equate to enhanced community safety. The sharp end of the increasingly punitive stance against offenders has been a burgeoning incarceration rate, but probation and parole numbers have increased to an even larger

¹¹⁸ Eisen & Chettiar, *supra* note 42, at 1.

¹¹⁹ *Preliminary Semiannual Uniform Crime Report, January-June, 2017*, FBI.GOV, <https://ucr.fbi.gov/crime-in-the-u.s/2017/preliminary-report/home> [<https://perma.cc/H9MR-9SPV>].

¹²⁰ *Attorney General Sessions Delivers Remarks to the Western Conservative Summit*, U.S. DEP'T JUST. (June 8, 2018), <https://www.justice.gov/opa/speech/attorney-general-sessions-delivers-remarks-western-conservative-summit> [<https://perma.cc/2YZ3-8E8V>].

¹²¹ Ames Grawert et al., *Crime in 2017: Final Analysis*, BRENNAN CTR. FOR JUST., https://www.brennancenter.org/sites/default/files/analysis/Crime_in_2017_A_Final_Analysis.pdf [<https://perma.cc/YY95-7R76>].

¹²² PROBATION AND PAROLE, *supra* note 2.

extent. As noted above, the conditions associated with probation and parole have become increasingly onerous, and at the same time, less resources have been committed to these sanctions.¹²³ This is part of the reason for the high breach and recidivism rates associated with these sanctions, as is detailed in Part II below. The promising aspect of recent developments in the criminal justice system is that there is a considerable recognition that change in the use and nature of criminal sanctions is necessary. In Part IV we set out the optimal reforms that should occur to the probation and parole. Prior to doing so, we contextualize our proposals by providing an overview of the appropriate aims of sentencing.

II. THE APPROPRIATE AIMS OF SENTENCING

There are a number of orthodox and well-established aims of sentencing. All jurisdictions in the United States pursue the objectives of “community protection . . . general deterrence, specific deterrence, rehabilitation, and retribution.”¹²⁴ Generally, there is no ranking of these aims, although over the past forty years, the objective that has assumed cardinal status is community protection.¹²⁵ The sentencing process is made more complex by the fact that the objectives often favor different outcomes. Thus, for example, general deterrence inclines in favor of heavier sentences, while rehabilitation favors more lenient dispositions.

A key reason for the unsatisfactory state of sentencing law and practice is that sentencing practice is largely not informed by empirical knowledge regarding the capacity for state-imposed sanctions to achieve the stated goals of sentencing. There is a major disconnect between sentencing knowledge and practice, largely because the “tough on crime” political and social agenda has drowned out the influence of empirical learning in this area.¹²⁶ There is, in fact, a degree of scientific consensus regarding the viability of most sentencing objectives. The weight of evidence strongly suggests that the key to reducing crime is not increasing penalty levels, but rather the rate of detection and enforcement of breaches of the criminal law.¹²⁷

¹²³ See *supra* Part I.

¹²⁴ See Mirko Bagaric et al., *Bringing Sentencing into the 21st Century: Closing the Gap Between Practice and Knowledge by Introducing Expertise into Sentencing Law*, 45 HOFSTRA L. REV. 785, 791 (2017).

¹²⁵ *Id.*

¹²⁶ See *id.* at 786–87.

¹²⁷ See Richard Berk, *New Claims About Executions and General Deterrence: Déjà Vu All Over Again?*, 2 J. Empirical Legal Stud. 303, 328 (2005); Steven D. Levitt, *Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six that Do Not*, 18 J. ECON. PERSP. 163, 178 (2004); Paul R. Zimmerman, *State*

There is a very small correlation between higher penalties and lower crime.¹²⁸ The best way to discourage crime is to make potential offenders believe that if they offend, they will be apprehended. This means that the goal of general deterrence cannot be used as a basis for setting harsh penalties. The failure of general deterrence theory has been supported by recent analysis of the incarceration rate of drug offenders and the distribution and use of illicit drugs. A PEW Research Report in March 2018 noted that high levels of imprisonment for drug offenses do not reduce drug use or drug arrests.¹²⁹

The objective of specific deterrence aims to discourage offending by individual offenders as opposed to the general community.¹³⁰ It is premised on the assumption that harsh penalties will teach offenders a lesson and disincline them from reoffending. Empirical data shows that this is flawed. Harsh penalties in the form of prison terms in fact seem to have a slight criminogenic effect—they slightly increase the likelihood of reoffending.¹³¹

Rehabilitation aims to elicit positive attitudinal reform in offenders by altering their value set such that they are less likely to commit a crime. The evidence about the efficacy of sentencing practice to achieve this goal has fluctuated greatly over the past few decades, but current data suggests that properly designed programs

Executions, Deterrence, and the Incidence of Murder, 7 J. APPLIED ECON. 163 (2004); Anthony N. Doob & Cheryl Marie Webster, *Sentence Severity and Crime: Accepting the Null Hypothesis*, 30 CRIME & JUST. 143, 143–45 (2003); Dale O. Cloninger & Roberto Marchesini, *Execution and Deterrence: A Quasi-Controlled Group Experiment*, 33 Applied Econ. 569 (2001).

¹²⁸ Mirko Bagaric & Theo Alexander, *(Marginal) General Deterrence Doesn't Work—And What It Means for Sentencing*, 35 CRIM. L.J. 269 (2011). Recent data, however, suggests that focused deterrence efforts may be more effective. Anthony A. Braga et al., *Focused Deterrence Strategies and Crime Control: An Updated Systematic Review and Meta-Analysis of the Empirical Evidence*, 17 CRIMINOLOGY & PUB. POL'Y 205, 205 (2018) (“[F]ocused deterrence strategies are associated with an overall statistically significant, moderate crime reduction effect.”).

¹²⁹ PEW CHARITABLE TRS., MORE IMPRISONMENT DOES NOT REDUCE STATE DRUG PROBLEMS 5 (2018), https://www.pewtrusts.org/-/media/assets/2018/03/pspp_more_imprisonment_does_not_reduce_state_drug_problems.pdf [<https://perma.cc/2YWM-6P3A>].

¹³⁰ See Daniel S. Nagin et al., *Imprisonment and Reoffending*, 38 CRIME & JUST. 115, 124 (2009).

¹³¹ See Donald P. Green & Daniel Winik, *Using Random Judge Assignments to Estimate the Effects of Incarceration and Probation on Recidivism Among Drug Offenders*, 48 CRIMINOLOGY 357, 382–83 (2010); DONALD RITCHIE, SENTENCING ADVISORY COUNCIL, SENTENCING MATTERS: DOES IMPRISONMENT DETER? A REVIEW OF THE EVIDENCE 18, 22 (2011); DON WEATHERBURN ET AL., AUSTL. INST. OF CRIMINOLOGY, THE SPECIFIC DETERRENT EFFECT OF CUSTODIAL PENALTIES ON JUVENILE RE-OFFENDING 5 (2009); FRANKLIN E. ZIMRING & GORDON J. HAWKINS, DETERRENCE: THE LEGAL THREAT IN CRIME CONTROL 245 (1973); NEW SOUTH WALES LAW REFORM COMM'N, SENTENCING (Report No 139, July 2013).

can reduce recidivism levels for most offenders.¹³² It is clear, however, that merely consigning offenders to prison is not conducive to rehabilitation. A wide-ranging report by the United States Sentencing Commission in 2018 examined the reoffending patterns of federal offenders released in 2005 and noted that over an eight-year period, 49.3% were rearrested and that the median re-arrest period was twenty-one months.¹³³ The picture is even bleaker at the state level with the BJS finding that “76.6 percent of offenders released from state prison[s] were rearrested within five years.”¹³⁴

The rearrest rate of state prisoners increases considerably if the follow-up period is extended. A report released in May 2018 examined the behavior of offenders released from states prisons across thirty states in the United States over a period of nine years.¹³⁵ It noted that eighty-three percent of the offenders were arrested at least once during this period.¹³⁶ The highest recidivism levels were for offenders who had initially been sentenced for property offenses and the lowest rearrest rate was for those who had committed violent offenses.¹³⁷

The main manner in which community protection has been more vigorously pursued is incapacitation in the form of imprisonment. The confinement associated with incarceration ensures that offenders cannot commit crimes in the community during the period of the sentence. The efficacy of imprisonment, however, is undermined in some situations by the fact that its financial cost outweighs the benefit associated with preventing minor criminal acts, especially property, immigration and low-level drug offenses.¹³⁸ The empirical data suggests that prison

¹³² See Mirko Bagaric et al., *Mitigating America's Mass Incarceration Crisis Without Compromising Community Protection: Expanding the Role of Rehabilitation in Sentencing*, 22 LEWIS & CLARK L. REV. 1, 36–42 (2018). See Stephen Steurer, *Why Aren't We Spending More on Prisoner Education?*, CRIME REP. (June 8, 2018), <https://thecrimereport.org/2018/06/08/why-arent-we-spending-more-on-prisoner-education/> [<https://perma.cc/2HG7-RU3C>], for more recent data demonstrating that education significantly diminished the rate of recidivism of prisoners.

¹³³ KIM STEVEN HUNT & ROBERT DUMVILLE, U.S. SENTENCING COMM'N, RECIDIVISM AMONG FEDERAL OFFENDERS: A COMPREHENSIVE OVERVIEW 15 (2016), https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2016/recidivism_overview.pdf [<https://perma.cc/8UVM-VA3Q>].

¹³⁴ *Id.*

¹³⁵ MARIEL ALPER ET AL., U.S. DEP'T OF JUSTICE, NCJ 250975, 2018 UPDATE ON PRISONER RECIDIVISM: A 9-YEAR FOLLOW-UP PERIOD (2005-2014), at 15 (2018), <https://www.bjs.gov/content/pub/pdf/18upr9yfup0514.pdf> [<https://perma.cc/69C9-UP2J>].

¹³⁶ *Id.* at 1.

¹³⁷ *Id.*

¹³⁸ See Mirko Bagaric, *The Punishment Should Fit the Crime—Not the Prior Convictions of the Person that Committed the Crime: An Argument for Less Impact Being Accorded to Previous Convictions in Sentencing*, 51 SAN DIEGO L. REV. 343, 402, 405–11 (2014).

should be confined for offenders that commit serious violent and sexual offenses.¹³⁹

There is no clear meaning of retribution. In the sentencing domain, however, it is generally used to refer to the concept of proportionality, which is the principle that “the seriousness of the crime [should] be matched by the [severity] of the [punishment].”¹⁴⁰ As noted above, there is clear evidence that this principle is widely ignored as a result of the overly harsh penalties for many drug, immigration, and property offenses.¹⁴¹

Thus, the weight of empirical evidence suggests that a scientifically sound sentencing system would result in the abolition of the goals of specific deterrence and general deterrence and a narrowing of the use of incapacitation to only serious sexual and violent offenses.¹⁴² Moreover, the principle of proportionality would be the guiding determinant in relation to setting type, duration and severity.¹⁴³

Against this backdrop we evaluate the efficacy of the probation and parole systems, and also the new sanctions proposed in this article. We start by taking a closer look at the current use of probation and parole.

III. OVERVIEW OF PROBATION AND PAROLE

There are two main criminal sanctions which involve supervised release. Probation is a sanction imposed by a court, which is often used as an alternative to prison. Parole is a post-incarceration order which involves a statutory body, typically known as a Parole Board, releasing an offender into the community. Probation and parole are very common sanctions. As noted in the Introduction to this Article, currently there are over 3,673,000 adult offenders under probation and approximately 875,000 on parole.¹⁴⁴

Probation is used far more extensively—about three times the rate—at the state level than in relation to federal crimes. Thus, it has been noted:

¹³⁹ *See id.*

¹⁴⁰ Mirko Bagaric & Sandeep Gopalan, *Sound Principles, Undesirable Outcomes: Justice Scalia’s Paradoxical Eighth Amendment Jurisprudence*, 50 AKRON L. REV. 301, 303 n.6 (2016) (quoting Mirko Bagaric & Sandeep Gopalan, *Saving the United States From Lurching To Another Sentencing Crisis: Taking Proportionality Seriously and Implementing Fair Fixed Penalties*, 60 ST. LOUIS U. L.J. 169, 189 (2016)).

¹⁴¹ *See supra* Part I.

¹⁴² *Id.*

¹⁴³ *See* Mirko Bagaric & Sandeep Gopalan, *Saving the United States from Lurching to Another Sentencing Crisis: Taking Proportionality Seriously and Implementing Fair Fixed Penalties*, 60 ST. LOUIS U. L.J. 169, 173 (2016).

¹⁴⁴ PROBATION AND PAROLE, *supra* note 2, at 1.

According to Commission data, approximately [ten] percent of people sentenced in federal court during 2016 received a sentence of probation only or probation with conditions of confinement, often meaning home confinement or electronic monitoring, in Sentencing Zones A and B respectively. In contrast, at the state level [thirty-one] percent of people sentenced on felony charges received a sentence of probation only or some other non-incarceration penalty such as fines, treatment or community service.¹⁴⁵

Probation and parole orders both involve the imposition of certain conditions. The conditions are similar and generally come in two main forms: standard conditions and special conditions. These conditions are designed to achieve the principal aims of probation and parole, which include community protection and rehabilitation.¹⁴⁶

Probation and parole are utilized in some form throughout the United States, however, there is no unity regarding the availability, use and operation of these sanctions. By way of an overview, we now discuss the availability, use and scope of these sanctions in the federal jurisdiction and four largest states in America. It is not tenable to survey every state, and hence by way of illustration we focus on the largest jurisdictions.

A. *Federal Jurisdiction*

The two alternatives to incarceration at the federal level are probation and supervised release.¹⁴⁷ Offenders who are sentenced to probation do not spend any time in prison after sentencing. Additionally, supervised release occurs following the completion of a prison term and now effectively takes the place of parole, which at the federal level has been formally abolished.¹⁴⁸ The United States eliminated parole for federal sentencing in 1987 with the Federal Sentencing Guidelines.¹⁴⁹ Only those convicted of federal crimes committed before November 1, 1987, in Washington D.C. or by a military tribunal are eligible for federal parole.¹⁵⁰ For most

¹⁴⁵ Mark Mauer et al., *Public Comment on USSC's "First Offenders/Alternatives to Incarceration" Proposed Amendment*, SENT'G PROJECT (Oct. 11, 2017), <https://www.sentencingproject.org/publications/public-comment-usscs-first-offendersalternatives-incarceration-proposed-amendment> [<https://perma.cc/4XWV-3VCR>].

¹⁴⁶ *Probation and Pretrial Services - Mission*, U.S.COURTS.GOV, <http://www.uscourts.gov/services-forms/probation-and-pretrial-services/probation-and-pretrial-services-mission> [<https://perma.cc/2ZCR-UCHN>].

¹⁴⁷ GUIDELINES MANUAL, *supra* note 61, at ch. 7 pt. A.

¹⁴⁸ *Id.*

¹⁴⁹ The Federal Sentencing Guidelines were promulgated by the United States Sentencing Commission. *Guidelines*, U.S. SENT'G COMMISSION, https://www.ussc.gov/Research/Research_Projects/Miscellaneous/15_Year_Study/chap1.pdf [<https://perma.cc/3T8X-GNF3>]; PROBATION AND PAROLE, *supra* note 2.

¹⁵⁰ Douglas C. McDonald & Kenneth E. Carlson, U.S. DEPT OF JUSTICE, Special Report, *Federal Sentencing in Transition, 1986-90*, at 1 (1992) <https://www.bjs.gov/content/pub/pdf/fst8690.pdf> [<https://perma.cc/2EBF-LUX2>]. The Supreme

purposes, however, federal supervised release is still referred to as parole, and we adopt that terminology in this article.

Congress passed the Probation Act of 1925 under President Calvin Coolidge, which created federal probation.¹⁵¹ Five years later, the National Parole Board obtained the power to supervise federal parolees.¹⁵² In 1940, administration of the federal probation system switched to the control of the Administrative Office of the U.S. Courts.¹⁵³ Federal probation and parole are governed by 18 U.S.C. § 3601, which states that released prisoners will be observed and that they must report “to the degree warranted by the conditions specified by the sentencing court.”¹⁵⁴ These defendants are subject to supervision by the United States Parole Commission.¹⁵⁵

Defendants are eligible for probation unless they have been found guilty of a Class A or B felony.¹⁵⁶ Mandatory conditions for supervised release and probation are set by 18 U.S.C. §§ 3583(d) and 3563(a), respectively.¹⁵⁷ 18 U.S.C. §§ 3563(b) and 3583(d) allow the imposition of further conditions reasonably related to the relevant sentencing factors.¹⁵⁸

The United States Sentencing Commission recommends supervised release after any prison sentence of longer than a year.¹⁵⁹ All those on supervised release must observe three standard rules to stay in compliance: they must: (1) refrain from committing a new offense; (2) refrain from any drug possession; and (3) submit to one drug test within fifteen days of release and two subsequent drug tests. Offenders who have committed certain sexual offenses must maintain current registration as a sex

Court ruled in *United States v. Booker* that the guidelines cannot be binding on judges' sentencing decisions. *United States v. Booker*, 543 U.S. 220, 268 (2005).

¹⁵¹ *Probation and Pretrial Services History*, U.S.COURTS.GOV, <http://www.uscourts.gov/services-forms/probation-and-pretrial-services/probation-and-pretrial-services-history> [<https://perma.cc/F6ML-28KV>].

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ 18 U.S.C. § 3601 (2012); PROB. AND PRETRIAL SERVICES OFFICE, ADMIN. OFFICE OF THE U.S. COURTS, OVERVIEW OF PROBATION AND SUPERVISED RELEASE CONDITIONS 1 (2016), http://www.uscourts.gov/sites/default/files/overview_of_probation_and_supervised_release_conditions_0.pdf [<https://perma.cc/L3AX-GGGQ>].

¹⁵⁵ PROB. AND PRETRIAL SERVICES OFFICE, *supra* note 154, at 1 n.1.

¹⁵⁶ 18 U.S.C. § 3561(a) (2012). Class A Felonies are those that carry a sentence of death or life in prison; class B felonies carry a maximum sentence of twenty-five years. 18 U.S.C. § 3559 (a)(1)–(2).

¹⁵⁷ *See* 18 U.S.C. §§ 3583(d), 3563(a) (2012 & Supp. 2018). Those on federal probation and supervised release cannot be found guilty of a new crime, possess drugs, and must submit to drug testing within 15 days of release and at least two subsequent tests over the course of probation. Further requirements apply to those convicted of crimes that would require sexual offender registration or crimes of domestic violence. 18 U.S.C. § 3583(d).

¹⁵⁸ *See* 18 U.S.C. §§ 3553(a), 3563(b), 3583(d) (Supp. 2018).

¹⁵⁹ GUIDELINES MANUAL, *supra* note 61, at ch. 5 pt. D, cmt. n.1.(Imposition of a Term of Supervised Release).

offender. For certain crimes, submission to DNA testing may be required.¹⁶⁰ If a parolee is a first-time domestic violence offender as defined by 18 U.S.C. § 3561(b), a court-approved rehabilitation program must be completed.¹⁶¹

If a defendant's sentence requires payment of a fine, the parolee must pay the fine or work with the court to establish a payment schedule.¹⁶² Any other penalties or restitution must be paid along with a notification of any change in circumstances that may affect the parolee's ability to make payments.¹⁶³ Conditions on restitution are set by statutes 18 U.S.C. §§ 2248, 2259, 2264, 2327, 3663, 3663A, and 3664.¹⁶⁴

Federal statutes set a maximum range of no more than five years of supervised release supervision for Class A or Class B felonies and no more than three years for Class C or D Felonies.¹⁶⁵ 18 U.S.C. § 3583(b)(3) caps the maximum length of supervised release at one year for a misdemeanor.¹⁶⁶ Federal statutes 18 U.S.C. §§ 3563(b) and 3583(d) allow courts to set additional requirements for a defendant's probation or supervised release.¹⁶⁷ Courts are given wide discretion to:

[M]odify, reduce, or enlarge the conditions of a sentence of probation at any time prior to the expiration or termination of the term of probation, pursuant to the provisions of the Federal Rules of Criminal Procedure relating to the modification of probation and the provisions applicable to the initial setting of the [terms and] conditions of probation.¹⁶⁸

Discretionary conditions must connect to the statutory factors in 18 U.S.C. § 3553(a)(2). For supervised release these factors are: "the nature and circumstances of the offense; the history and characteristics of the defendant; deterrence; protection of the public; and providing needed correctional treatment to the defendant."¹⁶⁹ Probation cases use the same factors and also consider "the seriousness of the offense . . . promot[ing] respect for the law, and . . . provid[ing] just punishment for the offense."¹⁷⁰

¹⁶⁰ 18 U.S.C. § 3583(d).

¹⁶¹ *Id.*; see 18 U.S.C. § 3561(b) (2012).

¹⁶² 18 U.S.C. § 3624(e) (Supp. 2018).

¹⁶³ 18 U.S.C. § 3563(a)(7) (2012).

¹⁶⁴ 18 U.S.C. §§ 2248 (1996), 2259 (2018), 2264 (2018), 2327 (1998), 3663 (2008), 3663A (2012), 3664 (2002).

¹⁶⁵ 18 U.S.C. § 3583(b)(1)–(2).

¹⁶⁶ 18 U.S.C. § 3583 (b)(3).

¹⁶⁷ 18 U.S.C. §§ 3563(b) (2008), 3583(d) (Supp. 2016).

¹⁶⁸ 18 U.S.C. § 3563(e) (2012).

¹⁶⁹ 18 U.S.C. §§ 3553(a)(1), 3553(a)(2)(B)–(D) (2018), 3583(d)(1) (2016).

¹⁷⁰ 18 U.S.C. §§ 3553(a)(2)(A), 3563(b) (2012 & Supp. 2018).

The court's ability to set discretionary conditions for supervised release is limited by the language "no greater deprivation of liberty than is reasonably necessary."¹⁷¹ Discretion for the probationer's terms may "involve only such deprivations of liberty or property as are reasonably necessary."¹⁷² Some of the discretionary conditions that courts may set include additional community service, further restrictions on where a defendant can live or travel to, limited freedom of association, financial or substance abuse counseling, testing, and/or additional disclosure of information.¹⁷³

Furthermore, federal law mandates that all probationers be provided with a written explanation that is "sufficiently clear and specific to serve as a guide for the defendant's conduct and for such supervision as is required."¹⁷⁴ 18 U.S.C. § 3583(e)(2) allows courts to "extend a term of supervised release if less than the maximum authorized term was previously imposed, and may modify, reduce, or enlarge the conditions of supervised release."¹⁷⁵

The behavior and responsibilities of U.S. probation officers are set by 18 U.S.C. § 3603 and the Federal Rules of Criminal Procedure. Officers must write a report on the defendant before the court issues its parole or supervised release terms.¹⁷⁶ This report must describe the prisoner's personal history, criminal history and prison behavior.¹⁷⁷ Principles of supervision are set by the Judicial Conference of the United States.¹⁷⁸ The supervised release program has been heavily criticized because it results in too many offenders breaching relatively minor conditions and then being returned to prison. Public Defender Jacob Schuman wrote recently that:

In the federal criminal justice system, prison is just the beginning of punishment. After prison comes "supervised release," a set of obligations and restrictions governing an ex-con's day-to-day schedule, employment, residence, and relationships. In the best-case scenario, two-thirds of people successfully complete their term of supervised release . . . [However], the data show that this system is incredibly strict, and that its reach is vast. Between 2005 and 2009, federal judges imposed supervised release in approximately 300,000 cases, with an average term lasting over [forty] months. By 2010, more than [ten-thousand] federal inmates were locked up for violating their supervised release. The supervision costs the federal government

¹⁷¹ 18 U.S.C. § 3583(d)(2).

¹⁷² 18 U.S.C. § 3563(b).

¹⁷³ 18 U.S.C. § 3563(b)(1)-(22).

¹⁷⁴ 18 U.S.C. § 3563(d).

¹⁷⁵ 18 U.S.C. § 3583(e)(2).

¹⁷⁶ FED. R. CRIM. P. 32(c)(1)(A).

¹⁷⁷ FED. R. CRIM. P. 32(d)(2).

¹⁷⁸ See 28 U.S.C. § 2073 (a)(1) (2012).

\$400 million annually (not including the cost of incarcerating people for violations).¹⁷⁹

There are no offenses that have guaranteed periods of supervised release but certain crimes nearly always receive supervised release sentences.¹⁸⁰ Those convicted of “manslaughter, sexual abuse, robbery, arson, drug trafficking, firearms, extortion/racketeering, pornography/prostitution” have an over ninety-nine percent likelihood of receiving supervised release sentences, while drug possession prison sentences are 56.7% likely to receive supervised release.¹⁸¹ This cumulative number represents eight of every ten defenders sentenced on federal charges.¹⁸² The number of federal offenders on supervised release per year has increased from 39,000 to over 115,000 from 1995 to 2015.¹⁸³ The average length of the supervision program has increased on a smaller scale from 42.1 to 47.1 months.¹⁸⁴ As of December 2015, 132,800 prisoners are on federal probation or parole.¹⁸⁵

The consequences of violating parole and probation are set out in 18 U.S.C. § 3565 and 18 U.S.C. § 3583(e) and include being re-sent to a period of incarceration, which occurs relatively frequently.¹⁸⁶ It has been observed that “being sentenced to prison rather than probation increases the probability of imprisonment in the first [three] years after release from prison” by eighteen to nineteen percentage points.¹⁸⁷

A study in 2015 examined the breach rates of 454,223 offenders serving active supervision terms of supervised release

¹⁷⁹ Jacob Schuman, *America’s Shadow Criminal Justice System*, NEW REPUBLIC (May 30, 2018), <https://newrepublic.com/article/148592/americas-shadow-criminal-justice-system> [<https://perma.cc/84YG-U6EE>].

¹⁸⁰ See U.S. SENTENCING COMM’N, FEDERAL OFFENDERS SENTENCED TO SUPERVISED RELEASE 55 (2010), https://www.uscc.gov/sites/default/files/pdf/research-and-publications/research-publications/2010/20100722_Supervised_Release.pdf [<https://perma.cc/84YG-U6EE>].

¹⁸¹ *Id.* at 54–55.

¹⁸² U.S. SENTENCING COMM’N, OVERVIEW OF FEDERAL CRIMINAL CASES: FISCAL YEAR 2014, at 4 (2015), http://www.uscc.gov/sites/default/files/pdf/research-and-publications/research-publications/2015/FY14_Overview_Federal_Criminal_Cases.pdf [<https://perma.cc/RM2U-M4H8>].

¹⁸³ PEW CHARITABLE TRS., NUMBER OF OFFENDERS ON FEDERAL SUPERVISED RELEASE HITS ALL-TIME HIGH 2 (2017), https://www.pewtrusts.org/-/media/assets/2017/01/number_of_offenders_on_federal_supervised_release_hits_alltime_high.pdf [<https://perma.cc/8HMX-J9HD>]. The number of offenders on supervised release compares to the total number of federal prisoners of 180, 181. *Statistics: Past Inmate Population Totals*, FED. BUREAU PRISONS, https://www.bop.gov/about/statistics/population_statistics.jsp [<https://perma.cc/XL53-LADR>].

¹⁸⁴ PEW CHARITABLE TRS., *supra* note 183, at 2.

¹⁸⁵ KAEBLE & GLAZE, *supra* note 34, at 12.

¹⁸⁶ See 18 U.S.C. §§ 3565, 3583(e) (2012 & Supp. 2016)

¹⁸⁷ David J. Harding et al., *Short and Long-term Effects of Imprisonment on Future Felony Convictions and Prison Admissions*, PROC. NAT’L ACAD. SCI. U.S. (Oct. 17, 2017), <https://www.pnas.org/content/pnas/114/42/11103.full.pdf> [<https://perma.cc/EUC2-DJYV>].

(eighty-one percent) and probation (nineteen percent) which commenced between October 2004 and September 2014.¹⁸⁸ It observed that approximately 16.2% of offenders on these orders had supervision revoked within the first year by committing a second crime.¹⁸⁹ This increases to 33.7% over three years and 41.1% over five years (the maximum possible length).¹⁹⁰ Over the same time intervals, the chances of revocation for a technical violation are 5.9%, 10.8% and 11.2%.¹⁹¹ After supervision ends, there exists a fifteen percent chance that the defendant will be arrested for another offense within the next three years.¹⁹² Common major violations include drug possession, immigrant offenses, assault, firearm possession, and larceny.¹⁹³

In terms of cost, a day in a federal prison costs the U.S. Government \$79.16 per resident as compared to \$9.17 per day (i.e. \$3,350 per year) for probation officer supervision.¹⁹⁴ We now consider the manner in which parole and probation are regulated in the second largest state: California.

B. California

The California system is unusual in terms of lack of uniformity, with considerable discretion being accorded to counties to set their own probation terms. State parole rules are set by CAL. CODE REGS. tit. 15, Section 2355.¹⁹⁵ Rules on county parole and probation are set by CAL. PENAL CODE Section 1203.¹⁹⁶ County Parole boards set standards according to CAL. PENAL CODE Section 3076(b) for any prisoner in county jail or on work furlough.¹⁹⁷ These parole terms may not exceed three years.¹⁹⁸ As of December 2015, California has 349,600 offenders on parole or probation.¹⁹⁹

¹⁸⁸ Laura M. Baber, *Inroads to Reducing Federal Recidivism*, 79 FED. PROB. 3, 4 (2015).

¹⁸⁹ *Id.* at 6.

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.* at 6.

¹⁹³ *Id.* The five most common minor offenses are traffic violations, drunk and disorderly, simple assault, petty theft, and driving under the influence.

¹⁹⁴ *Does Prison Work?*, SECURITYDEGREEHUB.COM, <https://www.securitydegreehub.com/prison/> [<https://perma.cc/MY5Z-DW6B>].

¹⁹⁵ CAL. CODE REGS. tit. 15, § 2355 (2019)

¹⁹⁶ CAL. PENAL CODE § 1203 (2019)

¹⁹⁷ CAL. PENAL CODE § 3076(b) (2002).

¹⁹⁸ CAL. PENAL CODE § 3081(b) (2014).

¹⁹⁹ DANIELLE KAEBLE & THOMAS P. BONCZAR, U.S. DEP'T OF JUSTICE, NCJ 250230, PROBATION AND PAROLE IN THE UNITED STATES, 2015, at 14 (2017), <https://www.bjs.gov/content/pub/pdf/ppus15.pdf> [<https://perma.cc/V5VU-LAHH>].

Defendants who have been convicted of two prior felonies or most aggravated felonies are not eligible for probation.²⁰⁰ The California conditions for parole and probation are similar to those federally.²⁰¹ One notable exception is the requirement that those on parole can be the subject of “search or seizure by a probation or parole officer or other peace officer at any time of the day or night, with or without a search warrant or with or without cause.”²⁰²

For certain prisoners, post-incarceration supervision is handled at a county rather than a state level. Eligible prisoners—those with non-violent, non-serious, and non-sexual convictions—are allowed to enter post-release community supervision (PRCS).²⁰³ CAL. PENAL CODE Section 3451(a) limits post-incarceration supervision to three years.²⁰⁴

In 2011, the California Assembly passed split sentences with Assembly Bill 109. Intended to alleviate California’s overburdened prison population, split sentences lead to a bifurcated sentence: half of a defendant’s time is spent in incarceration while half is under mandatory supervision. These sentences are mandatory for many minor convictions “[u]nless the court finds that, in the interests of justice, it is not appropriate in a particular case.”²⁰⁵ This realignment also means that defendants who violate probation will be housed in county jails instead of being returned to state prison.²⁰⁶ The maximum time that can be spent in county jail for revocation is 180 days.²⁰⁷

In a departure from recent pushes for judicial discretion to give probation and community supervision, 2016 Assembly Bill AB 2888 removed the ability of judges to grant community

²⁰⁰ CAL. PENAL CODE § 1203(e) (2019). Crimes that can render a defendant ineligible for probation include “burglary with explosives, rape with force or violence, torture, aggravated mayhem, murder, attempt to commit murder, trainwrecking, extortion, kidnapping, [and] escape from the state prison.” § 1203(e)(1).

²⁰¹ See *supra* Part III.

²⁰² CAL. PENAL CODE § 3067(b)(3) (2012). This requirement was upheld by the U.S. Supreme Court in *Samson v. California*, 547 U.S. 843, 846, 857 (2006).

²⁰³ CAL. PENAL CODE § 3450 (2011); CAL. CODE REGS. tit. 15, §§ 3079-79.1 (2012).

²⁰⁴ CAL. PENAL CODE § 3451(a) (2015).

²⁰⁵ CAL. PENAL CODE § 1170(h)(5)(A) (2018).

²⁰⁶ Another means to combat prison overcrowding was approved in September 2010 when the California Legislature passed Senate Bill 1266 to establish the Alternative Custody Program. Non-serious, non-violent offenders and non-sex offenders may be permitted to serve the remainder of their sentences in a residential home or other facility that offers individual services. S.B. 1266, Assemb. Reg. Sess. 2009-2010 (Cal. 2010).

²⁰⁷ *Parole Revocation Proceedings: FAQs*, ADMIN. OFF. CTS., at 28 (2013), <http://www.courts.ca.gov/partners/documents/FAQs-Parole-Revocation-Proceedings.pdf>.

supervision for any defendant convicted of sexual offenses against an incapacitated or unconscious party.²⁰⁸

An inmate in a California prison costs the state approximately \$59,919 per year. Annual parole costs equal \$10,182 and probation costs are \$4,438.²⁰⁹ Currently, 5.6% of California probations end in failure.²¹⁰ Parole's three year failure rate for inmates released in 2011 (the last year surveyed) was considerably higher at 30.3%.²¹¹

C. Texas

Texas parole and probation decisions have been managed by the Texas Department of Criminal Justice Board of Pardons and Paroles since 1985.²¹² As of December 2015, Texas had 88,893 offenders on parole programs²¹³ and 488,800 residents on any form of community supervision programs.²¹⁴ Section 508 of the Texas Government Code sets the standards and conditions. Eligibility criteria are set in Texas Government Code Sections 508.145 and 508.149.²¹⁵ The Texas legislature has referred to "probation" as "community supervision" since 1993.²¹⁶

All Texas defendants are eligible for community supervision unless their offense carries a prison term of over ten years or a term of confinement under Section 12.35 of the Penal Code.²¹⁷ The determination of who will receive community supervision and the conditions to be imposed are set by the sentencing judge.²¹⁸ The same judge can modify these conditions at any time. Minimum possible supervision sentences are two years for a misdemeanor and ten years for a felony.²¹⁹ Basic community supervision restrictions include (but are not limited to): avoiding future offenses, avoiding members of street gangs, submitting to substance testing,

²⁰⁸ A.B. 2888, Assemb. Reg. Sess. 2016-2017. (Cal. 2016).

²⁰⁹ Ryken Grattet & Brandon Martin, *Probation in California*, PUB. POL'Y INST. CAL. (Dec. 2015), http://www.ppic.org/content/pubs/jtf/JTF_ProbationJTF.pdf [https://perma.cc/UR42-N5GS].

²¹⁰ *Id.* Failure is considered a "revocations to jail or prison." *Id.*

²¹¹ SCOTT KERNAN, ET AL., CAL. DEP'T OF CORR. & REHAB., 2015 OUTCOME EVALUATION REPORT, at 50 (2016), <https://sites.cdc.ca.gov/research/wp-content/uploads/sites/9/2018/04/2015-Outcome-Evaluation-Report.pdf> [https://perma.cc/8BDB-HAY2].

²¹² *Revised Parole Guidelines*, TEX. BOARD PARDONS & PAROLES, http://www.tdcj.state.tx.us/bpp/parole_guidelines/parole_guidelines.html [https://perma.cc/PWR5-HSJT].

²¹³ *Adult Parole System in Texas*, LEGIS. BUDGET BOARD. (June 2014), http://www.lbb.state.tx.us/Documents/Publications/Issue_Briefs/1388_Adult_Parole_System_In_TX.pdf [https://perma.cc/XE3S-HCLR].

²¹⁴ KAEBLE & BONCZAR, *supra* note 199, at 15.

²¹⁵ TEX. GOV'T CODE ANN. §§ 508.145, .149 (WEST 2017).

²¹⁶ *Id.*; TEX. CODE CRIM. PROC. ANN. art. 42A (West 2017).

²¹⁷ TEX. CODE CRIM. PROC. ANN. art. 42A.053(c) (West 2017).

²¹⁸ TEX. CODE CRIM. PROC. ANN. art. 42A.051 (West 2017).

²¹⁹ TEX. CODE CRIM. PROC. ANN. art. 42.12, § 3.

permitting searching of the home, attending regular meetings, remaining employed, and paying any relevant fines.²²⁰

Texas prisoners are eligible for parole unless they have been sentenced to death or life with no possibility of parole. Qualifying for parole requires a two-thirds vote by the Parole Board.²²¹ Incarcerated prisoners are considered on a list of static and dynamic factors.²²² Static factors are: “[a]ge at first admission to a juvenile or adult correctional facility; [h]istory of supervisory release revocations for felony offenses; [p]rior incarcerations; [e]mployment history; and [t]he commitment offense.”²²³ Dynamic factors considered are: “[t]he offender’s current age; [w]hether the offender is a confirmed security threat group (gang) member; [e]ducation, vocational and certified on-the-job training programs completed during the present incarceration; [p]rison disciplinary conduct; and [c]urrent prison custody level.”²²⁴

As with all states, the parole board has considerable flexibility for setting parole conditions.²²⁵ Mandatory conditions of release include assigning a county for the defendant to reside in (typically the county they were residing in prior to incarceration or the county that will likely ensure the greatest likelihood of a successful parole program).²²⁶ Parolees must also attain an educational equivalent of at least sixth grade or higher²²⁷ and undergo controlled substance testing.²²⁸

The Texas Legislature recently modified the process for handling alleged supervision violations. Previously, the accused defendant would be incarcerated in a county lockup until a hearing, resulting in considerable costs to the county and the defendant.²²⁹ Texas now allows the defendant to remain at home until the process hearings begin.²³⁰

According to Marc Levin, director of the Center for Effective Justice at the Texas Public Policy Foundation, housing a Texan prisoner costs the state \$53 a day compared to \$3 a day for parolees and less than \$2 a day for probationers.²³¹ Further,

²²⁰ TEX. CODE CRIM. PROC. ANN. art. 42.12, § 11.1-24.

²²¹ TEX. ADMIN. CODE ANN. § 145.1 (West 2019).

²²² TEX. ADMIN. CODE ANN. § 145.2. (West 2019).

²²³ *Id.*

²²⁴ *Id.*

²²⁵ *See id.*

²²⁶ TEX. GOV’T CODE ANN. § 508.181 (West 2019).

²²⁷ TEX. GOV’T CODE ANN. § 508.183 (West 2019).

²²⁸ TEX. GOV’T CODE ANN. § 508.184 (West 2019).

²²⁹ INTERIM REPORT, *supra* note 102, at 9.

²³⁰ *Id.*

²³¹ Johnathan Silver, *Texas Prisons Ponder Cutting \$250 Million*, TEX. TRIBUNE (Aug. 3, 2016), <https://www.texastribune.org/2016/08/03/prisons-agency-could-see-250-million-budget-cuts> [https://perma.cc/7W77-L2J2].

in 2014, 6.5% of Texas parolees were found in violation of parole terms, 80% of these violations were due to committing a new offense. The same year, 15.6% of defendants on probation violated their conditions, and in 50.7% of these instances was due to committing a new offense.²³² Having examined the law and practice in relation to parole and probation in the two largest states, we now move to the third largest state: New York.

D. *New York*

New York Penal Law Section 65.10 sets the conditions for New York probation.²³³ New York Penal Law Section 70.45 sets the terms of New York post-release supervision.²³⁴ New York's maximum allowed felony probation sentences are longer than most states, a maximum of five years as compared to the average state's cap of two or five years.²³⁵ The general New York probation conditions are very similar to the general parole conditions.²³⁶

More than 200 years ago, New York started to use good behavior and parole as an alternative to sentencing. Section 70.40 of the New York State Penal Law created a unique New York supervision program entitled "Good Time,"²³⁷ beginning in 1817.²³⁸ Good Time is a form of rehabilitative behavior credit for prisoners and allows New York prisoners to begin post-incarceration release earlier than the court-appointed date. This can be done after six-sevenths of the minimum time has elapsed for prisoners with determinate sentences or in the case of prisoners with

²³² INTERIM REPORT, *supra* note 102, at 13.

²³³ N.Y. PENAL LAW § 65.10 (McKinney 2019).

²³⁴ N.Y. PENAL LAW § 70.45 (McKinney 2019).

²³⁵ N.Y. PENAL LAW § 65.00(3)(a)(i) (McKinney 2014); JUSTICE CTR., IMPROVING PROBATION AND ALTERNATIVES TO INCARCERATION IN NEW YORK STATE: INCREASING PUBLIC SAFETY & REDUCING SPENDING ON PRISONS AND JAILS 4 (2013), <https://csgjusticecenter.org/corrections/projects/ny-state-probation-incarceration-study> [<https://perma.cc/23JA-F98A>] [hereinafter IMPROVING PROBATION].

²³⁶ N.Y. PENAL LAW § 65.10 (2)(a)-(g) (McKinney 2019). "When imposing a sentence of probation or of conditional discharge, the court shall, as a condition of the sentence, consider restitution or reparation and may, as a condition of the sentence, require that the defendant: Avoid injurious or vicious habits; Refrain from frequenting unlawful or disreputable places or consorting with disreputable persons; Work faithfully at a suitable employment or faithfully pursue a course of study or of vocational training that will equip him for suitable employment; Undergo available medical or psychiatric treatment and remain in a specified institution, when required for that purpose; Participate in an alcohol or substance abuse program or an intervention program approved by the court after consultation with the local probation department having jurisdiction, or such other public or private agency as the court determines to be appropriate; Support his dependents and meet other family responsibilities; Make restitution of the fruits of his or her offense or make reparation, in an amount he can afford to pay, for the actual out-of-pocket loss caused thereby."

²³⁷ *Id.*

²³⁸ GRAY CAVENDER, PAROLE: A CRITICAL ANALYSIS (1982).

indeterminate sentences, where the good time credits exceed the remaining incarceration period.

Prisoners who are serving one or more indeterminate sentences become eligible for parole in New York when he or she has served a minimum sentence set by the sentencing court.²³⁹ The Sentencing Reform Act of 1998 made all violent felony offenders not eligible for parole.²⁴⁰ New York Penal Law Section 70.45 was also modified to make post-release supervision mandatory for all determinate sentences. In 2005 and 2007, mandatory determinate sentences expanded to drug offenders and most sexual offenders.²⁴¹ In 2003, New York amended Section 806 to allow Presumptive Release for non-violent inmates.²⁴² As with most states, the conditions imposed on parolees by the Parole Board can vary greatly but usually have common elements similar to those set out above in relation to the other states.²⁴³

²³⁹ N.Y. PENAL LAW § 70.40(1) (McKinney 2011).

²⁴⁰ See *The Sentencing Reform Act of 1998-Jenna's Law*, N.Y.S. DEP'T CORR. & CMTY. SUPERVISION, <http://www.doccs.ny.gov/legislation-jl.html> [<https://perma.cc/7843-QXV5>].

²⁴¹ *Merger of Department of Correctional Services and Division of Parole*, N.Y. DEP'T CORR. & CMTY. & SUPERVISION (Apr. 2011), <http://www.doccs.ny.gov/FactSheets/DOCS-Parole-Merger.html> [<https://perma.cc/3ZV9-PVWG>].

²⁴² *New York State Department of Corrections and Community Supervision Handbook*, N.Y.S. DEP'T CORR. & CMTY. SUPERVISION (July 2017), http://www.doccs.ny.gov/CommSup_Handbook.html [<https://perma.cc/2MM3-6AHK>] [hereinafter *Community Supervision Handbook*].

²⁴³ *Id.* These common requirements are typically written as “1. I will proceed directly to the area to which I have been released and, within twenty-four (24) hours of my release make my arrival report to the Community Supervision Office indicated on my release agreement, unless other instructions are designated on the agreement. 2. I will make office and/or written reports as directed. 3. I will not leave the State of New York or any other state to which I am released or transferred, or any area defined in writing by my Parole Officer without permission. 4. I will permit my Parole Officer to visit me at my residence and/or place of employment and I will permit the search and inspection of my person, residence, [and] property. I will discuss any proposed changes in my residence, employment, or program status with my Parole Officer. I understand that I have an immediate and continuing duty to notify my Parole Officer of any changes in my residence, employment, or program status when circumstances beyond my control make prior discussion impossible. 5. I will reply promptly, fully, and truthfully to any inquiry of[,] or communication by my Parole Officer or other representative of the Department of Corrections and Supervision. 6. I will notify my Parole Officer immediately any time I am in contact with[,] or arrested by[,] any law enforcement agency. I understand that I have a continuing duty to notify my Parole Officer of such contact or arrest. 7. I will not be in the company of[,] or fraternize with any person I know to have a criminal record or whom I know to have been adjudicated a Youthful Offender[,] except for accidental encounters in public places, work, school, or in any other instance without the permission of my Parole Officer. 8. I will not behave in such a manner as to violate the provisions of any law to which I am subject[,] which provide[s] for a penalty of imprisonment, nor will my behavior threaten the safety or well-being of myself or others. 9. I will not own, possess, or purchase any shotgun, rifle, or firearm of any type without the written permission of my Parole Officer. I will not own, possess, or purchase any deadly weapon as defined in the Penal Law or any dangerous knife, dirk, razor, stiletto, or imitation pistol. In addition, I will not own, possess or purchase any instrument readily capable of causing physical injury without a satisfactory explanation for ownership, possession or purchase. 10. In the event

As of December 2015, New York had 145,600 persons in community supervision programs.²⁴⁴ The adult probation population of New York has steadily declined over the years (the largest example of a decline in any state) and many New York City residents on probation now report to kiosks instead of probation officers.²⁴⁵ Probation in New York City has an eighty percent success rate, lowering to a sixty-five percent success rate in the rest of the state.²⁴⁶ Additionally, seventeen percent of New Yorkers on supervised release commit another crime during their period of release.²⁴⁷

E. Florida

Florida's state probation programs are set by state statute section 948.03.²⁴⁸ Florida's state legislature eliminated parole in October 1983.²⁴⁹ Only inmates incarcerated for crimes committed before October 1983 are eligible for parole.²⁵⁰ As of 2016, 4,552 inmates remain parole-eligible in Florida's state prisons.²⁵¹

Florida defendants can be sentenced to probation as long as their crime is not death-eligible.²⁵² Florida's probation conditions are nearly identical to the general stipulations in other states.²⁵³ The Florida supervised release program was created in

that I leave the jurisdiction of the State of New York, I hereby waive my right to resist extradition to the State of New York from any state in the Union and from any territory or country outside the United States. This waiver shall be in full force and effect until I am discharged from Parole or Conditional Release. I fully understand that I have the right under the Constitution of the United States and under law to contest any effort to extradite me from another state and return me to New York, and I freely and knowingly waive this right as a condition of my Parole or Conditional Release. 11. I will not use or possess any drug paraphernalia or use or possess any controlled substance without proper medical authorization. 12. Special Conditions: (as specified by the Board of Parole, Parole Officer or other authorized representative of DOCCS). 13. I will fully comply with the instructions of my Parole Officer and obey such special additional written conditions as he or she, a member of the Board of Parole, or an authorized representative of the Department of Corrections and Community Supervision, may impose." *Id.*

²⁴⁴ KAEBLE & GLAZE, *supra* note 34, at 12, 15.

²⁴⁵ Michael P. Jacobson et al., *Less Is More: How Reducing Probation Populations Can Improve Outcomes, Papers from the Executive Session on Community Corrections*, HARV. KENNEDY SCH. 8–9 (Aug. 2017), https://www.hks.harvard.edu/sites/default/files/centers/wiener/programs/pcj/files/less_is_more_final.pdf [<https://perma.cc/AE2R-A5ZT>].

²⁴⁶ IMPROVING PROBATION, *supra* note 235, at 3.

²⁴⁷ *Id.*

²⁴⁸ FLA. STAT. § 948.03 (2018).

²⁴⁹ *Release Types*, FLA. COMM'N ON OFFENDER REV., <https://www.fcor.state.fl.us/release-types.shtml> [<https://perma.cc/Z6QZ-ZW2N>].

²⁵⁰ *Id.*

²⁵¹ *Id.*

²⁵² FLA. STAT. § 948.01(1) (2017).

²⁵³ FLA. STAT. § 948.03. "(1) The court shall determine the terms and conditions of probation. Conditions specified in this section do not require oral pronouncement at

1988 and is controlled by the Florida Commission on Offender Review.²⁵⁴ A year later, Florida's legislature created the Control Release Authority which is a system designed to keep the state's prison population within manageable levels via discretionary release reviews.²⁵⁵ Prisoners must serve eighty-five percent of their sentence to be considered for release.²⁵⁶ Thus, this sanction functions as a form of parole.

Florida's incarcerated and supervised population is higher than the national average, at 513 per 100,000 residents.²⁵⁷ Florida State Statute (F.S.S.) section 948.001 prohibits officers from monitoring more than 50 drug offenders at once. F.S.S. section

the time of sentencing and may be considered standard conditions of probation. These conditions may include among them the following, that the probationer or offender in community control shall: (a) Report to the probation officer as directed. (b) Permit the probation officer to visit him or her at his or her home or elsewhere. (c) Work faithfully at suitable employment insofar as may be possible. (d) Remain within a specified place. (e) Live without violating any law. A conviction in a court of law is not necessary for such a violation of law to constitute a violation of probation, community control, or any other form of court-ordered supervision. (f) Make reparation or restitution to the aggrieved party for the damage or loss caused by his or her offense in an amount to be determined by the court. The court shall make such reparation or restitution a condition of probation, unless it determines that clear and compelling reasons exist to the contrary. If the court does not order restitution, or orders restitution of only a portion of the damages, as provided in s. 775.089, it shall state on the record in detail the reasons therefore. (g) Effective July 1, 1994, and applicable for offenses committed on or after that date, make payment of the debt due and owing to a county or municipal detention facility under s. 951.032 for medical care, treatment, hospitalization, or transportation received by the felony probationer while in that detention facility. The court, in determining whether to order such repayment and the amount of the repayment, shall consider the amount of the debt, whether there was any fault of the institution for the medical expenses incurred, the financial resources of the felony probationer, the present and potential future financial needs and earning ability of the probationer, and dependents, and other appropriate factors. (h) Support his or her legal dependents to the best of his or her ability. (i) Make payment of the debt due and owing to the state under s. 960.17, subject to modification based on change of circumstances. (j) Pay any application fee assessed under s. 27.52(1)(b) and attorney's fees and costs assessed under s. 938.29, subject to modification based on change of circumstances. (k) Not associate with persons engaged in criminal activities. (l) 1. Submit to random testing as directed by the probation officer or the professional staff of the treatment center where he or she is receiving treatment to determine the presence or use of alcohol or controlled substances. 2. If the offense was a controlled substance violation and the period of probation immediately follows a period of incarceration in the state correctional system, the conditions must include a requirement that the offender submit to random substance abuse testing intermittently throughout the term of supervision, upon the direction of the probation officer." *Id.*

²⁵⁴ *Media/Public Information: Florida Commission on Offender Review History*, FLA. COMM'N ON OFFENDER REV., <https://www.fcor.state.fl.us/media.shtml> [<https://perma.cc/Q3N2-BJV4>].

²⁵⁵ *Id.*

²⁵⁶ FLA. STAT. § 944.275(3)(f) (2017).

²⁵⁷ *Facts About Florida's Prisoners*, PROJECT 180, <https://www.project180reentry.org/statistics> [<https://perma.cc/XV8K-F8FX>] (citing *Agency Annual Report 2013-2014*, FLA. DEP'T CORRECTIONS (2015), <http://www.dc.state.fl.us/pub/annual/1314/AnnualReport-1314.pdf>); E. Ann Carson, *Prisoners In 2014*, BUREAU JUST. STAT. 8 (2015), <https://www.bjs.gov/content/pub/pdf/p14.pdf> [<https://perma.cc/5G5C-JBVJ>]; see also Lauren E. Glaze & Danielle Kaeble *Correctional Populations in the United States, 2013*, BUREAU JUST. STAT. (Dec. 19, 2014), <http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5177> [<https://perma.cc/5YLX-BHB7>].

948.10 prohibits the DOC from giving officers more than twenty-five “community control” or “house-arrest” cases.²⁵⁸

As of December 2015, Florida had 225,400 citizens on probation, parole or supervised release.²⁵⁹ The recidivism rate for 2012 (the most recent year surveyed) was twenty-five percent.²⁶⁰ As of 2014, the successful program completion rate was 56.4%.²⁶¹ The cost of Florida incarceration is \$53.49 per day (in fiscal year 2015).²⁶² Supervised release costs the state \$5.05 per day (or \$1843 per year).²⁶³

F. *Overview of Conditions Associated with Parole and Probation*

As the above survey shows, probation and parole are widely utilized sanctions throughout the United States. There is widespread uniformity regarding the conditions that are placed on offenders undergoing these sanctions. The cardinal condition that is imposed on all offenders during the period of probation and parole is that they cannot commit an offense during the period of the order. The numerous other core or optional conditions that are associated with these sanctions, such as not taking illicit drugs, are principally designed to increase the likelihood of offenders not committing other offenses during this period. Thus, a key objective of the sanctions is community protection. A number of other conditions that are often imposed as part of probation and parole aim at rehabilitating offenders. These conditions too are designed to protect that community from criminal behavior. Despite this, a large number of probation and parole orders result in a default. This varies considerably across each of the jurisdictions, however, but is generally in the order of thirty percent and in some instances is over forty percent.²⁶⁴ This means that offenders commit hundreds of thousands of crimes in the community while undergoing sentence.

There are numerous reasons why probation and parole are ineffective at preventing reoffending during the period of the sanctions. The key reason is that the level of oversight and observation of offenders during this period is negligible. Offenders

²⁵⁸ WTSP Staff, *DOC Skirts Law, Risks Safety on Probation Caseloads*, WTSP (Mar. 31, 2015), <http://www.wtsp.com/news/investigations/doc-skirts-law-risks-safety-on-probation-caseloads/236703183> [<https://perma.cc/5REB-EQCQ>].

²⁵⁹ KAEBLE & BONCZAR, *supra* note 199.

²⁶⁰ *Quick Facts About the Florida Department of Corrections*, FLA. DEP'T CORRECTIONS (revised Dec. 2017), <http://www.dc.state.fl.us/oth/Quickfacts.html>.

²⁶¹ *Agency Annual Report 2013-2014*, *supra* note 257, at 51.

²⁶² *Quick Facts About the Florida Department of Corrections*, *supra* note 260.

²⁶³ *Id.*

²⁶⁴ KAEBLE & BONCZAR, *supra* note 199; *see also Too big to succeed*, *supra* note 23.

are essentially at large in the community and have no meaningful oversight of their movements and actions. In short, they have an unrestricted level of opportunity to commit crime. In addition to this, the conditions that are imposed in an attempt to decrease the likelihood of reoffending are not effective. This to some extent may be attributable to insufficient resources being devoted to implementing these sanctions. The cost of probation and parole vary considerably, however, they generally are in the order of one-eighth that of prison.²⁶⁵ Despite this, there is considerable criticism of the level of resourcing provided in relation to these sanctions, including the number of staff that are employed to monitor offenders placed on probation and parole.²⁶⁶

Moreover, and importantly for the purposes of this Article, the true cost of probation and parole is not reflected by the cost compared to the cost of imprisonment. This is because, as we have seen, there is a very high breach rate of these sanctions, which often involves offenders being sentenced to imprisonment.²⁶⁷ Thus, the breach rate of the sanctions is a cardinal consideration in evaluating the financial viability of parole and probation.

The reality is that even if the parole and probation sanctions were better resourced, the rate of reoffending during the term of the sanction is unlikely to improve meaningfully. This is because an intrinsic aspect of the sanction is that it involves no meaningful oversight by corrections staff. Offenders who are on probation and parole receive a negligible amount of direct supervision by a corrections officer and have an unlimited capacity to plan and engage in criminal conduct. The nominal level of oversight of these sanctions is a fundamental and defining flaw of these sanctions. By their very nature, they will always involve a large amount of crime being committed by offenders who are placed on them. In the next part of the article, we set out the contours of a sanction which would far more effectively achieve the goals of probation and parole.

²⁶⁵ *Supervision Costs Significantly Less than Incarceration in Federal System*, U.S. COURTS.GOV (July 18, 2013), <http://www.uscourts.gov/news/2013/07/18/supervision-costs-significantly-less-incarceration-federal-system> [<https://perma.cc/9BCU-N4PY>].

²⁶⁶ *See, e.g., Too Big to Succeed: The Impact of the Growth of Community Corrections and What Should Be Done About It*, COLUM. U. JUST. LAB 1 (Jan. 29, 2018), https://justicelab.columbia.edu/sites/default/files/content/Too_Big_to_Succeed_Report_FINAL.pdf [<https://perma.cc/6EXE-7PRG>].

²⁶⁷ *See supra* Part III.

IV. PROPOSED NEW SANCTION—THE “MONITORING SANCTION”

Probation and parole in the form that they are currently imposed in are archaic, rudimentary processes that are incapable of achieving their ultimate objective of sentencing (community protection) to a satisfactory level. Offenders spend very little time with their supervising corrections officer and hence have an ample, unimpeded, opportunity to commit further crimes.²⁶⁸ These sanctions also sometimes have a rehabilitative aim, but the level of resources devoted to this objective is minimal. Technology promises to provide a far more effective and efficient means of achieving the aims of probation and probation.

A. *Objective of the New Sanction*

As we saw in Part II, the most important aim of sentencing is protection of the community.²⁶⁹ Sentencing should also aim to rehabilitate offenders, if possible. It should also impose a punishment commensurate with the severity of the crime.

These objectives are consistent with the aim of probation and parole; hence, one of the main points of attraction regarding the new proposed sanction is that it can replace parole and probation, while at the same time promoting the aims of sentencing in general. In broad terms, the objective of the new sanction is to provide a means for courts to impose punishment on offenders who have committed mid-level and minor offenses which does not involve the offender spending any time in prison and to punish serious offenders who have completed part of their prison term. The new sanction would replace probation and parole in a manner which would ensure that all of the appropriate sentencing objectives for this cohort of offenders are satisfied in a far more efficient and effective manner that is currently the situation.

There is one additional significant advantage of the new sanction, which distinguishes it from all other criminal sanctions. As noted above, the theory of marginal general deterrence is flawed because there is no meaningful link between higher penalties and lower crime.²⁷⁰ But absolute general deterrence does work: there is a connection between the likelihood of being apprehended and punished for a crime and lower recidivism.²⁷¹

²⁶⁸ See *supra* Part III.

²⁶⁹ See *supra* INTRODUCTION.

²⁷⁰ See *supra* Part II.

²⁷¹ See *supra* Part II.

Absolute general deterrence cannot normally be achieved by criminal sanctions because by their nature they are reactionary measures imposed by the criminal justice system after a crime has been committed. Existing criminal sanctions do not operate in a manner where they are designed or capable of effectively monitoring the actions of offenders and thereby discouraging offenders from committing further offenses.

By contrast, the new sanction would also facilitate the goal of absolute general deterrence. The new sanction involves monitoring and evaluating all of the actions of offenders. This mechanism also provides a record of the actions of offenders, which the police can use to detect the commission of a crime and by prosecutors as evidence of the crime. This provides a powerful reason for offenders who are undergoing the sanction to not commit further offenses. Thus, the subsidiary aim of the sanctions is to enable the efficient detection, arrest and prosecution of offenders who do commit offenses while they are subject to the sanction.

B. Overview of the New Sanction

More than forty years ago, criminologist Robert Martinson, in response to the high rate of offender recidivism, suggested the most effective way to protect the community from criminals was to assign a police officer to each offender. He dubbed this “cop-a-con.”²⁷² The proposal was never implemented or even trialed, presumably because of the prohibitive cost. But technology now exists, which if adapted to the development and implementation of criminal sanctions can achieve a very similar level of monitoring and supervision, at a fraction of the cost. Moreover, the technological approach we advocate is in many respects even more foolproof than the detection and surveillance prowess of police.

The gold standard in achieving these aims is to have every movement of offenders monitored in real time for the entire duration of the sanction. This was the rationale behind Martinson’s “cop-a-con” proposal.²⁷³ It is not feasible to have this monitoring undertaken by human beings, given the labor intensive (and hence expensive) nature of the activity. Moreover,

²⁷² Lee Wohlfert, *Criminologist Bob Martinson Offers a Crime-Stopper: Put a Cop on Each Ex-Con*, PEOPLE (Feb. 23, 1976), <http://people.com/archive/criminologist-bob-martinson-offers-a-crime-stopper-put-a-cop-on-each-ex-con-vol-5-no-7> [<https://perma.cc/58HE-DGYB>].

²⁷³ *Id.*

humans have concentration and other lapses and hence human monitoring would have considerable limitations in any event.

Fortunately, computer technology is now at a point where it can efficiently and effectively monitor, record, and, most importantly, evaluate all human behavior. The clearest example of the implementation of this type of technology is its use in driverless cars. As discussed below, sensor technology is already in use in the health sector which enables the immediate detection of untoward events, such as falls. The same type of technology can be adapted and utilized to monitor and record human movement.

The broad thrust of the proposed new sanction is that the location of the offender would be ascertainable at every point in time. In addition to this, every movement that an offender makes would be monitored in real-time by sensor equipment. If the movement involves suspicious activity, a camera is automatically activated which enables a corrections officer to gain a more accurate assessment of the relevant event. Suspicious activities include fast movements which could involve the application of force to another person or picking up an implement which could be used as a weapon. The camera would not be activated immediately on detection of the suspicious movement. This is in order to acknowledge privacy interests of the offender, and more importantly, people in close proximity to the offender. Thus, if a suspicious movement occurs, an audio alarm would trigger, which would raise awareness to the offender and people in his or her vicinity that visual monitoring may occur within a short period of time—say one minute. We now discuss the technology that can be used to develop the sanction.

C. *The Technological Aspects of the Sanction*

1. Electronic Monitoring of Offenders' Locations

The most established aspect of our technological monitoring proposal is the use of radio frequency or Global Positioning System (GPS) monitoring.²⁷⁴ At present,

²⁷⁴ See Mike Nellis, *Electronic Monitoring: Exploring the Commercial Dimension*, 58 CRIM. JUST. MATTERS 12, 12 (2008), <https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/09627250408553235.pdf> [<https://perma.cc/ZC4D-YVZR>]; MATTHEW DEMICHELE & BRIAN PAYNE, OFFENDER SUPERVISION WITH ELECTRONIC TECHNOLOGY: COMMUNITY CORRECTIONS RESOURCE 10–12, 14, 16–17, 19–20 (2d ed. 2009), https://www.appa-net.org/eweb/docs/APPA/pubs/OSET_2.pdf [<https://perma.cc/QN75-RPWX>]. For a summary of its introduction and use in the United States, see Lars H. Andersen & Signe H. Andersen, *Effect of Electronic Monitoring on Social Welfare Dependence*, 13 CRIMINOLOGY & PUB. POL'Y 349, 350–

approximately 125,000 inmates are subject to electronic monitoring.²⁷⁵ Although this is a significant number of prisoners, given the size of U.S. prisons, this is still a relatively untested and unfamiliar area of criminal justice reform. The Pew Trust noted that:

Despite the substantial growth of electronic tracking during the study period, it remains relatively rare in the context of the U.S. corrections system. Nationally, nearly [seven] million people were in prison or jail or on probation or parole at the end of 2014, but individuals tracked using electronic devices in 2015 represented less than [two] percent of that total. Although some research suggests that electronic monitoring can help reduce reoffending rates, the expanded use of these technologies has occurred largely in the absence of data demonstrating their effectiveness for various types of offenders at different stages of the criminal justice process.²⁷⁶

There are no universal criteria for how a prisoner in the United States can receive electronic monitoring but generally, it is only for offenders who have not committed a serious violent or sexual offense.²⁷⁷

Electronic monitoring works by fixing a transmitter to the offender which then sends a pulse to the local authorities, allowing them to monitor his or her position.²⁷⁸ GPS and radio frequency (RF) are both used to track the offender and trigger an alert when offenders leave their designated areas.²⁷⁹ A step outside of these bounds alerts the authorities and the offender. GPS is by far the more common form of monitoring.²⁸⁰ As of 2015, approximately eighty-eight thousand GPS units were in use, a thirty-fold increase in the past decade.²⁸¹ By contrast, the number of RF units used fell

52 (2014); see also Matthew DeMichele, *Electronic Monitoring: It Is a Tool, Not a Silver Bullet*, 13 CRIMINOLOGY & PUB. POL'Y 393, 395–97 (2014); Brian K. Payne, *It's A Small World, but I Wouldn't Want to Paint it: Learning from Denmark's Experience with Electronic Monitoring*, 13 CRIMINOLOGY & PUB. POL'Y 381, 382–83 (2014); Mike Nellis, *Surveillance and Confinement: Explaining and Understanding the Experience of Electronically Monitored Curfews*, 1 EUR. J. PROB. 41, 41 (2009).

²⁷⁵ This number has grown from 53,000 in 2005. *Use of Electronic Offender-Tracking Devices Expands Sharply*, PEW CHARITABLE TRS. 1 (Sept. 7, 2016), https://www.pewtrusts.org/-/media/assets/2016/10/use_of_electronic_offender_tracking_devices_expands_sharply.pdf [<https://perma.cc/NA6E-JJCC>] [hereinafter *Electronic Tracking Devices*].

²⁷⁶ *Id.* at 3.

²⁷⁷ See, e.g., WASH. REV. CODE § 9.94A.734 (2018); *Electronic Monitoring Program for DUI Offenders*, OKLA. DEP'T CORR. (2014), <http://doc.ok.gov/Websites/doc/Images/Documents/Policy/op061002.pdf> [<https://perma.cc/44QY-BWDG>] Juliet Lapidos, *You're Grounded! How Do You Qualify for House Arrest?*, SLATE (Jan. 28, 2009), http://www.slate.com/articles/news_and_politics/explainer/2009/01/youre_grounded.html [<https://perma.cc/ZV5P-TL3E>]; Brandon Martin & Ryken Grattet, *Alternatives to Incarceration in California*, PUB. POL'Y INST. CAL. (Apr. 2015), http://www.ppic.org/main/publication_quick.asp?i=1146 [<https://perma.cc/P749-4FHD>].

²⁷⁸ *Electronic Tracking Devices*, *supra* note 275, at 2.

²⁷⁹ *Id.*

²⁸⁰ *Id.* at 2–3.

²⁸¹ *Id.* at 3.

from approximately fifty thousand to thirty-eight thousand over the same period.²⁸² This change in usage is likely due to the greater capabilities of GPS, benefits which include the ability to track an offender's movements in real time.²⁸³

These tracking devices are typically fitted into ankle bracelets and charged by a twenty-four-hour battery. Monitors consist of a hard plastic shell containing a GPS chip and a fiber-optic cable, and are affixed to the offender's ankle with a rubber strap.²⁸⁴ Any attempt to tamper with or remove the bracelet would result in a notification sent to the local enforcement authorities monitoring the device.²⁸⁵

Tracking bracelets are six to ten times less expensive than typical imprisonment of offenders.²⁸⁶ The benefits of GPS monitoring are not merely confined to direct cost savings compared to prison—several studies have shown that the reduction in recidivism levels of offenders through electronic monitoring is between around twenty percent and fifty percent, far lower than the rates of imprisonment.²⁸⁷

²⁸² *Id.*

²⁸³ *Id.* at 2–3.

²⁸⁴ See Mark Morri, *New Electronic Anklelets a Tougher Collar for Prisoners*, DAILY TELEGRAPH (Dec. 10, 2014), <http://www.dailytelegraph.com.au/news/nsw/new-electronic-anklets-a-tougher-collar-for-prisoners/news-story/c2e00e5356bbf7a8e7596d4285df4971> [https://perma.cc/N22D-GVGZ]; Rob Walker, *Reconsidering the Ankle Monitor: Contemplating the Criminal Justice Tool's Role in the Rehabilitation Process amid the Wearable Tech Boom*, GOOD (Jan. 5, 2016), <https://www.good.is/features/issue-35-ankle-monitors> [https://perma.cc/FC7G-2R3F].

²⁸⁵ Morri, *supra* note 284; Walker, *supra* note 284.

²⁸⁶ Barry Latzer, *Let Them Wear Bracelets*, NAT'L REV., <https://www.nationalreview.com/magazine/2018/03/19/criminal-justice-reform-electronic-monitoring-future/> [https://perma.cc/3BA5-DLU2]. A review in 2006 of the electronic monitoring of offenders found that the cost is about one-fifth that of imprisonment and “robust” in detecting violations of the term of the order. See *The Electronic Monitoring of Adult Offenders*, NAT'L AUDIT OFF. (Feb. 1, 2006), http://www.nao.org.uk/publications/0506/the_electronic_monitoring_of_a.aspx [https://perma.cc/7L73-L9WA]; see also Natasha Alladina, *The Use of Electronic Monitoring in the Alaska Criminal Justice System: A Practical Yet Incomplete Alternative to Incarceration*, 28 ALASKA L. REV. 125, 144 (2011); OFF. JUST. PROGRAMS, U.S. DEP'T OF JUSTICE., NCJ 234460, ELECTRONIC MONITORING REDUCES RECIDIVISM 1 (2011), <https://www.ncjrs.gov/pdffiles1/nij/234460.pdf> [https://perma.cc/VTDD-6Z7U].

²⁸⁷ ELECTRONIC MONITORING REDUCES RECIDIVISM, *supra* note 286, at 2; see also RAFAEL DI TELLA & ERNESTO SCHARGRODSKY, CRIMINAL RECIDIVISM AFTER PRISON AND ELECTRONIC MONITORING 69 (2013); F. Marklund & S. Holmberg, *Effects of Early Release from Prison Using Electronic Tagging in Sweden*, 5 J. EXPERIMENTAL CRIMINOLOGY 41, 53, 59 (2009); Stuart S. Yeh, *The Electronic Monitoring Paradigm: A Proposal for Transforming Criminal Justice in the USA*, 4 LAWS 60, 64 (2015); WILLIAM BALES ET AL., U.S. DEP'T OF JUSTICE, A QUANTITATIVE AND QUALITATIVE ASSESSMENT OF ELECTRONIC MONITORING 58, 64 (2010), <https://www.ncjrs.gov/pdffiles1/nij/grants/230530.pdf> [https://perma.cc/BL3Z-P8BR]; STEPHEN V. GIES ET AL., U.S. DEP'T OF JUSTICE, MONITORING HIGH-RISK SEX OFFENDERS WITH GPS TECHNOLOGY: AN EVALUATION OF THE CALIFORNIA SUPERVISION PROGRAM, FINAL REPORT 3–15 (2012), <https://www.ncjrs.gov/pdffiles1/nij/grants/238481.pdf> [https://perma.cc/9JD8-D2XA]; JOHN K. ROMAN ET AL., D.C. CRIME POL'Y INST., THE COSTS AND BENEFITS OF ELECTRONIC MONITORING FOR WASHINGTON, D.C., 3, 6 (2012), <https://>

GPS, however, is not infallible. While it is practically impossible for the offender to cut the bracelet without setting off the alarm,²⁸⁸ sub-standard monitoring by law enforcement has resulted in triggered alarms with inadequate responses.²⁸⁹ This limitation, however, is human rather than technological, and outcomes can be improved simply by allocating more resources to police departments and other departments who monitor these devices. The second limitation of electronic monitoring is that offenders can still harm people within their assigned physical boundaries.²⁹⁰ This shortcoming stems from the fact that electronic tracking does not involve monitoring the actions which are performed by people. It is this limitation of the GPS tracking that we seek to address with monitoring of an offender's behavior, and in the next section we discuss how technology can be adapted and implemented to meet this aim.

2. Computer Surveillance of Offenders' Actions

Aside from monitoring offender's location, we propose live monitoring of an offender's actions. The technology now exists to monitor, in real-time, whether an offender is behaving in a criminal, aggressive, threatening, or problematic way. By using artificial intelligence-based monitoring of offender's behavior, we believe that we can deter offenders from committing a crime, and detect the commission of the offenses should offenders decide to re-offend during the period of the sanction.

An old-fashioned way of monitoring offender's actions would be to confine them to one location, overseen by closed-circuit televisions in offenders' residences and employing people to watch the footage from several residences on two or three screens simultaneously. This surveillance, however, is impractical for a range of reasons, most notably because it is unrealistic to confine an offender to a small number of locations, and it would be prohibitively expensive to hire correctional officers to monitor millions of prisoners in real time in numerous environments in any

www.urban.org/sites/default/files/alfresco/publication-pdfs/412678-The-Costs-and-Benefits-of-Electronic-Monitoring-for-Washington-D-C-.PDF [https://perma.cc/5FE9-VNXF].

²⁸⁸ Eric Markowitz, *Why GPS Doesn't Always Work for Tracking Convicts*, VOCATIV (Apr. 17, 2014), <http://www.vocativ.com/underworld/crime/gps-doesnt-always-work-tracking-convicts> [https://perma.cc/CM9S-2ZTK].

²⁸⁹ See Associated Press, *Analysis Finds not Enough Monitoring of Monitoring Bracelets in US*, FOX NEWS (July 28, 2013), <http://www.foxnews.com/us/2013/07/28/analysis-finds-not-enough-monitoring-monitoring-bracelets-in-us.html> [https://perma.cc/EL85-XC4Z].

²⁹⁰ See Markowitz, *supra* note 288. Nevertheless, studies show that offenders who are subject to house arrest and are electronically monitored are 94.7% less likely to commit an offense than those that are not monitored. Yeh, *supra* note 287, at 64.

event. More than this, human monitoring is laborious, difficult, and prone to human error.²⁹¹ As Georgakopoulos et al. notes:

Video surveillance solutions relying on human operators require humans to try to discover occurrences of complex events by continuously reasoning about patterns of simple video events distributed in time and possibly occurring in different locations in a facility. This is very hard to do and is impossible for humans to sustain even for a modest period of time (e.g., a few hours).²⁹²

A more cost-effective, efficient, and reliable alternative is to use recent advances in signal processing and artificial intelligence to perform constant, automated processing of the actions of all offenders. The key to the new sanction is utilizing and adapting current developments in sensor technology and in machine learning algorithms.

Sensors now exist that can detect all human movement and simultaneously monitor the geographical whereabouts of people wearing the sensors. This can be readily completed by equipment that can visually and aurally record the actions of the person. Machine learning systems then analyze the sensor data to detect anomalous, dangerous, or criminal behavior. In broad terms, the technology can detect suspicious movement, and if this occurred, an alarm would be activated notifying the offender that within a short period of time his or her actions would be visually observed. The data from the technology, even prior to the activation of an alarm would always be stored to record the actions and location of the offender. Moreover, the sensor can be made tamperproof so that it cannot be removed by an offender (similarly to the technology described above for electronic ankle bracelet monitors). If an attempt is made to remove the bracelet, an alarm is triggered, and police would be notified to the last location of the offender.

The system that would implement constant monitoring relies on three main technical requirements: a mandatory body sensor harness worn by all offenders, a stable and secure communication system, and a remote, machine-learning based signal processing system that can recognize suspicious behavior.

The first requirement is a sensor harness that can capture video and audio signals from an offender's environment.²⁹³ These

²⁹¹ M. Sivarathinabala & S. Abirami, *An Intelligent Video Surveillance Framework for Remote Monitoring*, 2 INT'L J. ENG'G. SCI. & INNOVATIVE. TECH. 297, 297 (2013).

²⁹² Dimitrios Georgakopoulos et al., *Event-driven Video Awareness Providing Physical Security*, 10 WORLD WIDE WEB J. 86, 86 (2007).

²⁹³ For the sake of simplicity, we call this a "sensor harness" throughout this Article, but as cameras and sensors decrease in the size, the harness will probably end up being the size of a matchbox, and able to be clipped to the upper part of the prisoners' clothing. Already police

types of units are already being produced in the form of body cameras that police departments are introducing across the United States in order to lower complaints, provide evidence where police officers' use of force results in fatalities, and improve the transparency and accountability of police officers' activities.²⁹⁴ Although these systems have come under various types of criticism, there are now a variety of sophisticated and customizable body cameras on the market, and their efficacy is extremely high. Some of these cameras have night vision, built-in flashlights, twelve-hour batteries,²⁹⁵ high definition video recording that incorporates date and time information into recorded footage, capacity to restrict access to the footage to designated computers, GPS technology, and 150 degree fields of view.²⁹⁶ They are durable, fire-resistant, water-proof, and light-weight.²⁹⁷ Current models cost between \$300-\$800, depending on the specifications and manufacturers, and this figure is certain to drop as the technology becomes ubiquitous.²⁹⁸

Offenders would be required to change the batteries in the sensor harness regularly and to wear them on their clothing at all times, and offenders would also need to wear the sensors while bathing. They would be forbidden from removing the sensors

body cameras that include high definition video, dual audio channels, Wi-Fi and Bluetooth connection, and a 12-hour battery are the size of a pack of playing cards. See *Axon Body 2*, AXON AU, <https://au.axon.com/products/body-2> [<https://perma.cc/RFS6-DDX9>].

²⁹⁴ See Dana Goodyear, *Can the Manufacturer of Tasers Provide the Answer to Police Abuse?*, NEW YORKER (Aug. 20, 2018), <https://www.newyorker.com/magazine/2018/08/27/can-the-manufacturer-of-tasers-provide-the-answer-to-police-abuse> [<https://perma.cc/6MVT-SWG2>]; Damien Gayle, *Police with Body Cameras Receive 93% Fewer Complaints – Study*, GUARDIAN (Sept. 29, 2016), <https://www.theguardian.com/uk-news/2016/sep/29/police-with-body-cameras-receive-93-fewer-complaints-study> [<https://perma.cc/99RC-W528>]; Danny Shaw, *Police Body Cameras 'Cut Complaints Against Officers'*, BBC NEWS (Sept. 29, 2016), <http://www.bbc.com/news/uk-37502136> [<https://perma.cc/PS4D-HQ3M>]; Robinson Meyer, *Body Cameras Are Betraying Their Promise*, ATLANTIC (Sept. 30, 2016), <http://www.theatlantic.com/technology/archive/2016/09/body-cameras-are-just-making-police-departments-more-powerful/502421> [<https://perma.cc/7WN8-4J7C>].

²⁹⁵ *Bodycam: Body-Worn Cameras*, BODYCAMERAS.COM, <https://bodycameras.com/> [<https://perma.cc/CNX3-NW7V>] [hereinafter *Bodycam by Provision*]. As noted below this is a limitation of the sanction and needs to be addressed before the sanction is widely implemented. See *infra* Part V.

²⁹⁶ *Body Cameras, In-Car Video & Evidence Management Solutions*, WOLFCOM, <https://wolffcomusa.com/> [<https://perma.cc/MGU9-XW57>] [hereinafter *Wolfcom Body Cameras*]; *Bodycam by Provision*, *supra* note 295.

²⁹⁷ See, e.g., *Wolfcom Body Cameras*, *supra* note 296; *Bodycam by Provision*, *supra* note 295; REVEAL, <https://www.revealmedia.com/products/d-series> [<https://perma.cc/9PAT-W9Q9>]; AXON, *supra* note 293.

²⁹⁸ Eric Markowitz, *Police Departments Face a Crucial Question: How to Pay For Body Cameras?*, INT'L BUS. TIMES (May 12, 2016), <http://www.ibtimes.com/police-departments-face-crucial-question-how-pay-body-cameras-2366968> [<https://perma.cc/B3N4-QCJF>]; Alfred Ng, *How Police Body Cameras Became a Budget Battlefield*, CNET (Oct. 25, 2016), <https://www.cnet.com/au/news/nypd-body-camera-police-justice-view-taser> [<https://perma.cc/Z3EH-P9TN>].

during the period of the sanction. An obvious concern is that an offender might attach the sensors to someone else in an effort to thwart the monitoring. This difficulty, however, can be easily overcome by having an upward facing camera within the sensor harness that undertakes constant facial recognition of the prisoner to ensure compliance. A combination of thermal and visual cameras has been shown to generate reliable identification in over ninety-eighty percent of cases.²⁹⁹

The second requirement of this part of our proposal is a reliable and secure communication infrastructure that would allow transmission of video and audio streams to a remote location. This is a necessary feature of the new sanction, because sensor processing technology is currently too intensive for it to be able to be done on the sensor unit. For the next decade it is likely the signal processing of the video and audio activity would have to happen at remote computing facilities, potentially distant from the prisoner's location. Of course, in an era of 4G—soon 5G—mobile telecommunication infrastructure, together with widespread broadband, most of the United States would be covered.

Finally, the transmitted video and audio stream would need to be analyzed by a remote signal processing architecture. This system would analyze the signals in real time and trigger an alarm in the event that offenders are attempting to commit crimes or engaging in unauthorized activity, or where their sensor harnesses have been deactivated or removed. This is the most technologically sophisticated requirement of our proposal. Nonetheless, it is perfectly feasible these days. The recent publicity surrounding self-driving cars provides ample evidence of the strides that have been made in real-time sensor analysis using machine learning algorithms. Self-driving cars rely on a range of environmental sensors—typically ultrasonic sonar, lidar, and radar arrays³⁰⁰—together with a neural network-based signals processing system, to drive a car more safely than human beings.³⁰¹ This feat is something that, a few years ago,

²⁹⁹ Diego A. Socolinsky & Andrea Selinger, *Thermal Face Recognition in an Operational Scenario* (2004) (unpublished manuscript), <http://www.dtic.mil/dtic/tr/fulltext/u2/a451507.pdf> [<https://perma.cc/VU23-M9DJ>]; see Sachin Sudhakar Farfade et al., *Multi-view Face Detection Using Deep Convolutional Neural Networks*, (Apr. 20, 2015), <https://arxiv.org/pdf/1502.02766v3.pdf> [<https://perma.cc/CGA8-2VMX>].

³⁰⁰ See Bryan Clark, *How Self-Driving Cars Work: The Nuts and Bolts Behind Google's Autonomous Car Program*, MAKE USE OF (Feb. 21, 2015), <http://www.makeuseof.com/tag/how-self-driving-cars-work-the-nuts-and-bolts-behind-googles-autonomous-car-program> [<https://perma.cc/3RXE-ALWK>]; Ryan Bradley, *Tesla Autopilot*, MIT TECH. REV. (Mar./Apr. 2016), <https://www.technologyreview.com/s/600772/10-breakthrough-technologies-2016-tesla-autopilot> [<https://perma.cc/AD6Z-WYAU>].

³⁰¹ Clark, *supra* note 300.

was seen as a virtually impossible task, and one that was thought would take decades to achieve.³⁰²

We are now at the same inflection point in a range of signals processing fields that can be applied to technological incarceration. As long ago as ten years ago, Georgakopoulos et al. showed that a computer system could monitor and analyze in real time footage of human motion that is captured on video surveillance cameras within offices and workplaces, and detect automatically any suspicious events.³⁰³ This system looked for abnormal actions of multiple people—that is, where they diverge from typical movements, such as by fighting, wobbling around, moving their arms, hitting, falling over, running, punching, kicking, shaking their heads to both sides, and revolving side-by-side or back-to-back³⁰⁴ The system is trained on large datasets of prior examples, and establishes a baseline of acceptable behavior. Any behavior that falls outside of this baseline would trigger an exception to alert human operators of the system. It can send to the human operators to view a record of the sequence, in which the detected behavior occurred, including the date and time it took place.³⁰⁵

Current machine learning systems are even more precise in determining unauthorized or problematic behaviors,³⁰⁶ and can be used to monitor larger areas with ease.³⁰⁷ There is even now an industry standard, called Open Network Video Interface Forum (ONVIF), to provide for integration of processing systems for the creation of wide-area surveillance systems.³⁰⁸ These

³⁰² For a simple and accessible overview of artificial intelligence, and especially the modern advances in convolutional and multi-layer/deep neural networks, along with their social significance, see Gideon Lewis-Kraus, *The Great A.I. Awakening*, N.Y. TIMES MAG. (Dec. 14, 2016), <http://www.nytimes.com/2016/12/14/magazine/the-great-ai-awakening.html> [<https://perma.cc/2W38-YF9B>].

³⁰³ Georgakopoulos et al., *supra* note 292; Enrique Bermejo et al., *Security System Based on Suspicious Behavior Detection*, 25 BURAN 12 (2010); Sivarathinabala & Abirami, *supra* note 291, at 297–98; Syed Ahmar Qamar et al., *A Supervisory System to Detect Suspicious Behavior in Online Testing System*, 3 IPCSIT 397 (2011).

³⁰⁴ Bermejo et al., *supra* note 303, at 13; Sivarathinabala & Abirami, *supra* note 291, at 297–98, 300; Qamar et al., *supra* note 303, at 397–98.

³⁰⁵ Georgakopoulos et al., *supra* note 292; Bermejo et al., *supra* note 303, at 12–15; Sivarathinabala & Abirami, *supra* note 291, at 297–98, 300.

³⁰⁶ Esra Acar et al., *Human Action Recognition Using Lagrangian Descriptors*, IEEE INT'L WORKSHOP ON MULTIMEDIA SIGNAL PROCESSING (2012); Bermejo et al., *supra* note 303, at 14–15; Alexander Kuhn et al., *A Lagrangian Framework for Video Analytics*, IEEE WORKSHOP ON MULTIMEDIA SIGNAL PROCESSING (2012).

³⁰⁷ Tobias Senst et al., *On Building Decentralized Wide-Area Surveillance Networks based on ONVIF*, 8TH IEEE INT'L CONFERENCE ON ADVANCED VIDEO AND SIGNAL BASED SURVEILLANCE (2011), <http://elvera.nue.tu-berlin.de/files/1313Senst2011.pdf> [<https://perma.cc/4DYG-3N3F>].

³⁰⁸ See ONVIF, <http://www.onvif.org> [<https://perma.cc/3ACX-AWCG>]; see also Johanna P. Carvajal-Gonzalez et al., *Silhouette classification by using manifold learning for automated threat detection*, 47th INTERNATIONAL CARNAHAN CONFERENCE ON SECURITY TECHNOLOGY (ICST), at 1–5 (2013).

algorithms can now process signals from multiple sources—including video, audio, alarms, and satellite positioning systems—to assess behavior of the surveilled place or individual.³⁰⁹ Recent advances in speech recognition have improved to the point where commercially available systems like Siri, Cortana, Facebook M, Google Assistant, and Alexa are used by millions of people a day, and the technology for comprehension of voice and audio continues apace, allowing for the monitoring of the speech of the offender.³¹⁰ And, finally, deep-neural networks now have the capacity to recognize the emotional state of a person speaking from the stress factors present in his/her voice, and are making great strides in reading the feelings of people from faces presented to them.³¹¹

When one connects all of these advances, it is clear that it is possible to conduct real-time, automatic analysis of the behavior of offenders, and of those who come within their environment. It is now feasible to develop a system that can determine whether an offender is having a psychotic episode (from speech recognition and audio processing of emotional states), is threatening another person (from audio processing of emotional states of all within the room, and video processing of the prisoner's behavior), or is seeking to leave a designated zone (from GPS tracking). And so we now stand at the point where the automatic, technological monitoring of all offenders is possible.

The likely benefits of this technology are two-fold. First, all offenders would be aware that their actions and whereabouts can be constantly and continually monitored. The theory of absolute general deterrence means that this makes it very unlikely that offenders would commit offenses in these circumstances. As we have seen, the greatest deterrent to crime is the realization by individuals that if they offend, they would then be detected and

³⁰⁹ Richard Adderley et al., MOSAIC: A Multi-modal Surveillance System to Enhance Situation Awareness and Decision Making, in HCI INTERNATIONAL 2014 - POSTERS' EXTENDED ABSTRACTS (Constantine Stephanidis ed. 2014). COMMUNICATIONS IN COMPUTER AND INFORMATION SCIENCE, VOL 434 (2014); Dragos Datcu & L.J. Rothkrantz, *A Multimodal Workbench for Automatic Surveillance*, IEEE CONFERENCE ON COMPUTER VISION & PATTERN RECOGNITION (2004).

³¹⁰ See generally Ossama Abdel-Hamid et al., *Convolutional Neural Networks for Speech Recognition*, 22 IEEE/ACM TRANSACTIONS ON AUDIO, SPEECH & LANG. PROC. (2014).

³¹¹ Iulia Lefter et al., *Recognizing Stress Using Semantics and Modulation of Speech and Gestures*, 7 IEEE TRANS. ON AFFECTIVE COMPUTING 162-75 (2016); Iulia Lefter et al., *Emotion Recognition from Speech by Combining Databases and Fusion of Classifiers*, in TEXT, SPEECH AND DIALOGUE (Petr Sojka et al., eds. 2010); see Wojtek Zajdel et al., *CASSANDRA: audio-video sensor fusion for aggression detection*, 2007 IEEE CONFERENCE ON ADVANCED VIDEO AND SIGNAL BASED SURVEILLANCE, AVSS, 200-05 (2007); Iulia Lefter et al., *Cross-corpus analysis for acoustic recognition of negative interactions*, INTERNATIONAL CONFERENCE ON AFFECTIVE COMPUTING AND INTELLIGENT INTERACTION (ACII) 2015, 132-38 (2015).

punished.³¹² Offenders who perform harmful acts would be detected as they perform the crime. The tracking of their location, identification of their movements and video surveillance of their conduct would provide powerful evidence of their crimes and awareness of this would provide the strongest possible discouragement against criminal behavior. This is the reason that so little overt crime is committed in locations where offenders are aware that they may be detected, such as at police stations and airports. For the relatively few offenders that do commit offenses while subjected to the monitoring sanction, it is likely that they would be detected and apprehended in a short period of time.

Of course, this analysis most strongly applies to crimes which involve the offender engaging in conduct that is likely to be detected as being suspicious by the sensor system. Crimes which are committed through innocuous behavior, such as fraud committed over the internet would not be detected by the sensors. Offenders would still be strongly discouraged from committing such crime, however, because the monitoring system would keep track of their exact location and actions at all times and hence make it easy for police to gather, at least circumstantial evidence, of their actions once the crime was reported and if they were identified as a suspect. The other significant advantage of the monitoring sanctions, as is discussed further below is that it is likely to be considerably financially cheaper than the current cost of probation and parole.

An important feature of the monitoring sanction is its flexibility and capacity to be adopted to different offenses according to their severity and an offender's risk profile. Thus, for less serious offenses, the sanction can be adopted to enable offenders to move around freely in the community with little restrictions (apart from, for example, in exclusion zones such as bars and restaurants) and few restricted movements, thus offenders would be permitted to pick up implements, which could be potentially used as weapons. For offenders who have committed more serious offenses, the sanctions could be applied far more strictly and hence, for example, they could be confined to their residence and precluded from picking up all but pre-tagged implements, such as certain pens and cutlery, and prohibited from all quick movements, such as running.

V. LIKELY CRITICISMS OF REFORM PROPOSALS

Technology already exists which can adapt to develop and implement the proposed monitoring sanction. There are likely to be

³¹² See *supra* Part II.

a number of criticisms, however, relating to its use. We now address the most likely criticisms and set out why none of them provide a persuasive reason against the implementation of the sanction.

A. *Lack of Privacy*

One of the main criticisms of the proposed new sanction is likely to be that it would violate the privacy of offenders. Privacy is a controversial right. The definition and justification of the right is unclear. Robert Post has lamented that “[p]rivacy is a value so complex, so entangled in competing and contradictory dimensions, so engorged with various and distinct meanings, that I sometimes despair whether it can be usefully addressed at all.”³¹³ Perhaps the most enlightening definition of privacy is simply “the right to be let alone.”³¹⁴ The rationale for privacy is generally thought to stem from the broader virtues of autonomy and dignity.³¹⁵

Despite doctrinal uncertainty regarding the nature and source of the right to privacy, the Supreme Court has acknowledged it as a legally protected interest. The right to privacy (so far as personal autonomy is concerned) has been mainly acknowledged in contexts relating to procreation and family relationships.³¹⁶ In *Roe v. Wade*, for example, Justice Blackmun stated in his majority opinion:

The Constitution does not explicitly mention any right of privacy. In a line of decisions, however, . . . the Court has recognized that a right of personal privacy, or a guarantee of certain areas or zones of privacy, does exist under the Constitution. In varying contexts, the Court or individual Justices have, indeed, found at least the roots of that right in the First Amendment, in the Fourth and Fifth Amendments, in the penumbra of the Bill of Rights, in the Ninth Amendment, or in the concept of liberty guaranteed by the first section of the Fourteenth Amendment.³¹⁷

The right to privacy, however, is virtually negated in the context of some criminal sanctions and in particular, imprisonment—even when prisoners are in their cells. In *Hudson v. Palmer*, the Court noted that it would not be possible to achieve many of the security objectives of prisons, which

³¹³ Robert C. Post, *Three Concepts of Privacy*, 89 GEO. L.J. 2087, 2087 (2001).

³¹⁴ Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193, 193 (1890).

³¹⁵ VICTORIAN LAW REFORM COMM'N, *Workplace Privacy: Issues Paper 17* (2002), <http://www.lawreform.vic.gov.au/sites/default/files/IssuesPaperfinal.pdf> [<https://perma.cc/5JQ4-LEPC>].

³¹⁶ See generally *Lawrence v. Texas*, 539 U.S. 558 (2003); *Roe v. Wade*, 410 U.S. 113 (1973); *Griswold v. Connecticut*, 381 U.S. 479 (1965).

³¹⁷ *Roe*, 410 U.S. at 152 (citations omitted).

involve prohibiting the introduction of drugs and weapons into prisons, if prisoners retained the right to privacy.³¹⁸

Thus, while the right to privacy does receive some legal recognition, it is a weak right, which is often impinged upon—often without the need for a formal or established legal justification. This is demonstrated by the massive intrusions into privacy that have occurred over the past decade. CCTV monitoring exists in many parts of America. A person who walks the streets of Manhattan likely has their image taken hundreds of times. Further, every keystroke that a person makes on their computer can be monitored and it is possible to retrieve voice and text messages sent by cell phone.

The violation of privacy stemming from the monitoring sanction is limited. For most of the time, individuals would be *potentially* observable, instead of being constantly observed or monitored during the operation of the sanction. While information about an offender's location and actions would be constantly monitored by computer censoring, this would generally not extend to actual human observation. Actual visual or other close observation of an offender's actions would occur only in two circumstances.

The first is when an offender breaches the limits of the GPS boundary or engages in suspicious activity. In these circumstances, visual monitoring of the offender's actions would be undertaken by a corrections staff member. The monitoring would then continue unless it transpires that the sensor alarm went off without due cause, for example, if the offender is punching a boxing bag as opposed to another person. The second is after the event, when it is suspected that the offender committed a crime. In this context, if the video surveillance was not activated at the time of the event, the available material would be available on a computer data regarding, where the offender was at a relevant time and the record from the sensors regarding the movements that were made during the relevant period. This could be closely scrutinized and provide police and prosecutors valuable evidential material. This retrospective information gathering exercise is in principle the same process that now occurs when a person is convicted of a crime. The only difference is that the sources of information that are currently available are ad hoc.

³¹⁸ Hudson v. Palmer, 468 U.S. 517, 517–18 (1984); see also *Giano v. Goord*, 9 F. Supp. 2d 235 (W.D.N.Y. 1998), *aff'd in part and vacated in part*, 250 F.3d 146 (2d Cir. 2001), *vacated on other grounds*, 380 F.3d 670 (2d Cir. 2004), *abrogated on other grounds* by *Ross v. Blake*, 136 S. Ct. 1850 (2016); *Williams v. Kyler*, 680 F. Supp. 172 (M.D. Pa. 1986).

For example, if an offender robs a bank, police can potentially collate data from a number and type of sources including CCTV footage from the bank and surrounding streets, witness testimony from staff working at the bank and positioning data if the offender was carrying a cell phone. It is incontestable that such evidence gathering does not breach privacy limits. There are countless instances of crimes that have been solved by police viewing CCTV footage of the event (generally when the offender was unaware that the location was being filmed) and the offender being identified after his or her image was screened in the mainstream media. If an offender burgles a house in a quiet location, however, then it may be the case that no relevant evidence can be obtained against the offender. The important point being that the incursion into the right to privacy that would stem from the new sanction is no different in nature to existing limitations of this right. To the extent that the incursions are more sophisticated than is currently the situation, this could be readily justified by the common good that is achieved by reducing crime (due to the principle of absolute general deterrence) and the increased rate of detecting and prosecuting offenders.

It is acknowledged, however, that the extent of the intrusion to privacy as it relates to the monitoring sanction can potentially extend beyond the privacy interests of offenders. Individuals who are in the immediate vicinity of the offender could also be video recorded during any periods when the video monitoring is activated. There are three reasons that this does not present as a serious objection to the proposed sanction. First, it is already commonplace for individuals to be subject to video monitoring on a regular basis, as now increasingly is the case in relation to urban locations. Secondly, video surveillance would only activate in circumstances where the offender is acting suspiciously. This would most typically be a situation where an offender is acting in a harmful way to another person. In such instances, the other person would almost certainly welcome the intrusion into their privacy. Thirdly, it is people who are living with the offender who are most likely to be captured during any video observation of the offender. If the privacy concerns of these people are regarded as being cardinal interests, a precondition of an offender being subjected to the sanction is that those living with him expressly consent to living with an offender who is subjected to such monitoring. This is not likely to prove to be a meaningful obstacle to the imposition of the new sanction. This requirement is similar to that which currently exists in relation

to home detention—prisoners are only eligible for it if those with whom they live provide informed consent to the sanction, which occurs in most cases.³¹⁹

There remains the potentially sensitive issue of what happens when offenders are involved in sexual activities with others, and to this end, it is expressly acknowledged that the proposed sanction limits an offender's sexual autonomy to a greater extent than parole or probation. Offenders who are the subject of the monitoring sanction would not be prohibited from engaging in sex but there is a risk that video surveillance could be triggered during a sexual episode. This obviously could embarrass the offender and the other person. The difficulty that this presents would be minimized by the fact that before video monitoring of an offender's actions commence, an audio alarm would be activated. This would begin thirty seconds before visual monitoring and could be reinforced by an alarm fifteen seconds prior to visual monitoring, which contains a pre-recorded message notifying the offenders and others in the vicinity of the imminent nature of video recording.³²⁰

There are a number of other reasons why the privacy interest of other people would not be meaningfully curtailed by the monitoring sanction. A condition of being subjected to the monitoring sanction should be that the offender expressly informs prospective sexual partners that he or she is undergoing the sanction and of the potential for video observation. Further, offenders could eliminate the risk of this type of intrusion by abstaining from sex for the duration of the sanction. To some this might appear at first instance to be a considerable form of deprivation but contextualized properly this is not the case. The alternative to this sanction would in many cases be prison, where there is a total ban on sexual relations and no opportunity for intimacy with other people and hence relatively speaking abstaining from sexual relations while still being able to have share intimate moments with family and loved ones is a small sacrifice to make. Thus, the right to privacy does not present an overwhelming obstacle to the new sanction.

B. Technological Failure

No technology is perfect. It is foreseeable that the new sanction could fail at times. This is especially the case given that the sanction depends on a technology, which has not yet been tested in

³¹⁹ See, e.g., GUIDELINES MANUAL, *supra* note 61, at 458–59.

³²⁰ This concession would of course mean that offenders would effectively receive a thirty second start in relation to any criminal acts, however, this “head start” remains a considerable improvement compared to current parole and probation sanctions.

the context of punishing and containing offenders. Given the novelty of the proposals and the potential fallibility of any new technology or system, the inevitable criticism that the monitoring sanction is not foolproof should be dealt with by gradually implementing the sanction. This would also ensure there is sufficient time for testing and refining the required technology, and for the community to accept and recognize the advantages of the new sanction. Punishment and sentencing of offenders are not solely, and in fact not mainly, rational processes. It is important that the new sanction is implemented in a systematic and methodical manner which reduces the likelihood of system failures. It is foreseeable that large-scale or high-profile failures of aspects of this sanction could lead to a significant loss of confidence in the concept, thereby jeopardizing the adoption of the new sanction.

The first phase of implementing the monitoring sanction would be testing all aspects of the technology. Once the integrity of the system is validated at the testing phase, it should then be rolled out for real offenders. Given the novelty of the proposal, there is no blueprint for how to best implement technological supervision in real-life settings. This is a matter on which lawmakers are likely to have different views.

In our view, however, in light of the fact that sentencing reform tends to evoke emotive responses from the community, the implementation should carefully target specific categories of offenders and the implementation should occur in a conservative manner. After the technology has undergone the laboratory testing phase,³²¹ there should be a relatively short, say, twelve month, trial of the new sanction on a small number, say one hundred, very low risk offenders who have not committed serious offenses.³²² This should be conducted in relation to offenders of whom the community has the least to fear and whose offenses have caused the least amount of harm. Thus, the sanction should be initially trialed in relation to offenders who have committed fraud and other property offenses. Property crimes cause the least amount of harm to victims,³²³ and accordingly starting a trial with this offender cohort would be particularly likely to garner community approval of the

³²¹ The testing and development phase would also need to address the relatively short (twelve hour) battery life of cameras. A twelve hour battery duration unduly limits the activities of people. Presumably larger batteries could extend the operation of the device to an acceptable level (in the order of one day), but this is a limitation that would need to be overcome in the proof of concept phase.

³²² This period is sufficiently long to provide an informed assessment of the capabilities and limitations of the technology.

³²³ See *supra* Part III.

monitoring sanction. The initial trial should also be confined to offenders who already have a residence and whose co-residents consent to the trial. This would ensure that the trial is conducted in the most efficient and cost-effective manner.

After the initial field testing, a more extensive trial is necessary. Ideally a large number of offenders should be subjected to this process, given the strong present need to ameliorate problems associated with probation and parole, and the need to obtain as much data as possible regarding any possible shortcomings associated with the technology and where necessary to adjust or adapt the design of the sanction. In broad terms, we suggest that this second part of the testing should involve approximately ten thousand offenders and last for three years. In absolute terms, this is a large number of people but in fact it represents only about 0.2% of offenders currently undergoing probation or parole.

Once the technology has been validated, the monitoring sanction should be implemented more widely. The rate at which the monitoring sanction is rolled out would depend largely on the success of the second trial and what, if any, changes are needed to the system. A key aspect of the trial would be the cost associated with technology. There is likely to be a considerable initial cost in adapting existing technology to create the sensors that are necessary for the monitoring sanction. Once developed, however, the cost is likely to be very small. The technology used in driverless cars is considerably more complex and extensive than that associated with the monitoring sanction, and it is anticipated that the technology for self-driving cars will be in the order of \$7,000 to \$10,000, reducing to approximately \$3,000 as more cars are rolled out.³²⁴ As noted above, the technology underpinning driverless cars is complex and expensive because of the enormous number of variables that must be accounted for (e.g., road signs, other vehicles, pedestrian and traffic conditions) and the very fast speed with which relevant events occur, often exceeding more than sixty mph.

Given, the relative simplicity of the monitoring sanction, it should be a fraction of the driverless car technology cost, and certainly much less than the current costs of probation and parole. It is not feasible to accurately determine the projected time it would take for the monitoring sanction to replace the entire parole and probation systems, however, as with most policy initiatives, it is

³²⁴ Chuck Tannert, *Will You Ever Be Able to Afford a Self-driving Car?*, FAST COMPANY (Jan. 31, 2014), <https://www.fastcompany.com/3025722/will-you-ever-be-able-to-afford-a-self-driving-car> [<https://perma.cc/AT2D-54CK>].

desirable to set in place a working time frame. To this end, we suggest that a timeframe of approximately ten years should be set for the full rollout of the new sanction.

CONCLUSION

The corrections population of the United States is at a near record high. Nearly all of the focus in the literature and in more recent times in the mainstream media has been on the high prison numbers. The prison crisis is profound but so much so that it has distracted lawmakers, courts and researchers from another crisis in the corrections system. This article has sought to highlight the considerable problems which exist with the probation and parole system and provide a solution to address the problems associated with these archaic sanctions.

More than four and a half million offenders are currently on probation or parole. The probation and parole system is broken. The system is chronically underfunded and does not allow appropriate supervision of offenders. Despite this, the system is still in objective terms prohibitively expensive—costing many millions of dollars. The main failing of the system is that offenders undergoing the sanction reoffend at alarming rates, causing a large amount of damage to individuals and society in general. There is little meaningful community dividend derived from the probation and parole system.

There is a pressing need to reform these criminal sanctions. The reforms should be based on the appropriate objectives of sentencing. The main aims of sentencing are community protection and rehabilitation. The most effective way to achieve these goals in the context of sanctions which fall short of imprisonment are to place offenders under constant surveillance regarding their location and to also have the capacity to monitor the movements of the offenders. Technological advances, which have been largely ignored in the development of criminal sanctions, now provide the means to fulfil these requirements.

The proposed monitoring sanction would involve the integration and harmonization of several existing technologies. Core to the sanction is the development and use of a sensor system that monitors the location of offenders, detects suspicious movements and triggers an alarm of the occurrence of such events. The real splendor of this system is that offenders would be aware that all of their actions are being monitored. This would make them far less likely to commit criminal offenses. If they were to do so, evidence of the crime would be available to

police and prosecutors. This would greatly facilitate the criminal detection and apprehension process.

The monitoring sanction is vastly superior to the current outdated, clumsy, and ineffective parole and probation systems. In an age where nearly all other areas of society and industry are undergoing fundamental change, which is being driven by technological developments it is no longer tenable that the criminal justice system should stand apart from this shift. Lawmakers need to embrace technological developments to ensure that the criminal justice system better serves the needs of the community. The monitoring sanction would greatly facilitate this process.