



# Rethinking Prison

---

A STRATEGY FOR EVIDENCE-BASED REFORM

**Grant Duwe**

NOVEMBER 2017

A M E R I C A N   E N T E R P R I S E   I N S T I T U T E

# Executive Summary

---

Over the past decade, there has been growing consensus on the need for prison reform. Observers from both sides of the political divide have increasingly concluded that imprisonment in the US has been overused, costly, and ultimately, ineffective. In the wake of the Great Recession, recent reform efforts have focused on limiting the use and costs of prison. Since 2008, the nation's imprisonment rate has dropped by more than 10 percent.

To date, however, little of the public debate around prison reform has zeroed in on developing strategies for improving prisons' effectiveness. US prison systems have been seen as ineffective, or "broken," due to the relatively high recidivism rates observed among released prisoners.

Is it possible to make prisons more effective, especially in reducing recidivism, without creating additional challenges such as increased costs? There is no evidence that recent efforts to downsize state and federal prison populations have been successful in lowering recidivism, and there is good reason to question whether these reforms will ever yield less recidivism. If we are going to succeed in reducing the amount of reoffending in America, we need to find ways to change the status quo in current incarceration policy and practice.

The best way to make progress in reducing recidivism is through the delivery of programming shown to be effective in reducing reoffending. Such programming must increase to bring down the high recidivism rates long observed among US prisoners. Drawing on the lessons learned from what is known as the "what works" literature, this paper lays out a three-pronged plan for evidence-based reform that will help US prison systems become leaner, more cost-effective, and more successful in reducing recidivism: (1) increase the delivery of correctional programming, (2) reduce the size of prison

populations, and (3) increase the use of risk assessment instruments.

Let's assume that, without any budget increase, prison systems can provide programming to all offenders by reinvesting their decarceration "savings." To what extent would the recidivism rate be reduced by such an increase in programming? The most recent recidivism study by the Bureau of Justice Statistics, which is the closest we have to a national recidivism study, found that 77 percent of the nearly 70,000 released prisoners from 30 states had been rearrested within five years.<sup>1</sup> Based on the findings from previous research, participation in one effective intervention has been shown to reduce recidivism by 12 percent, while involvement in two effective programs lowers it by 26 percent. With a baseline rate of 77 percent, increasing programming participation could lower this rate to somewhere between 57 and 68 percent.<sup>2</sup>

Although a recidivism rate north of 50 percent may seem high, it is also worth considering the fiscal implications of a drop from 77 percent to, say, 68 percent. If we assume the cost of the average prison-based intervention is approximately \$5,000, which is close to the mean observed for both Minnesota and Washington prisoners,<sup>3</sup> then delivering at least one intervention to 5,000 released prisoners would cost about \$25 million. With a return on investment of at least \$4 for the average prison-based intervention, the estimated return (or benefit) would be close to \$100 million overall for a \$25 million investment in which the delivery of one effective intervention to all 5,000 offenders reduced their rearrest rate from 77 percent to 68 percent (a 12 percent reduction).

If decarceration is not accompanied by an increase in effective programming resources, then recidivism rates will almost assuredly stay the same. Further, if more prisoners are being placed in the community

without an increase in community-based programming resources, then decarceration could hurt public safety, which would likely weaken the appetite for further reform. For prisons to more effectively reduce recidivism, a major shift from punishment to rehabilitation is needed in which there is substantially greater involvement in programming.

Given our long-standing notions of what prison should be, this would be no small feat. Indeed, one

enduring school of thought has been that if we make a sanction like prison so odious, it will assuredly jolt inmates into reforming their criminal ways. But punitive strategies have been not only largely ineffective in reducing recidivism but also wasteful and costly. Instead, this paper calls for a more efficient and cost-effective system that does more with less or, more precisely, more with the same amount.

# Rethinking Prison: A Strategy for Evidence-Based Reform

---

**Grant Duwe**

The prison systems in the United States are said to be broken. Observers from both sides of the political divide have increasingly concluded that imprisonment in the US has been overused, costly, and ultimately, ineffective. The bipartisan consensus on the need for prison reform—as demonstrated, for example, by the likes of Newt Gingrich and Van Jones—has largely focused on limiting the use and, therefore, the cost of prison.<sup>4</sup> Yet, to date, little of the public debate around prison reform has zeroed in on developing strategies for improving prisons' effectiveness.

The effectiveness of prison is frequently measured by the rate at which released prisoners recidivate, or reoffend with a new crime. The relatively high recidivism rates observed among released prisoners have commonly been adduced as evidence of the ineffectiveness of the US prison systems. Several decades of research by the Bureau of Justice Statistics (BJS) have shown that prisoner recidivism rates not only are relatively high but also have been fairly stable since the 1980s. In their most recent study, the BJS's Matt Durose, Alexia Cooper, and Howard Snyder found that more than three-fourths of the nearly 70,000 prisoners released from 30 states in 2005 had been rearrested for a new offense within five years.<sup>5</sup>

But in using recidivism as the main criterion by which to judge effectiveness, we are holding the nation's prison systems to a standard they were never adequately designed to achieve. Most prisons in this country were built decades ago, and few, if any, were designed to accommodate programming. Prison

construction in the US has not been guided by the question: How can we build prisons that successfully reduce recidivism? Instead, the guiding question has generally been: How can we build prisons that effectively separate prisoners from society, reduce the likelihood of their escape from prison, and minimize their misconduct? In short, prisons' design and operation have emphasized isolation, security, and control.

The emphasis on punishment is deeply embedded, of course, in our notions of what prison should be. Prison is supposed to be a tough and uncomfortable experience. After all, as the popular saying goes, "If you can't do the time, then don't do the crime."

Indeed, one enduring school of thought has been that if we make a sanction like prison so odious, it will assuredly jolt inmates into reforming their criminal ways. Increasing the misery of the prison experience, however, does not deter prisoners from returning. Existing evidence has generally shown that punishment, in and of itself, does not rehabilitate.<sup>6</sup>

Even if we accept that punishment alone does not reduce recidivism, some may wonder why we cannot punish prisoners while providing them with rehabilitative programming. To a certain extent, this is what we have tried to do over the past few decades. State and federal prison populations began to dramatically increase in the 1980s, nearly quadrupling by the end of the 2000s. During this same time, US correctional agencies increasingly embraced the idea of using policies and practices based on empirical evidence of what has been shown to be effective—that is, evidence-based practices (EBP).

As discussed later in more detail, however, providing prisoners with the interventions they need to desist from crime within the context of mass incarceration policies has proved to be nearly impossible, as the BJS recidivism data illustrate. Delivering programming and, more broadly, implementing EBPs have typically taken a back seat to the realities imposed by growing prison populations. The most urgent priority for many corrections agencies has simply been to find beds for the influx of offenders (re)entering their prison systems.

Grappling with tight budgets and limited bed space capacity since the onset of the Great Recession in 2008, many states have been compelled to implement reforms designed to reduce the overall size and cost of their prison populations. For example, New Jersey has lowered its prison population by decreasing admissions to prison for those who violate the technical terms of their parole.<sup>7</sup> More recently, Maryland enacted legislation that reduced the penalties for some nonviolent offenses while also limiting the amount of time parole violators can spend in prison.<sup>8</sup> Other states such as Missouri have shortened probation and parole supervision periods in an effort to reduce admissions to prison for probation and parole violations.<sup>9</sup> The Justice Reinvestment Initiative, which has been run by the Bureau of Justice Assistance since 2006, has attempted to foster the adoption of EBPs, such as the use of risk and needs assessments. Perhaps because of some of these reforms, the state and federal imprisonment rate has dropped by nearly 10 percent since 2008.<sup>10</sup>

But can we reduce the use and cost of prisons while also making them more effective, particularly when it comes to reducing recidivism? There is no evidence that the recent reforms mentioned above have successfully lowered recidivism among released prisoners. Moreover, there is good reason to question whether these reforms will ever yield lower rates of recidivism.

Given how bloated the US prison system has become in the wake of “tough on crime” sentencing policies during the 1980s and 1990s, scaling back the use and cost of imprisonment is a step in the right direction. Yet, limiting the use of prison or increasing

the use of risk and needs assessments will not magically decrease recidivism. It is unclear how simply assessing an individual’s recidivism risk or releasing this person from prison to the community will keep him or her from committing another crime.

What is clear, however, is that the delivery of programming shown to be effective in reducing reoffending must increase to bring down the high recidivism rates long observed among US prisoners. Remarkably, discussion about increasing prisoner participation in effective programming has been conspicuously absent from our recent public debate over prison reform. Reasons for this omission are not fully clear, although perhaps it may be partly due to the perception that increasing programming will increase costs. For prison systems looking to trim their budgets, anything perceived to increase costs is off the table.

## Report Outline

As this paper shows, however, we can increase prisoner participation in effective programming, which results in less recidivism, while also reducing both the use and costs of prison. If we are going to reform prison systems, and there is clearly need for reform, it should be rooted in the best available evidence on what works with prisoners and what does not.

To this end, the paper begins by briefly tracing the history of prison systems in the United States from the 19th century to present day. After reviewing the evidence on the relationship between prison and crime, it discusses the relationship between prison population growth and participation in correctional programming. Next, to better understand how to lower recidivism, this paper examines why re-offense rates are relatively high among US prisoners.

Drawing on the lessons learned from the “what works” literature, this paper then lays out a three-pronged plan for evidence-based reform that will help US prison systems become leaner, more cost-effective, and more successful in reducing recidivism. Significantly expanding the delivery of effective programming is the most important prong in this strategy. Existing research has shown that

programs can significantly lower recidivism when they address the known risk factors for reoffending and are delivered with integrity (i.e., their operation is consistent with their design). Programs generally found to be successful in reducing recidivism include cognitive-behavioral therapy (CBT), substance abuse treatment, sex offender treatment, education programming, employment programming, and social support interventions. The best recidivism outcomes are generally observed when higher-risk prisoners participate in multiple effective interventions during their confinement.

---

## Existing research has shown that programs can significantly lower recidivism when they address the known risk factors for reoffending and are delivered with integrity.

For many prison systems, however, significantly expanding programming resources is not viable under current conditions. To help make this expansion more viable, the second prong in this strategy calls on prison systems to reduce their prisoner populations. In doing so, prison systems will free up the resources needed to provide greater access to programming. Prison populations can be reduced by (1) decreasing the number of prison admissions and (2) shortening the lengths of stay for those who enter prison. This paper introduces a recidivism risk-violation severity grid that prison systems can use to safely reduce the volume of prison admissions, especially for probation and parole violators.

Moreover, in an effort to eliminate warehousing (i.e., inmates who are idle), which produces worse recidivism and postprison employment outcomes, this paper proposes limiting the majority of confinement periods to between five months and five years. Because prison is an expensive social resource, we should maximize its value by increasing involvement in programming for those who enter prison. While lengthy periods of imprisonment may prompt some prisoners to reflect on their crimes and find remorse, the truth is that inmates with long sentences are likely to be warehoused for much of their confinement. Participation in programming, however, can help hasten the rehabilitation process.

To help prison systems reduce their populations and deliver programming more effectively, the third prong in this plan involves greater use of risk, needs, and responsivity assessment instruments. Over the past few decades, prison systems have increasingly relied on these instruments to make decisions about prisoner custody levels, participation in programming, and post-release community supervision. Because decades of evidence have consistently shown that risk assessment tools perform better than professional judgment in predicting how offenders will behave in prison and in the community following their release, corrections agencies should continue to ramp up their use of these tools to achieve more effective prison reform. As this paper discusses later, prison systems can greatly improve the efficiency and cost-effectiveness of their methods for assessing risk by shifting from manual to automated processes.

### A Brief History of Corrections in America

Before the 18th century, societal responses to crime typically consisted of meting out corporal punishment in a public setting. But with the influential work in 1764 by the Italian scholar Cesare Beccaria titled *Crimes and Punishment*, correctional practice began the long and steady march from public corporal punishment to methods that reflected the Enlightenment's emphasis on reason, rationality, equality, and individualism. In the wake of this shift in thought, the

turn of the 19th century in the US brought about the penitentiary, which attempted to reform criminals by isolating them from society in the hopes that they would reflect on, and be penitent for, their crimes.

As the number of penitentiaries grew during the early 1800s, two main systems emerged in the US—the separate system in Pennsylvania and the congregate system in New York (Auburn, to be precise). While both emphasized individual reform through silence and labor, Pennsylvania’s separate system required inmates to spend their time in isolation from one another, during which they would read the Bible, work on crafts, and contemplate what they had done. In contrast, Auburn’s congregate system required that inmates work together in shops making products that the state sold. Because the Pennsylvania model was more costly than the Auburn system, the design, construction, and operation of new prisons in the US generally resembled the New York model by the end of the 1800s.

Neither the Pennsylvania model nor the Auburn system were considered effective in reforming prisoners, which eventually led to the development of modern correctional practices such as probation, rehabilitative programming, indeterminate sentencing, and parole. As the social and behavioral sciences gained acceptance and grew in stature, the medical model of corrections began to emerge in the US during the mid-20th century. The medical model maintained that prisoners can be rehabilitated through a variety of programs and therapies.

Robert Martinson’s research in 1974 helped shift the focus from the medical model, which had prevailed during the 1950s and ’60s, to deterrence and punishment, especially during the 1980s and 1990s.<sup>11</sup> The well-known conclusion from this study and another one that Martinson coauthored the following year on programming’s effectiveness in reducing recidivism was that “nothing works.”<sup>12</sup> In response to the widespread attention this research received, scholars critiqued the methods that were used and challenged the conclusions that were drawn.<sup>13</sup>

While the “nothing works” claim was the catalyst for the rise of the “what works” movement within corrections, it nevertheless provided support for more

punitive correctional practices. If rehabilitative programming does not work, then the best way to achieve public safety, reasoned proponents of the “nothing works” conclusion, is to increase the penalties for crime, resulting in the greater use of prison.

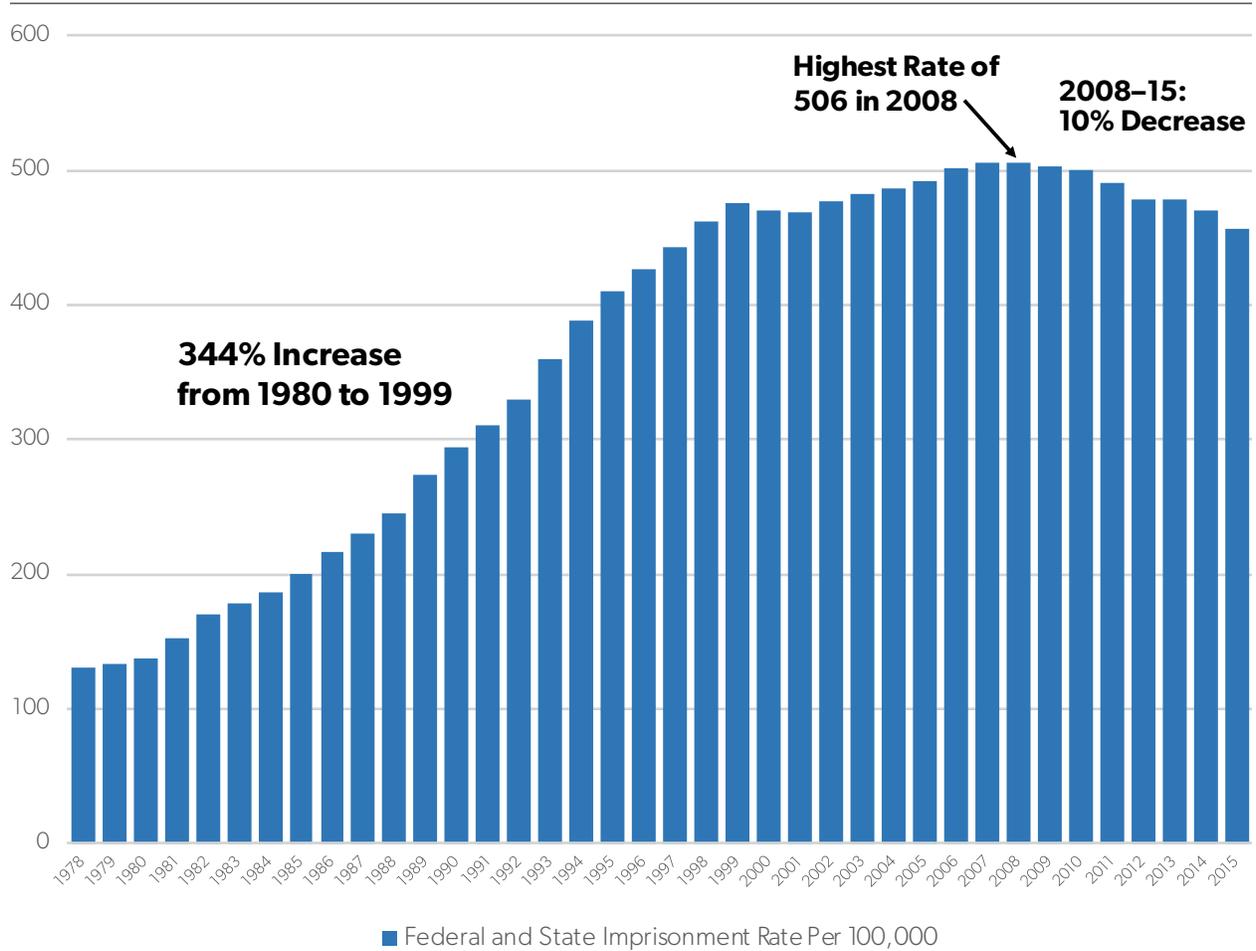
Beginning in the late 1970s, state- and federal-level legislators enacted “tough on crime” policies that ushered in the era of mass incarceration. As shown in Figure 1, the state and federal imprisonment rate (per 100,000 of the US population) in 1979 was 133. By the end of the 1980s, this rate more than doubled in size, reaching 274 by 1989. The nation’s imprisonment rate continued to proliferate during the 1990s, rising to 476 in 1999. Between 1980 and 1999, the imprisonment rate grew by 344 percent. After reaching the high point of 506 in 2008, the rate has declined by 10 percent over the past seven years.

The prison population boom from the 1970s to the mid-2000s was brought on by not only more punitive sentencing policies but also growth in crime rates and, perhaps most notably, state spending.<sup>14</sup> Prison populations tend to expand when there is an apparent need for prisons. But this expansion occurs only when states have the financial resources to pay for more prison beds.<sup>15</sup> Therefore, it is not a coincidence that many states began looking at ways to trim their prison populations when the Great Recession hit in the late 2000s. With shrinking tax revenues and state budgets, the prevailing mass incarceration model was no longer tenable. And, because much of the country still has not fully recovered from the Great Recession, the need for prison reform remains acute.

## The Relationship Between Prison and Crime

As the state and federal prison population grew during the latter part of the 20th century, crime rates began to drop in the 1990s. In fact, since the mid-1990s, crime rates in the US have remained lower than those observed in the 1970s and ’80s. One reason cited for the crime drop since the 1990s is the increase in the nation’s prison population.<sup>16</sup>

**Figure 1. State and Federal Imprisonment Rates, 1978–2015**



Source: Bureau of Justice Statistics, National Prisoner Statistics Program, 1978–2015.

Prison has typically been said to reduce crime in three ways. First, the threat of imprisonment could potentially deter individuals from committing crime. Second, when offenders are in prison, their incapacitation greatly diminishes their ability to commit crime, at least against the general public. Third, by rehabilitating prisoners during their confinement, prisons can reduce crime by lowering their risk for recidivism.

The findings from existing research suggest that prison does not deter crime.<sup>17</sup> While it is generally accepted that prison reduces crime through incapacitation, there is less consensus over the size of this effect, which is due, in no small part, to the wide variety of data and methods used to develop

estimates.<sup>18</sup> Studies relying on individual-level data have reported the lambda (i.e., the annual number of crimes the prisoner would have likely committed had he or she not been incapacitated) ranges from as little as two offenses to as many as 187.<sup>19</sup> In research using aggregate-level data, the findings indicate a null effect for county-level data, modest effects for state-level data, and relatively large effects for national-level data.<sup>20</sup>

The size of the incapacitation effect also depends on the size of the prison population itself. To illustrate, let’s say a state has 20,000 individuals in prison who we are able to rank (from #1 to #20,000) in terms of the likely recidivism cost from their release

from prison. If released from prison, prisoner #1 has the highest risk of committing a severe, violent crime that would be costly to society. On the other hand, there would be little or no cost for prisoner #20,000 due to minimal risk of recidivating with any offense, violent or nonviolent. For prisoner #1, the benefits resulting from the crime(s) prevented by this individual's incapacitation clearly outweigh his or her confinement costs. Conversely, because prisoner #20,000 has such a low likelihood of reoffending, the costs to confine this individual likely outweigh whatever crime-reduction benefits might be achieved from his or her incapacitation.

To be sure, imprisonment can benefit society by preventing future crimes. As prison populations increase, however, these benefits grow at a diminishing rate. When prison populations expand, less serious prisoners are more likely to be incarcerated. Imprisoning progressively less dangerous offenders produces progressively smaller crime-reduction benefits because these offenders are less likely to reoffend or, if they do recidivate, are less likely to commit a serious offense.<sup>21</sup>

Using the above example of the state with 20,000 prisoners, this state would see greater crime-reduction benefits from imprisoning offenders ranked #1 to #1,000 than it would for those ranked #19,001 to #20,000. Because states with higher imprisonment rates are, in general, more likely to imprison less serious offenders, reducing prison populations in these states without significantly jeopardizing public safety may be easier.

This is not to say that correctional officials in high-imprisonment states can begin releasing prisoners en masse. Rather, as this paper argues later, populations can be effectively reduced through a combination of risk assessment instruments, correctional interventions, and community supervision. In doing so, prison systems can better identify the lower-risk prisoners whose imprisonment costs are more likely to outweigh the meager crime-reduction benefits from their confinement.

At a broader level, the inverse relationship between the sizes of the prison population and incapacitation effect also has implications for our understanding of the prison population boom and the crime drop during

the late 20th century. Although crime rates began to descend sharply during the 1990s, this decrease eventually tapered off. One reason may be that as prison populations continued to increase (see Figure 1), the size of the incapacitation effect began to decline. This implies that there is a point, which no one has been able to isolate yet, at which more imprisonment may yield diminishing returns.

When prison populations expand, prisons' ability to reduce crime may be weakened for other reasons, too. As noted above, even though prisons can theoretically reduce crime through rehabilitation, the results from several studies suggest that prison does not rehabilitate offenders and may even have a criminogenic effect.<sup>22</sup> At the same time, however, a rather large body of research—the “what works” literature—has shown there are correctional interventions that effectively reduce recidivism. How do we reconcile these findings? How can prisons be criminogenic while also being able to deliver programming to prisoners that successfully reduces recidivism?

The answer is that neither body of literature has considered the extent to which prisoners participate in programming, especially interventions with proven success in reducing recidivism. For example, prior research on the link between prison and crime has typically treated prison as a black box. In studies using individual-level data, in particular, prisoners are often compared with noncustodial populations without any controls for participation in programming. The worse recidivism outcomes for prisoners in these studies may simply reflect diminished access to effective interventions.

The “what works” literature, on the other hand, consists almost entirely of individual program evaluations and meta-analyses of specific types of programming. Although this literature has identified interventions that are effective in reducing recidivism, it has not measured the extent to which prisoners participate in these interventions. Therefore, while the “what works” literature suggests that CBT, for example, effectively reduces recidivism, CBT will likely have a negligible impact on overall recidivism rates if only 2 percent of the prison population has access to it.<sup>23</sup>

The available evidence, most of which is not recent, suggests that many prisoners are not involved in interventions while they are incarcerated. Moreover, the rate at which prisoners were warehoused appears to have increased during the 1990s, perhaps because of growing prison populations resulting from mass incarceration policies. Using 1998 data compiled by the Criminal Justice Institute, James Austin reported an estimated 24 percent of prisoners in the US were idle and not participating in a work or educational program.<sup>24</sup> In their analysis of data from the 1991 and 1997 Survey of Inmates in State and Federal Correctional Facilities, James Lynch and William Sabol indicated that the percentages of soon-to-be released prisoners who had participated in prerelease, educational, and vocational programming had decreased between 1991 and 1997.<sup>25</sup> Analyzing the same data, Christopher Mumola found that 25 percent of state prisoners to be released in the next 12 months in 1991 had entered prison-based drug treatment, compared to only 10 percent in 1997.<sup>26</sup>

---

## Warehousing increased the odds of recidivism by 13 percent.

In a recent study on more than 55,000 Minnesota prisoners released between 2003 and 2011, Valerie Clark and I found that 31 percent were warehoused.<sup>27</sup> Warehousing increased the odds of recidivism by 13 percent, and it was more likely to occur for prisoners with brief stays in prison who were admitted as probation or parole violators. On the other hand, participation in at least one successful recidivism-reduction intervention lowered the odds of recidivism by 12 percent, while involvement in two effective programs decreased it by 26 percent.

Why does warehousing increase recidivism? As we explained in the study, idle offenders are often placed in living units with other idle offenders, at least in Minnesota's prison system. Rather than

creating a therapeutic community commonly associated with various correctional interventions, the concentration of idle offenders may foster a criminogenic community. Moreover, disciplinary infractions have been found to exacerbate recidivism risk. If idleness promotes more opportunities for prison misconduct and other recidivism-risk escalation behavior, such as gang involvement in prison or increased contact with heavily antisocial peers, the finding that warehousing increases recidivism should come as little surprise.

Warehousing is very much a punitive correctional approach. Warehoused prisoners are typically serving a brief stint in prison for a probation or parole revocation. Having violated their conditions of supervision, these offenders are often revoked in the interest of public safety. Any public safety benefits from their revocations would stem only from an incapacitation effect. Given that few participate in any programming during their time in prison, the revocation of probation and parole violators generally serves just one goal—punishment.

Historically, punitive approaches in corrections have seldom achieved favorable outcomes, as noted earlier. These approaches tend to be ineffective in reducing recidivism because they do not address the reasons why released prisoners fail when transitioning from prison to the community.

### Why Is Recidivism High Among Released Prisoners?

Why do so many prisoners fail (i.e., recidivate) following their release from prison? The risk-needs-responsivity (RNR) model provides an evidence-based context in which to understand why prisoners recidivate. As the “what works” literature continued to grow during the late 1970s and 1980s, researchers drew on this empirical evidence to form the principles of effective correctional interventions and, more narrowly, the RNR model. While many correctional agencies in the United States use the RNR model to guide the delivery of programming, it also offers a framework in which to understand why prisoners recidivate.

The RNR model maintains that programming should be matched to an offender's risk of reoffending, criminogenic needs, and responsivity issues.<sup>28</sup> Because correctional resources are often scarce, the risk principle suggests we can get the most bang for our treatment buck by focusing on higher-risk offenders. The most intensive programs—generally measured by total length and number of hours—should be reserved for offenders with a higher recidivism risk.<sup>29</sup> Given the emphasis placed on recidivism risk, using validated risk assessment instruments is central to the RNR model.

The needs principle holds that interventions should address an individual's greatest criminogenic needs to reduce recidivism. Criminogenic needs are individual characteristics that increase the risk of recidivism.<sup>30</sup> For example, if an individual's greatest criminogenic need is substance abuse, which is a known risk factor for recidivism, the needs principle tells us that chemical dependency treatment would be an appropriate intervention to reduce this person's recidivism risk.

Under the RNR framework, one distinction among risk factors is whether they are static or dynamic. The best predictor of future criminal behavior is criminal history, or past criminal behavior, which is a static risk factor.<sup>31</sup> The salience of criminal history as a predictor of recidivism also helps explain why recidivism rates tend to be higher for nonviolent offenders.<sup>32</sup>

Sentencing is largely based on not only the severity of the crime but also the individual's criminal history. Because nonviolent crimes such as drug or property offenses are less serious than violent crimes, individuals sentenced to prison for nonviolent offenses are more likely to have longer criminal histories. On the other hand, individuals with little or no criminal history can be sentenced to prison if they commit only one serious violent offense. Because individuals in prison for nonviolent crimes generally have longer criminal histories, their recidivism rates are typically higher.

Even though an individual's criminal history anchors his or her recidivism risk, there are dynamic factors that can affect a prisoner's likelihood of recidivism. More important, unlike a static risk factor such

as criminal history, which cannot change, dynamic risk factors can be targeted through interventions because they can change. Indeed, much of the institutional programming provided to offenders is geared toward addressing these dynamic risk factors.

Prior research has further categorized recidivism risk factors as major, moderate, and minor.<sup>33</sup> The four major risk factors (i.e., the "Big Four") are history of antisocial behavior, antisocial personality pattern, antisocial cognition, and antisocial associates. Of the Big Four, history of antisocial behavior (i.e., criminal history) is static, whereas the others are dynamic needs areas. Moderate risk factors include family/marital, education/employment, leisure/recreation, and substance abuse, while areas such as major mental disorder, low IQ, and social class are considered minor risk factors.<sup>34</sup>

---

## **When individuals enter prison, they may have, in addition to a lengthy criminal history, a host of dynamic risk factors or criminogenic needs.**

The responsivity principle suggests that programming should be tailored to individuals' strengths, abilities, and learning styles. As such, the responsivity principle provides guidance on how to deliver interventions. Whereas general responsivity refers to types of programming, such as cognitive-behavioral interventions, that are most effective in reducing recidivism, specific responsivity includes individual barriers that may limit the likelihood for program participation and successful completion.<sup>35</sup> Examples of specific responsivity include motivation, anxiety, different forms of learning styles, language, transportation, gender, and culture.<sup>36</sup>

When individuals enter prison, they may have, in addition to a lengthy criminal history, a host of dynamic risk factors or criminogenic needs. For example, with nearly 40 percent lacking a secondary degree,<sup>37</sup> many prisoners are undereducated. When we consider that 12 percent of adults in the US do not have a secondary degree, according to the most recent Census,<sup>38</sup> prisoners are at least three times more likely to be without a secondary degree. Many prisoners also lack vocational skills and legitimate employment experience. Research has shown that less than one-third of prisoners had been employed in the year prior to entering prison.<sup>39</sup>

Even though mental illness is not a major risk factor for recidivism, prisoners are more likely to suffer from mental disorders. Compared to the general population, prisoners are two to four times more likely to have psychotic and major depressive disorders.<sup>40</sup> Lengthy histories of substance abuse are common for many prisoners. For example, close to 90 percent of Minnesota prisoners are diagnosed as chemically abusive or dependent.<sup>41</sup> Further, as evidenced by the presence and vibrancy of street gangs, or “security threat groups,” in prison, inmates often lack sources of pro-social support.

With lengthy criminal histories and multiple criminogenic needs, desistance from crime is a significant challenge for many individuals released from prison. The challenge grows even steeper when prisoners are warehoused, and there is some evidence that warehousing became more prevalent during the prison population boom. When prisons isolate inmates from potential sources of pro-social support, such as friends and family members, and do not provide prisoners with effective programming, they run the risk of becoming “finishing schools for criminals,” wherein prisoners learn from each other how to become more adept or prolific at committing crime.

After their release to the community, prisoners then bear the stigmatizing mark of a criminal record, which carries a host of collateral consequences. In addition to the challenges released prisoners face in finding proper housing, they routinely experience difficulties in securing stable employment, which diminishes their earnings potential and upward mobility.<sup>42</sup>

Since the arrival of the penitentiary more than two centuries ago, prison systems in the US have been proficient at punishing offenders. But when it comes to rehabilitating prisoners, American prison systems have not been quite as proficient. A prominent reason for this failure to rehabilitate is that American correctional practice has often assumed—incorrectly, as it turns out—that prisoners can be scared into desistance.

Yet, even when it has been recognized that prisoners need more than fear to desist from crime, US prison systems have placed relatively little importance on providing offenders with effective programming. Even during the 1950s, when the medical model was at the height of its popularity, little of state correctional budgets was allocated for rehabilitative programming.<sup>43</sup> If rehabilitation or, more narrowly, recidivism reduction is truly one of the preeminent goals of state and federal prison systems, then it is imperative that we rethink how prisons are used in the US.

### **An Evidence-Based Strategy for Prison Reform**

The strategy for improving the performance of US prison systems in reducing recidivism is relatively simple and straightforward: Increase the extent to which prisoners are involved in effective programming. Increasing programming, however, costs money, and one of the main drivers of the recent prison reform movement is that states have lacked money since the onset of the Great Recession. In addition to costs, the vast majority of correctional facilities in the US were not designed to be program-rich environments in which physical space was dedicated to programming. Instead, many correctional facilities were designed and constructed, often decades ago, to meet the needs of punishment and security rather than rehabilitation.

The need for physical space is seldom considered in the academic literature on correctional programming, but it is a reality that must be considered. The physical space needs tend to vary by the type of program, but

most programs need space for classrooms and offices for staff. The availability of physical space for programming was limited even further during the mass incarceration era. With bulging prison populations, many states continue to operate at or above the bed space capacities for their facilities. In doing so, prison systems must forgo programming and use the physical space they have available to warehouse prisoners.

Efforts to increase programming will invariably be constrained by the physical design and layout of correctional facilities. Even so, there are steps prison systems can take to increase the delivery of programming without spending more money. Most notably, state and federal prison systems can reduce the size of their prison populations.

Reducing the size of prison populations is not only possible due to the overuse of prison in the US but also crucial to reform for a few reasons. First, it will help lower correctional costs, which can then be reinvested toward an increase in programming resources. Second, it will help free up the physical space in correctional facilities that is needed to deliver programming.

As noted earlier, some states have adopted various strategies to reduce their prison populations, such as allowing early discharge for probationers, capping probation and parole sentences, and eliminating revocations for technical violations. Strategies such as these should continue to help shrink the size of prison populations. But other tools in the population-reduction toolbox may be just as effective, and perhaps even more so, in decreasing prison populations without compromising public safety.

Over the past few decades, risk assessment instruments have become more commonplace in corrections. Decades of research have consistently shown that actuarial instruments outperform professional judgment in predicting future outcomes. Using validated risk and needs assessments has been central to the RNR model, which emphasizes the delivery of programming that is calibrated to an offender's recidivism risk, criminogenic needs, and responsivity issues. While valid risk assessment instruments can help identify the higher-risk prisoners who are prioritized for programming under the RNR model, they

can also be used to identify the lower-risk offenders who should be released from prison or remain in the community under correctional supervision. To date, the prison reform movement has yet to adequately capitalize on the value that risk assessments can offer in safely reducing populations.

The remainder of this paper lays out an evidence-based strategy for improving the ability of US prisons systems to reduce recidivism. In particular, it addresses three main areas: (1) assessing the risk, needs, and responsivity of all individuals who (re)enter correctional systems; (2) reducing the size of prison populations; and (3) increasing the delivery of effective programming. In the following section, I discuss RNR assessments and, more specifically, how these tools can help reduce prison populations and increase programming. Next, after reviewing existing approaches to reducing prison populations, I present several strategies to effectively lower prison populations. Finally, I delineate a strategy for prison systems to provide more programming to prisoners.

## **Number 1: Assessing Risk, Needs, and Responsivity**

Within corrections, risk assessment is often used to prospectively identify imprisoned persons who have a greater risk of violating the rules of prison or jail, the conditions of community supervision, or more broadly, the laws of society. Correctional authorities use risk assessments to guide a host of decisions that are largely intended to enhance public safety and make better use of scarce resources. For example, in low-stakes risk assessment, instruments have been used to help determine institutional custody levels, prioritization for programming, and the type of community supervision. In high-stakes risk assessment, in which an individual's liberty hangs in the balance, tools have been used to inform decisions related to pretrial release, sentencing, and whether individuals should be paroled from prison.

In predicting recidivism, risk assessment instruments typically rely on algorithms, which can range from simple to complex. An algorithm transforms

the values for the items that predict recidivism into a probability or risk score. For example, if it is a predicted probability, then the value ranges from 0 to 100 percent, with higher probabilities reflecting a greater likelihood for recidivism. If it is a score, then a higher value also signifies a greater risk for recidivism. The items in a risk assessment instrument generally include predictors of recidivism such as criminal history, demographic characteristics (age, gender, and race/ethnicity), type of admission to prison, length of stay in prison, educational level, prior employment, antisocial peers, substance abuse, and behavior in prison (e.g., prison misconduct).

Risk assessments have recently come under greater scrutiny for a variety of reasons. In addition to criticisms over their transparency and performance in predicting recidivism, concerns have been raised over whether risk assessment tools are being used to perpetuate, if not heighten, racial and ethnic disparities in the criminal justice system.<sup>44</sup> This scrutiny is warranted and crucial to making progress. What is not warranted, however, is the idea that we need to abandon these assessments due to current weaknesses in their design or operation.

What these critiques have failed to point out is what the alternative, or alternatives, would be if we decided to jettison the use of actuarial risk assessments. Without these instruments, we would be forced to go “old school,” in which correctional and criminal justice system staff would make decisions based on their professional judgments or “gut instincts.” Decades of evidence have consistently demonstrated that clinical or professional judgment is simply not good in predicting future behavior,<sup>45</sup> and recidivism is no exception. Moreover, increasing the use of professional judgment would result in greater use of discretion, which has been linked to worsening the racial and ethnic disparities in the criminal justice system.<sup>46</sup> The superiority of statistical prediction over clinical or professional judgment does not mean that risk assessment tools always achieve a satisfactory level of performance; it just means that statistical prediction has consistently cleared the low bar set by professional judgment.

Even though actuarial instruments offer the best

approach to making risk assessment decisions, their design and use could be improved in a few ways. Many agencies use assessments developed on correctional populations from other states, or even other countries, without ever testing their performance on their own correctional populations. For example, some jurisdictions assume that because an assessment performed adequately in, say, Canada, it will also perform well for a US correctional population. Many problems could be avoided, however, by simply testing the performance of an instrument before using it. In doing so, prison systems could determine whether an assessment performs well in predicting recidivism overall and whether there are differences in performance among various prisoner subpopulations.

In addition, correctional staff manually score the vast majority of risk assessment tools. The findings from recent research suggest that an automated process is, in several ways, superior for assessing risk.<sup>47</sup> By standardizing the process in which items are scored, automated scoring methods eliminate the inter-rater disagreement (i.e., differences in how raters score an assessment) that is inherent to manually scored assessments. In doing so, automated scoring processes can help improve the reliability and, by extension, the predictive performance of risk assessment decisions.<sup>48</sup>

Automation can also significantly increase the efficiency of the risk assessment process by eliminating the time that prison staff spend in (1) scoring assessments for individual offenders, (2) undergoing the training required to use the instrument, and (3) conducting quality checks to ensure assessments are being done correctly. Even though automating the risk assessment process entails a cost for prison systems, it still delivers a highly favorable return on investment (ROI) due to the significant increase in efficiency. In my study on the automation of the Minnesota Screening Tool Assessing Recidivism Risk 2.0 (MnSTARR 2.0), coauthor Michael Rocque and I found that for every dollar spent on automating the MnSTARR 2.0, there will be an estimated return of approximately \$22 within five years, totaling nearly \$3 million in staff time saved.<sup>49</sup> Because automation is more efficient and cost-effective, industries that

commonly make risk assessment decisions (e.g., financial lending, insurance, and health care) have, over the past few decades, increasingly eschewed manual assessment processes in favor of automated ones.

While developments such as these would improve the design and use of risk assessment instruments in US prison systems, it is worth emphasizing that using these assessments is not a panacea. Their use will not, in and of itself, lower recidivism. Instead, because the effectiveness of programming can hinge on the type of intervention, the quantity of the dosage, and when it is delivered, we use these assessments as a diagnostic tool to help us determine which prisoners need a higher dosage of programming and what types of interventions would be most beneficial. Low-stakes assessments are therefore crucial to maximizing the successful delivery of correctional programming.

---

## Low-stakes assessments are crucial to maximizing the successful delivery of correctional programming.

But high-stakes assessments are also crucial to prison reform, for they can be used to curb the size of prison populations. Strategies to increase or decrease the use of prison have often relied on a single consideration. For example, many states increased their prison populations during the 1990s by enacting “three strikes” legislation, which raised the penalties for those with at least two prior convictions. On the other hand, attempts to reduce the likelihood of incarceration have focused on single factors such as the length of time served. Rather than releasing individuals on poor or weak predictors of risk such as the type of most recent crime they committed, risk

assessment instruments provide a more complete picture of recidivism risk. By more accurately identifying the lower-risk offenders, these assessments offer the best way of reducing prison populations without significantly compromising public safety.

## Number 2: Reducing the Size of Prison Populations

Offenders can enter prison as a new court commitment, a probation violator, or a parole violator. Prisoners admitted as new court commitments are sentenced directly to prison by the court system. In general, new court commitments have longer lengths of stay than either probation or parole violators. Probation violators were initially convicted of a felony-level offense and sentenced to probation, which consists of community supervision and, in some instances, time in a local jail. After violating their conditions of supervision, probation violators are sentenced to prison after having their probation revoked. Parole violators, meanwhile, were initially released from prison to community supervision after entering as a new court commitment or probation violator. Parole violators return to prison after having their parole revoked for violating the conditions of their supervision. Whereas the courts typically determine whether probation violators go to prison, Departments of Corrections or parole boards generally decide whether parole violators return to prison.

Prison populations can be reduced in two main ways: (1) decreasing the volume of prison admissions and (2) shortening the lengths of stay for those who enter prison. Recent prison reform efforts have focused on decreasing the number of prison admissions by limiting the opportunities for individuals to (re)enter prison for probation and parole revocations.

There are, of course, a few good reasons for targeting probation and parole violators. First, due to their short stays in prison, probation and parole violators are more likely to be warehoused, which leads to worse post-release employment and recidivism outcomes.<sup>50</sup> Second, recent data suggest that probation and parole violators make up between

60 and 70 percent of prison admissions, with new court commitments accounting for the rest. In our study of Minnesota prisoners, Valerie Clark and I found that 62 percent of the 55,656 releases from prison had been admitted to prison most recently as a probation or parole violator.<sup>51</sup> This rate is consistent with older data on the percentage of probation and parole violators among all prison admissions for states such as California, Ohio, and Oregon, and with more recent data from states such as Utah and Missouri.<sup>52</sup>

To date, prison systems have attempted to lower the volume of probation and parole violators by reducing the number of conditions, capping the length of probation and parole sentences, increasing the use of early discharge, and eliminating technical violations. After discussing these approaches in the context of what the empirical evidence indicates, this paper introduces the concept of a recidivism risk-violation severity grid, which prison systems can use to reduce their volume of probation and parole violator admissions.

**Recent Prison Reform Efforts.** While the ramifications from reducing supervision conditions are unclear, recent efforts to trim the lengths of probation and parole periods—either through early discharge or capping the sentence length—are consistent with the empirical evidence. Research on recidivism, particularly for released prisoners, has long shown that the risk of reoffending dissipates the longer that individuals remain in the community. For example, the BJS study found that 77 percent were rearrested within five years.<sup>53</sup> When we look at annual recidivism rates, we see that 43 percent were rearrested after the first year. Of those not arrested by the end of the first year, 29 percent were rearrested by the end of the second year, 21 percent by the end of the third year, 16 percent by the end of the fourth year, and 13 percent by the end of the fifth year.<sup>54</sup> As these data show, the risk for recidivism declines the longer that individuals remain in the community.

These data also suggest that the relatively recent trends toward lengthening probation sentences and parole periods are likely misguided, ineffective, and ultimately, costly to taxpayers. Let's assume, for

example, we have an individual who has received a 10-year probation sentence. If this individual has been under correctional supervision for more than five years, the cost to supervise this individual over the remainder of his or her probation would likely outweigh whatever benefits might be gained from a reduction in recidivism. Revoking this individual for “technical violations” that do not involve new criminal behavior would also not make much sense if he or she had successfully reintegrated in the community.

Individuals with a track record of compliance with community supervision should be eligible for early discharge or have their community supervision capped. In doing so, correctional systems would decrease the likelihood that probationers and parolees will be revoked and sent to prison toward the end of their sentences. Reducing the number of probation and parole violator admissions could help decrease the size of the prison population, which could, in turn, lower costs and potentially increase opportunities to provide programming.

One caveat with this approach, however, is that its overall impact could be relatively minimal. After all, individuals who have been compliant under community supervision are not only unlikely to reoffend but also less likely to violate the conditions of supervision that would result in a revocation. Therefore, while shortening the length of supervision periods makes sense empirically, it would likely affect relatively few offenders.

On the other hand, eliminating revocations for “technical violations” could potentially have a large impact. Technical violations run the gamut from using drugs and alcohol to not following agent's directives to failing to remain law-abiding. Limiting revocations to new felony-level offenses would have a large impact. The one potential concern is how this could affect public safety. Below I lay out a strategy that attempts to maintain public safety while lowering prison populations by reducing probation and parole violator admissions to prison.

**Using a Risk-Severity Grid to Reduce Revocations.** Prison systems are overusing probation and parole revocations, which make up roughly two-thirds

of all prison admissions. Part of the reason for the revocation overuse is likely that bureaucracies are typically risk averse, and prison systems are no different. Revoking a parolee for, say, using drugs or failing to maintain contact with his or her supervision agent is much less risky than leaving this individual in the community, where he or she may commit a new crime, especially one that is violent.

The overuse of revocations is also likely due to the significant amount of discretion that courts and correctional professionals have in making these decisions. To be sure, we often place a premium on discretion and, more narrowly, the ability to make decisions on a case-by-case basis. In doing so, however, we risk inconsistently applying criteria across all decisions, which can exacerbate disparities and lead to worse outcomes overall.

Using a grid that considers the severity of the violation(s) and the risk of the probationer or parolee for recidivism offers a more objective, reliable, and evidence-based approach for making revocation decisions. More specifically, a risk-severity grid provides a way of organizing the data from supervision violations and risk assessment instruments to help separate the low-risk, low-severity offenders from those who are higher risk with more severe violations. The grid concept is similar to criminal sentencing decisions, which are often based on the severity of the crime and the individual's prior criminal history.

The advantage of a risk-severity grid, which is presented below, is that it could be used to reduce revocation admissions without significantly jeopardizing public safety. Just as important, its use could help achieve a key goal of prison reform—eliminating warehousing. In particular, a risk-severity grid could be used to revoke only the higher-risk offenders with more severe violations while lower-risk offenders with less serious violations would remain in the community.

Generally, effective interventions last at least three months, if not longer.<sup>55</sup> When higher-risk and more severe offenders get revoked, their stay in prison should be long enough to ensure a sufficient amount of time (at least 150 days) to participate in programming. Given that time must be taken to assess the risk, needs, and responsivity of prisoners to help

determine appropriate types of programming, prison stays should likely be at least five months in duration.

As it stands, when less serious violators have their probation or parole revoked, they tend to have shorter stays in prison. For example, let's say we have a relatively low-risk parolee who continually fails to maintain contact with his parole agent because he has been using alcohol. Rather than returning this individual to prison, where he may sit idle for 60 or 90 days, why not have this person participate in substance abuse treatment in the community? A key question to ask here is: Would prison truly be the best option, both for society and the individual? If a parolee gets revoked and then is idle in prison with other revoked parolees for the next three months, it is unclear how this would create better outcomes. Accordingly, using the grid would result in less serious violators remaining in the community, where programming would be accessible. In a later section, I describe how reallocating correctional resources can deliver more programming to offenders in both prisons and the community.

To illustrate how the risk-severity grid might work in practice, hypothetical data are presented in Table 1. In this example, we are focusing on parole revocations, although the same principles would apply to probation revocations, too. Let's say we have four risk levels (low, medium, high, and very high) and four violation severity levels (also low, medium, high, and very high). Let's also say we have a prison system that has 30,000 prison admissions each year, of which 10,000 are parole violators. The release violators are evenly spread among the four risk level categories (25 percent per each risk level), while close to two-thirds of the violations are in the medium and high severity levels.

If we wanted to cut our parole violator admissions in half without compromising public safety, how might we do that? With a risk-severity grid like Table 1, each parole violator would fall into one of the 16 cells. If we wanted to reduce parole violator admissions to prison by half, we would limit revocations to prison to eight of the cells, while the other half would always remain in the community. For example, as shown in Table 1, all violators above the black line would remain in the community, whereas all those

**Table 1. Recidivism Risk-Violation Severity Grid**

Most Serious Severity Level	Low Risk Level	Medium Risk Level	High Risk Level	Very High Risk Level	Total
Low Severity	400	400	400	400	1,600 (16%)
Medium Severity	900	900	900	900	3,600 (36%)
High Severity	700	700	700	700	2,800 (28%)
Very High Severity	500	500	500	500	2,000 (20%)
Total	2,500	2,500	2,500	2,500	10,000

Source: Author.

below the black line would be revoked to prison. A lower-risk parolee could not return to prison unless it was for a very high severity violation. Conversely, very-high-risk parolees would be revoked to prison unless the violation was low severity.

The above discussion about the potential impact of this grid assumes, of course, that courts or corrections staff will not be able to exercise discretion in making revocation decisions. For prison systems that are unable to completely cut the cord on using discretion in probation and parole revocation decisions, another approach would be to designate the cells where discretion could be used. For example, if a violator falls into one of the eight cells along the black line, then staff may use discretion in determining whether to revoke a probation or parole violator; otherwise, if a violator falls into one of the other eight cells, then he or she will automatically remain in the community or be revoked to prison.

To use a risk-severity grid like Table 1, correctional systems would need to be able to assess the risk of those they imprison or supervise. Again, a fully automated risk assessment system would significantly increase the efficiency of this process. In addition, a prison system would need to rank the severity of the violations that occur. However, as long as the risk assessment and violation severity data are available to staff, the risk-severity grid could be used to curtail

admissions to prison, which would, in turn, shrink the size of prison populations. Reducing parole violator admissions would also lower the rate of reimprisonment, which is one measure of recidivism. But for this decarceration approach to be fully successful, the “savings” from the decreased use of prison would need to be reinvested in more community-based resources for the less serious violators who stay in the community.

**Reducing Long Lengths of Stay in Prison.** Contrary to recent popular thought, which holds that longer confinement periods increase recidivism, the empirical evidence actually indicates the opposite—longer imprisonment periods are associated with lower recidivism.<sup>56</sup> Does this mean that, in addition to increasing the minimum length of stay to at least five months, we should extend the lengths of stay for all prisoners? Not exactly.

Although the Andrew Tiedt and William Sabol study did not control for participation in programming,<sup>57</sup> recent evidence shows that longer confinement periods often lead to greater involvement in correctional interventions.<sup>58</sup> And, when prisoners spend a greater proportion of their prison time participating in programming, we see significantly better recidivism outcomes.<sup>59</sup> The association between longer confinement periods and lower recidivism likely

reflects not only an “aging out” effect for crime but also the benefits from participating in one or more correctional programs.

If extending the minimum length of stay in prison to at least five months is necessary to better meet the goals of rehabilitation, then the same holds true for shortening the maximum lengths of stay for prisoners, especially those serving long nonlife sentences. Since the 2000s, the average prison sentence length in the US has been about five years. A little more than 10 percent of the inmates in state and federal prisons are confined for a life sentence—about 3 percent for life without parole and the other 7 percent for life with parole.<sup>60</sup> Given that many lifers are eventually granted parole, roughly 95 percent of the inmates in prison will be released from prison at some point.<sup>61</sup> But before their release from prison, many prisoners serving a nonlife sentence spend more than five years in prison. Overall, the average time served is close to 30 months for all prisoners, although the average time served is nearly double that for those in prison for violent offenses.<sup>62</sup>

The average sentence length for prisoners—five years—is ample time to participate in multiple interventions. Effective programs typically last somewhere between three months and 9–12 months.<sup>63</sup> Therefore, five years in prison would be a sufficient amount of time to complete two or more effective interventions, even for programs that are longer in duration. Research on Minnesota prisoners has shown that participation in two effective interventions reduces the odds of recidivism by 26 percent. The odds are 30 percent lower for prisoners involved in three effective interventions and 31 percent lower for those who participated in four interventions. Among the relatively small number of prisoners who participated in five effective programs, their likelihood of recidivism was 39 percent lower.<sup>64</sup>

If five years is plenty of time for a prisoner to participate in multiple effective interventions, then confining inmates—primarily those imprisoned for nonlife sentences—in prison beyond five years would not serve the goals of rehabilitation. Instead, whenever prisoners are not participating in programming, we are using prison strictly to punish and incapacitate. In

some states, such as Florida, policies prohibit inmates from entering programming until they are within three years of release. While evidence shows that interventions are generally more effective in reducing recidivism when prisoners exit programming closer to their release from prison,<sup>65</sup> policies such as these also reflect the shortage of programming resources available to prison populations.

---

## **Participation in programming could help expedite the process by which prisoners come to terms with the choices they made that led them to prison.**

Nevertheless, in practical terms this means that a prisoner confined for, say, nine years would be warehoused for the first six years of his or her imprisonment. During this six-year period, which would result in close to \$200,000 in imprisonment costs to the state, would the prisoner reflect on his or her misdeeds and find remorse? Perhaps, but history also tells us this approach is costly and ineffective, particularly in reducing recidivism. None of this is to say that remorse is unimportant but simply that \$200,000 would be costly for one individual to achieve it. Moreover, participation in programming could help expedite the process by which prisoners come to terms with the choices they made that led them to prison.

Although the volume of prison admissions has been the most visible source of prison population growth, longer confinement periods have also contributed. Trimming the lengths of stay would help diminish the size of prison populations, which would, in turn, reduce costs. Reducing the length of stay for a

prisoner from, say, seven years to five years would not unduly limit involvement in programming because, as noted above, five years is ample time to participate in multiple effective interventions. Moreover, to ensure the early release of a prisoner does not significantly jeopardize public safety, release decisions would be contingent on completing effective programming. But as with revocation decisions, risk assessment instruments should be used to help better identify the prisoners with a lower risk of recidivism.

**Five Months and Five Years: Estimating the Potential Impact.** If a premium is placed on rehabilitation and, more narrowly, effective correctional programming, then the vast majority of confinement periods for prisoners will fall between five months and five years. The main exception to this rule of thumb will be lifers, who make up roughly one in 10 prisoners. If we limited prison stays between five months and five years for the remaining 90 percent of prisoners, how would this affect the size of prison populations?

Let's assume we have a prison system whose population currently sits at 15,000 prisoners. Due to variations in lengths of stay, 9,000 prisoners had been admitted as new court commitments, 3,000 as probation violators, and another 3,000 as parole violators. Let's further assume this prison system has about 10,000 prison admissions each year. Because parole and probation violators generally have shorter lengths of stay, we see that 4,000 are admitted as parole violators, 3,500 as probation violators, and another 3,500 as new court commitments.

If we used a risk-severity grid to cut the number of parole violator admissions in half, it would reduce the size of this prison system's population by approximately 10 percent in a relatively short period of time. As it stands, the average length of stay for a parole violator is a little over a year.<sup>66</sup> Even if the minimum length of stay was extended to five months for all prison admissions, cutting parole violator admissions in half would lower the number of parole violators in prison from 3,000 to about 1,500 in the first year or two. For a prison system with a population of 15,000, a loss of 1,500 prisoners would equal a 10 percent reduction.

To what extent would capping prison stays at 60 months affect the size of prison populations? Unlike with using a risk-severity grid to reduce parole violator admissions, the effect would not be felt immediately. Eventually, however, the magnitude of the impact could be just as large. Let's assume, for example, that 20 percent of the 15,000 inmates currently in prison have nonlife sentences greater than 60 months and that a relatively small percentage (5 percent) who enter prison each year have a nonlife sentence greater than five years. If we began to cap prison stays at 60 months, for those currently in prison and those entering prison in the future, we would not see an impact in the first five years. By year six, however, this change would begin to reduce the size of the prison population. By year 10, the reduction would be nearly 1,500 inmates, which rivals the size of the impact for limiting parole violator admissions.

Combined, these two approaches would lower this prison system's population by 20 percent within 10 years. The size of this reduction would be affected, of course, by different decision points. For example, this prison system could achieve a larger reduction by also using the severity-risk grid to cut their probation violators in half or limiting prison stays to, say, 48 months among non-lifers. Conversely, the reduction would be more modest if probation and parole violator admissions were reduced by 25 percent or if prison stays were capped at 10 years instead of five years.

### **Number 3: Increasing the Delivery of Correctional Programming**

While several states have recently decreased the size of their prison populations, none have substantially reinvested their decarceration "savings" toward more programming. This is the missing piece in the recent prison reform movement. More broadly, it is the piece that has arguably always been missing from American corrections. As mentioned earlier, even during the 1950s and 1960s when the rehabilitative ideal reigned supreme (at least in terms of rhetoric), prison systems still devoted less than 5 percent of their budgets toward rehabilitative programming.<sup>67</sup>

Recent prison reform efforts have, for various reasons, not emphasized ramping up programming to lower recidivism. Part of this reticence may stem from the perception that more programming requires more funding, which has been in short supply since the Great Recession. But the silence may also reflect a lack of familiarity with the “what works” literature or suspicions about the effectiveness of correctional programming in general. If it is the latter, the suspicion would be understandable. After all, the news media routinely run stories touting the success of programs that epitomize correctional quackery. As Edward Latessa, Francis Cullen, and Paul Gendreau explain, “correctional quackery” refers to programs that are not rooted in sound criminological theory.<sup>68</sup> Examples of correctional quackery popularized by the news media include stories about the salutary effects of pet therapy,<sup>69</sup> gardening,<sup>70</sup> or music therapy<sup>71</sup> for prisoners.

**Targeting Known Criminogenic Needs.** To be effective in reducing recidivism, a correctional intervention must be rooted in theory, meaning it addresses known criminogenic needs such as criminal thinking, education, employment, substance abuse, or antisocial peers. As evidenced by mental health interventions and domestic violence (DV) programs, some interventions that are commonly used with prisoners have not proved to be successful in lowering recidivism.<sup>72</sup> Mental health programs for offenders are typically designed to treat the symptoms of mental illness, whereas DV programs (e.g., the Duluth model) have focused on altering patriarchal attitudes. In doing so, however, mental health and DV interventions have not mitigated dynamic risk factors for recidivism such as criminal thinking, substance abuse, or antisocial peers.

**Program Integrity.** In addition to addressing known criminogenic needs, a correctional intervention must have program integrity to reduce recidivism. Program integrity means the program’s design and operation are consistent with the established principles of effective correctional interventions. A lack of integrity occurs when a program’s operation deviates from its original design.

In prison systems, it is not uncommon for staff to modify programs. For example, to reach more prisoners, the “light” version of an intervention is sometimes given to prisoners on the grounds that something is better than nothing at all. Research has shown, however, that a lack of program integrity can compromise an intervention’s effect on recidivism.<sup>73</sup> The lesson drawn from this research is that prison systems cannot cut corners in their efforts to reduce recidivism. If anything, cutting corners by offering the “light” version ends up being more costly because costs were incurred to deliver an intervention that did not affect recidivism.

An analogy from the health care system would be a doctor in a third-world country who had enough antibiotics to treat 10 patients with a five-day regimen. However, because 50 patients need the antibiotic, the doctor provides each of the 50 patients with a single dose, reasoning that something is better than nothing. Rather than improving the health of 10 patients, none of the 50 significantly improve after taking the single dose of antibiotic. Similarly, when we try to provide the watered-down version of an intervention, it has no impact on recidivism.

What is worse is that prison systems often like to tout that they are using EBPs. But these practices work only if they are applied correctly. Therefore, even though a prison system may claim they are using EBPs, these practices will be effective in reducing recidivism only when they are delivered with integrity.

**Cognitive-Behavioral Therapy.** The evidence indicates there are several interventions that, when applied with fidelity, effectively reduce recidivism by targeting known criminogenic needs. One of the most effective interventions for prisoners is CBT programming.

CBT programs generally aim to address the link between dysfunctional thought processes and harmful behaviors through timely reinforcements and punishments, as well as role-playing and skill-building exercises. CBT programs have proved to be effective in reducing recidivism and prison misconduct.<sup>74</sup> Moreover, compared to other correctional programming, CBT programs tend to yield an impressive ROI.<sup>75</sup>

**Chemical Dependency Treatment and Sex Offender Treatment.** Many prison systems provide chemical dependency treatment and sex offender treatment, both of which are often delivered within a cognitive-behavioral framework. Existing research has shown that prison-based chemical dependency treatment successfully reduces recidivism, especially if the treatment provides a continuum of care and uses a therapeutic community approach.<sup>76</sup> Similarly, a recent meta-analysis reported that sex offender treatment reduces sexual recidivism by 26 percent. The best outcomes, Friedrich Lösel and Martin Schmucker concluded, were associated with programs that delivered cognitive-behavioral and multisystem treatment.<sup>77</sup>

**Social Support Interventions.** Antisocial peers are a major criminogenic need, and research has shown that providing prisoners with pro-social support—mainly through visitation—decreases misconduct and lowers recidivism.<sup>78</sup> Moreover, a recent meta-analysis reported that visitation is associated with a 26 percent reduction in recidivism.<sup>79</sup> Other interventions that provide prisoners with pro-social support include faith-based programs and Circles of Support and Accountability, both of which have been found to effectively reduce recidivism.<sup>80</sup> Underused in American correctional systems, programming that increases pro-social sources of support warrants greater attention as a correctional intervention because of not only its demonstrated efficacy in reducing recidivism but also its potential cost-effectiveness.

**Education and Employment Programming.** Education and employment programming have, on the whole, produced favorable outcomes for post-release employment and cost avoidance. The results for prison misconduct and recidivism are more modest and inconsistent, although still generally positive. Among the different types of educational programming provided to prisoners, more recent evidence suggests that postsecondary educational programming generates better prison misconduct and recidivism outcomes.<sup>81</sup>

Among employment interventions, research generally suggests that even though prison labor improves post-release employment outcomes, it does not reduce recidivism.<sup>82</sup> Employment programs in which services are delivered mainly in the community, such as work release, have been shown to lower recidivism, although the effect size has been modest.<sup>83</sup> The results from more recent research, although far from conclusive, suggest that a continuum of employment programming may yield the best outcomes.<sup>84</sup>

**Continuum of Care.** While the “what works” literature has revealed which types of interventions effectively reduce recidivism, it has also identified the conditions under which programs are more likely to succeed. For example, as mentioned above, a continuum of care or service delivery is a common thread running through many effective correctional programs.

This issue has not been rigorously examined, but most successful interventions begin in prison and continue after an individual has been released to the community. As opposed to programs that are based solely in prison or the community, interventions that provide a continuum of care may offer prisoners a source of stability as they attempt to navigate the challenging transition from prison to the community.

**The Timing of Correctional Programming.** Along the same lines, we generally see that interventions have a better impact on recidivism when prisoners exit programming closer to their release from prison.<sup>85</sup> Exiting programming closer to the time of release may help prisoners better retain the positive effects that interventions have on their post-release behavior. On the other hand, when prisoners enter an intervention earlier during their confinement, it does not significantly affect recidivism. Earlier involvement in programming, however, does lead to greater participation in programming.<sup>86</sup>

**Correctional Program Dosage.** Greater involvement in correctional programming has been associated with better recidivism outcomes. In other words, higher dosages of programming tend to yield less

recidivism, especially for higher-risk offenders.<sup>87</sup> This does not mean, however, that a relatively large dosage from a single type of intervention will produce less recidivism. For example, findings from the substance abuse treatment literature suggest there is a point at which treatment may have diminishing returns. Studies have found that individuals performed worse in chemical dependency treatment when they had been involved for a year or more.<sup>88</sup>

---

## Most prisoners have more than one criminogenic need.

Instead, the evidence suggests that higher dosages of programming are generally more effective in reducing recidivism when multiple criminogenic needs are addressed. Most prisoners have more than one criminogenic need, which is to say that many have lengthy substance abuse histories in addition to relying on criminal thinking, having antisocial friends, and lacking educational achievement and a legitimate work history. A prisoner with this criminogenic needs profile would clearly benefit from education programming. Yet, participating in education programming would not address this prisoner's needs relating to substance abuse, criminal thinking, or antisocial peers.

To help higher-risk prisoners desist from crime, multiple interventions are often necessary. As noted earlier, participation in effective interventions significantly reduces recidivism, and the size of this reduction is greater for individuals who were involved in multiple effective interventions and, thus, presumably had higher dosages of programming.<sup>89</sup>

**Cost-Effectiveness of Correctional Programming.** Cost-benefit analyses of correctional programming have shown that effective interventions can deliver a positive ROI.<sup>90</sup> The size of the ROI is affected by not only a program's impact on recidivism

but also economies of scale. Programs with higher enrollment, especially education and CBT programming, can often be delivered relatively inexpensively. Moreover, these programs tend to be good options for individuals who will not be in prison for lengthy periods of time. This is not to say smaller enrollment programs are not viable; on the contrary, low-volume interventions can be cost-effective. To do so, however, such interventions need to produce large reductions in recidivism, be effective in reducing violent recidivism, or both.

As the above discussion illustrates, the “what works” literature indicates there is effective programming available for prisoners. Again, however, to help determine which interventions are most appropriate for individual prisoners, prison systems should rely on instruments that assess their risk, needs, and responsivity. Whether prison systems can provide a sufficient amount of programming to prisoners will be limited, to some extent, by the lengths of their confinement periods. Still, the use of risk, needs, and responsivity assessments can help prison systems deliver programming more effectively.

### An Example of Evidence-Based Prison Reform

To better illustrate how the three-pronged plan for prison might work in practice, let's say we have a prison system that currently imprisons 15,000 inmates. With a marginal cost of \$30,000 per inmate, let's assume it costs \$450 million annually to run this system. It is currently filled to capacity, and about two-thirds of the population participates in programming. Put another way, the warehousing rate is 33 percent (which is not far off from what we found in the study on Minnesota's prison population at 31 percent).<sup>91</sup>

If we wanted to make this system leaner, more efficient, and more effective at reducing recidivism, how might we accomplish that? Let's say we use a variety of population-reduction strategies, such as a risk-severity grid for probation and parole violators and the “five months and five years” rule of thumb for those entering prison, to reduce this system's

population by one-third (5,000 prisoners). With a marginal cost of \$30,000 per inmate for 10,000 prisoners, it would still cost \$300 million annually to operate. But what would we do with the other \$150 million? With a decarceration-only approach, we would just spend \$150 million less per year and hope none of the 5,000 prisoners released to the community recidivate much or reoffend with a severe, violent offense. Due to public safety concerns over a decarceration-only approach, the \$150 million in decarceration “savings” could instead be invested in a strategy whereby every one of the 15,000 offenders would be provided with access to programming.

Among the 10,000 offenders remaining in prison, let’s say an additional \$7,500 is allocated per inmate, resulting in a cost of \$75 million. In doing so, we would eliminate, or at least greatly reduce, warehousing. (There will always be some prisoners who are, for a variety of reasons, unwilling or unable to participate in programming.) Depending on the type of programming and the economy of scale, an additional \$7,500 per inmate could range anywhere from one to three interventions.

For the 5,000 offenders no longer in prison who would be in the community under correctional supervision, \$75 million would still be available. With \$15,000 available per each offender, \$7,500 could go toward supervision, and the remaining \$7,500 could be allocated toward programming.

In general, the same types of interventions that have been successful with prisoners have also been shown to be effective for probationers and parolees. For example, programs such as CBT, substance abuse treatment, sex offender treatment, and employment programming have yielded favorable outcomes for those in the community under correctional supervision.<sup>92</sup> Again, depending on the type of programming, an additional \$7,500 annually per inmate could range anywhere from one to three interventions.

Rather than incarcerating 15,000 offenders and providing programming to only two-thirds at a cost of \$450 million annually, it would be possible to provide programming to all 15,000 offenders and, in many cases, deliver multiple interventions to offenders for the same amount of money. To be sure, this

illustrative example is an oversimplification. If a prison system reduced its population by one-third, it would likely need to close correctional facilities, which would, in turn, affect staffing. At the same time, however, it would need to increase the staff required to provide programming and supervise offenders in the community. Notwithstanding some uncertainty over all the ramifications from this shift in resources, community supervision is, on the whole, generally less costly than imprisonment.

### **Programming for All: What Can We Expect?**

If we could provide effective programming to all 15,000 offenders in the example above through a more efficient allocation of resources, to what extent would the recidivism rate be reduced? Could we cut the rate in half? Or would the size of the reduction be more modest?

The closest thing we have to a national recidivism study is the BJS research referenced earlier. As noted above, Matthew Durose, Alexia Cooper, and Howard Snyder reported that 77 percent of the nearly 70,000 released prisoners from 30 states had been rearrested within five years.<sup>93</sup> In the aforementioned example, we have 10,000 in the prison population. Within a given year, however, not all 10,000 will be released to the community. Let’s assume, however, that half (5,000) of these prisoners will be released over the next 12-month period.

In the study I conducted with Valerie Clark on Minnesota prisoners, we found that participation in one effective intervention reduces recidivism by 12 percent while involvement in two interventions lowers it by 26 percent.<sup>94</sup> If we assume that these same effect sizes apply to the 5,000 released prisoners and that each one had been warehoused, then providing these offenders with one effective intervention would lower the rearrest rate from 77 percent to 68 percent (i.e., a 12 percent reduction). If each one participated in two effective interventions, then the rate would drop to 57 percent (a 26 percent reduction).

Recall, however, that the warehousing rate in the illustrative example was 33 percent instead of 100 percent, which implies that 1,650 (33 percent) of the 5,000 released prisoners had been warehoused. If we assumed the base rate for the 5,000 released prisoners was still 77 percent, then providing the 1,650 warehoused prisoners with one effective intervention would lower the overall rate to 74 percent. Providing the 1,650 warehoused prisoners with two interventions would drop the overall rate to 70 percent.

Increasing the delivery of effective programming to prisoners to yield a recidivism rate that still exceeds 50 percent may strike some as underwhelming, if not an outright failure. It is worth remembering, however, that even effective interventions will not work for all offenders.

Let's consider an effective intervention that reduces recidivism by 20 percent for a group of 100 prisoners whose base rate is 50 percent. In other words, if this group of prisoners did not participate in this effective intervention, then their recidivism rate would be 50 percent. After participating in the program, however, the recidivism rate dropped to 40 percent, a 20 percent reduction (i.e., the intervention's effect size). So, among the 100 prisoners, 50 would not have recidivated irrespective of the intervention, while 10 desisted on account of having participated in the program. However, 40 prisoners still recidivated after participating in the intervention, which underscores that effective interventions tend to work for those at the margins.

It is also worth remembering that the strongest predictor of recidivism is an offender's criminal history.<sup>95</sup> Before arriving in prison, an inmate's criminal history is affected by not only individual-level characteristics (e.g., gender, race/ethnicity, and age) but also community-level factors. The neighborhoods from which prisoners come (and to which they typically return following their release from prison) are often marked by a lack of control over community behavior; diminished access to powerful social, economic, and political institutional resources; and concentrated disadvantages.<sup>96</sup> In addition to having lower rates of educational attainment and higher rates of poverty and unemployment, disadvantaged communities are

typically afflicted by higher rates of reported crime,<sup>97</sup> which can, in turn, trigger more aggressive policing strategies.<sup>98</sup>

None of this is to say that prisons are inconsequential for offenders' post-release behavior. Still, because prison is but one part of the criminal justice system or, even more broadly, society in general, its influence on recidivism may be limited to some extent. As a result, achieving a relatively large recidivism reduction on a system-wide basis is likely more difficult than what may be commonly believed. With five-year rearrest rates near 80 percent for released prisoners, it is probably unreasonable to expect these rates can be lowered below 50 percent. However, reducing the overall rate to 60 percent, which is more than a 20 percent drop, would be a more reasonable, although still ambitious, goal.

**Return on Investment.** Although a recidivism rate north of 50 percent may seem high, it is also worth considering the fiscal implications from dropping the rate from 77 percent to, say, 68 percent or even 57 percent. Compared to a rate of 77 percent, we would see, at a minimum, 450 fewer offenses with a rate of 68 percent and 1,000 fewer offenses with a rate of 57 percent. If we assume the cost of the average prison-based intervention is approximately \$5,000, which is close to the mean observed for both Minnesota and Washington prisoners,<sup>99</sup> then it would cost about \$25 million to deliver at least one intervention to all 5,000 released prisoners.

Existing research has shown that crime is costly to society. Ted Miller, Mark Cohen, and Brian Wiersema reported that insurers paid \$45 billion in 1993 due to crime, which translates to more than \$77 billion in 2017 dollars.<sup>100</sup> The costs include victimization costs, criminal justice system (law enforcement, courts, and corrections) costs, offender lost productivity, and public willingness-to-pay costs. While most property offenses incur a relatively low cost, the same is not true for violent crimes. It has been estimated, for example, that one sex offense can cost society up to half a million dollars and, more significantly, that one murder costs between \$10 and \$20 million (in 2017 dollars).<sup>101</sup> In addition, Matt DeLisi and Jewel

Gatling estimated that the average career criminal was responsible for more than \$1.4 million (in 2017 dollars) in victimization, criminal justice system, and lost productivity costs, while the most prolific criminals accounted for more than \$10 million in costs.<sup>102</sup>

Research on the cost-effectiveness of correctional programming has focused primarily on prisoners from Washington and Minnesota.<sup>103</sup> These studies have compared the costs to operate prison-based interventions with the crime-reduction benefits these programs provide to society. Among the 20 prison-based interventions examined in these studies (10 in Washington and 10 in Minnesota), the average cost per participant was \$5,286 in Washington and \$5,343 in Minnesota. Due to differences in methodology, the average ROI ranged from nearly \$12 for the 10 Washington programs to a little under \$4 for the 10 Minnesota programs.

The ROI of \$3.88 for the Minnesota programs may provide a more reasonable estimate given that the average effect size (13 percent reduction) for the 10 Minnesota programs is close to the 12 percent effect size reported by Duwe and Clark.<sup>104</sup> Therefore, if providing all 5,000 offenders with one effective intervention reduced the rearrest rate from 77 percent to 68 percent (a 12 percent reduction) for a total cost of \$25 million, then the return (or benefit) from this investment would be \$97 million overall, assuming a \$3.88 ROI. The \$97 million would not necessarily represent “savings” but rather the avoidance of future crime costs.

## Recommendations

Because the mass incarceration policies that prevailed during the latter half of the 20th century have not been sustainable since the Great Recession, many states have embraced decarceration strategies to reduce the cost of prison. But limiting the use and cost of prisons will not necessarily make them more effective in lowering recidivism. This paper has introduced an evidence-based approach for reducing prison populations and costs while improving the effectiveness of US prison systems. This approach consists of three broad components, which form the recommendations that are briefly summarized below.

**Recommendation #1: Increase the Delivery of Effective Correctional Programming.** The “what works” literature reveals that the following interventions have been found to be effective for prisoners:

- CBT programming;
- Chemical dependency treatment;
- Sex offender treatment;
- Educational programming, especially postsecondary degree programs;
- Employment programming, especially those providing a continuum of care; and
- Social support interventions (e.g., visitation, faith-based programs, and Circles of Support and Accountability).

In addition to identifying which interventions have generally been effective with prisoners, the “what works” literature has found several common threads that run through successful programs.

- Successful programs target known criminogenic needs.
- Program integrity is maintained—that is, the operation of a program is consistent with its design.
- Programming offered closer to release is associated with reduced recidivism.
- Greater dosages of programming tend to yield better outcomes. Participation in multiple effective interventions addresses multiple criminogenic needs.
- An intervention’s cost-effectiveness is influenced by its effect on recidivism and economy of scale.

**Recommendation #2: Reduce the Size of Prison Populations.** To substantially increase the delivery of effective programming, prison systems will need to reduce the size of their populations. Downsizing not only frees up the physical space needed to provide interventions but also reduces costs, which can be reinvested in programming. Prison systems can downsize by decreasing the number of prison admissions and shortening the lengths of stay for those who enter prison.

Strategies for decreasing the number of prison admissions include:

- Using a recidivism risk-violation severity grid;
- Allowing early discharge from correctional supervision;
- Capping lengths of correctional supervision; and
- Reducing the number of probation and parole conditions.

Limiting prison stays between five months and five years would reduce warehousing and the size of prison populations. Increasing the minimum length of stay to five months would help ensure prisoners have an opportunity to participate in programming. However, confinement periods for most prisoners can be capped at five years, as long as they have participated in multiple effective interventions.

**Recommendation #3: Increase Use of Risk, Needs, and Responsivity Assessments.** Decades of evidence have consistently shown that actuarial assessment instruments outperform professional judgment in making decisions about future behavior. Accordingly, these assessments can be used to not only help reduce prison populations but also deliver programming more effectively. In particular, risk assessment instruments can help better identify the lower-risk offenders who can either remain in, or be released to, the community without significantly jeopardizing public safety. Similarly, assessments can help determine the appropriate

types and dosage of programming for individual prisoners.

To improve the design and use of risk assessments in corrections, this paper offers several suggestions. First, before using an assessment, a prison system must test it on its correctional population. Testing the assessment's performance can help identify problems with performance and potential solutions. Second, to increase the efficiency and cost-effectiveness of the risk assessment process, prison systems should consider investing in automation. Because economy of scale also applies to risk assessment, larger prison systems would likely see the greatest benefit from shifting to an automated risk assessment process.

## Conclusion

If the recent reform efforts are any indication, focusing only on decarceration (Recommendation #2) will be a strong temptation for many prison systems. But the chief concern with a decarceration-only approach is that it will not substantially improve the effectiveness of prison systems. Granted, smaller prison populations would likely result in less warehousing, which would be a positive development. Yet, if decarceration is not accompanied by an increase in effective programming resources, then recidivism rates will almost assuredly stay the same. After all, why should we expect the outcomes to be any different?

Further, if more prisoners are being placed in the community without an increase in community-based programming resources, there is the risk that decarceration could hurt public safety. If this happens, then critics of the decarceration movement may very well point out, "I told you so." Because "softer" approaches such as decarceration and rehabilitation do not work, these critics might argue, the only "proven" tactic is getting tougher and more punitive with those who break the law.

As this paper has emphasized, however, a relatively large body of evidence shows that there are correctional interventions that effectively reduce recidivism. Even though our knowledge of what is

effective has increased since the emergence of the “what works” literature more than four decades ago, it is arguable whether this knowledge has yet to fundamentally alter correctional policy and practice. To be sure, US prison systems have generally embraced the evidence from the “what works” literature, which has resulted in more widespread adoption of the RNR model, greater reliance on risk and needs assessments, and increased use of practices such as case planning. These developments have enhanced correctional practice, but punishment remains the core, central function of American prison systems. Much like the 1950s, when the rehabilitative ideal was at its most popular, we may talk a good game about “what works” with prisoners and make peripheral changes to correctional policy and practice, but the extent to which we provide rehabilitative programming to prisoners remains, at best, about the same.

Increasing the delivery of programming to eliminate warehousing and, more broadly, shifting the focus from punishment to rehabilitation would constitute a major change. A change of this magnitude is needed, however, to make prisons more effective in reducing recidivism. The shift toward rehabilitation would not require additional funding to provide more programming to prisoners. Instead, the same level of funding would be used differently. Most, if not all, of the “savings” from reallocating funding should be reinvested toward an increased use of programming. As mentioned earlier, the physical design and layout of correctional facilities often limits the extent to which they can be program-rich environments. And there are also challenges, some profound, to embracing a more rehabilitative approach.

In the US, we have a long tradition of overusing prison and being “tough” on inmates. If a prison system began to implement the strategies outlined in this paper, would legislators and prison officials be accused of being too “soft” on criminals? If this prison system eliminated warehousing and began to deliver programming to all offenders, would it face criticism for pampering prisoners? Or, if this system helped inmates become better educated and provided them with assistance in finding employment following their

release from prison, would it be accused of treating criminals better than law-abiding citizens? With so many law-abiding citizens struggling to find full employment in the wake of the Great Recession, why should we be giving these “benefits” or “preferences” to prisoners?

These are all fair questions. But if we are trying to create prison systems that are more cost-effective and better at reducing recidivism, the evidence suggests that prisons need to shift their focus from punishment and retribution to rehabilitation. In doing so, we will end up spending less over the long run on corrections, criminal justice, and crime in general by increasing prisoner involvement in effective programming. Reduced public spending on crime and prisons could then be reinvested in other areas such as education and health care, especially in places that have not fully recovered from the Great Recession.

The chief problem with this long-term approach, however, is that it does not provide any immediate gratification. A reduction in crime and the costs associated with it would not be realized until some years down the road. One of the reasons why increasing the severity of sentencing has been so politically popular is that it provides lawmakers with relatively quick results. Unwinding the effects of draconian sentencing policies, on the other hand, does not deliver results as quickly.

The choice of whether to embrace reform or retain the status quo is likely complicated for many prison systems. But the ramifications from this decision are relatively clear. If we maintain the status quo, we will continue with our costly and ineffective overuse of prisons. And, if we eschew the delivery of effective programming under the guise that it coddles criminals, then the recidivism rates of released prisoners will almost certainly remain high.

As long as we indulge our collective appetite for retribution, we cannot reasonably expect our prisons to successfully reduce recidivism. We cannot have it both ways. But if we truly want our prison systems to be more effective, then we need to institute the reforms presented here, which will enable us to do more with less or, perhaps more precisely, more with the same amount.

### About the Author

**Grant Duwe** is an academic adviser to AEI for criminal justice reform. He is also the research director for the Minnesota Department of Corrections, where he develops and validates risk assessment instruments, forecasts the state's prison population,

and conducts research studies and program evaluations. Duwe has published more than 50 articles in peer-reviewed journals on a wide variety of correctional topics, and he is a coauthor of the recent book *The Angola Prison Seminary: Effects of Faith-Based Ministry on Identity Transformation, Desistance and Rehabilitation* (Routledge, 2016).

© 2017 by the American Enterprise Institute. All rights reserved.

The American Enterprise Institute (AEI) is a nonpartisan, nonprofit, 501(c)(3) educational organization and does not take institutional positions on any issues. The views expressed here are those of the author(s).

# Notes

1. Matthew R. Durose, Alexia D. Cooper, and Howard N. Snyder, "Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010," US Department of Justice, April 2014, <https://www.bjs.gov/content/pub/pdf/rprtso5po510.pdf>.
2. Grant Duwe and Valerie Clark, "The Rehabilitative Ideal Versus the Criminogenic Reality: The Consequences of Warehousing Prisoners," *Corrections: Policy, Practice and Research* 2, no. 1 (October 2016): 41–69, <http://dx.doi.org/10.1080/23774657.2016.1240596>; and Grant Duwe and Valerie Clark, "Nothing Will Work Unless You Did: The Predictors of Postprison Employment," *Criminal Justice and Behavior* 44, no. 5 (February 2017): 657–77, <https://doi.org/10.1177/0093854816689104>.
3. Steven Aos and Elizabeth Drake, "Prison, Police, and Programs: Evidence-Based Options That Reduce Crime and Save Money," Washington State Institute for Public Policy, 2013, [http://www.wsipp.wa.gov/ReportFile/1396/Wsipp\\_Prison-Police-and-Programs-Evidence-Based-Options-that-Reduce-Crime-and-Save-Money\\_Full-Report.pdf](http://www.wsipp.wa.gov/ReportFile/1396/Wsipp_Prison-Police-and-Programs-Evidence-Based-Options-that-Reduce-Crime-and-Save-Money_Full-Report.pdf); Grant Duwe, "Can Circles of Support and Accountability (COSA) Work in the United States? Preliminary Results from a Randomized Experiment in Minnesota," *Sexual Abuse* 25, no. 2 (2013): 143–65, <https://www.ncbi.nlm.nih.gov/pubmed/22855005>; and Grant Duwe, "What Works with Minnesota Prisoners: A Summary of the Effects of Correctional Programming on Recidivism, Employment and Cost Avoidance," Minnesota Department of Corrections, 2013.
4. Newt Gingrich and Van Jones, "Prison System Is Failing America," CNN, May 22, 2014, <http://www.cnn.com/2014/05/21/opinion/gingrich-jones-prison-system-fails-america/index.html>.
5. Durose, Cooper, and Snyder, "Recidivism of Prisoners Released in 30 States in 2005."
6. Francis T. Cullen, "Make Rehabilitation Corrections' Guiding Paradigm," *Criminology & Public Policy* 6, no. 4 (December 2007): 717–28, <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=242575>; Martin Killias, Marcelo F. Aebi, and Denis Ribeaud, "Does Community Service Rehabilitate Better Than Short-Term Imprisonment? Results of a Controlled Experiment," *Howard Journal* 39, no. 1 (February 2000), <http://dx.doi.org/10.1111/1468-2311.00152>; and Faye S. Taxman and Alex Piquero, "On Preventing Drunk Driving Recidivism: An Examination of Rehabilitation and Punishment Approaches," *Journal of Criminal Justice* 26, no. 2 (March 1998): 129–43, <http://www.scopus.com/inward/record.url?scp=0000361462&partnerID=8YFLogxK>.
7. Marc Mauer and Nazgol Ghandnoosh, "Fewer Prisoners, Less Crime: A Tale of Three States," Sentencing Project, July 23, 2014, <http://www.sentencingproject.org/publications/fewer-prisoners-less-crime-a-tale-of-three-states/>.
8. Michael Dresser, "Hogan Signs Bill to Overhaul Maryland Criminal Justice System," *Baltimore Sun*, May 19, 2016, <http://www.baltimoresun.com/news/maryland/politics/bs-md-justice-reinvestment-20160518-story.html>.
9. Pew Charitable Trusts, "Missouri Policy Shortens Probation and Parole Terms, Protects Public Safety," August 2016, [http://www.pewtrusts.org/~media/assets/2016/08/missouri\\_policy\\_shortens\\_probation\\_and\\_parole\\_terms\\_protects\\_public\\_safety.pdf](http://www.pewtrusts.org/~media/assets/2016/08/missouri_policy_shortens_probation_and_parole_terms_protects_public_safety.pdf).
10. E. A. Carson and Elizabeth Anderson, "Prisoners in 2015," US Department of Justice, Bureau of Justice Statistics, December 2016, <https://www.bjs.gov/content/pub/pdf/p15.pdf>.
11. Robert Martinson, "What Works? Questions and Answers About Prison Reform," *Public Interest* 34 (1974): 22–54, [http://www.pbpp.pa.gov/research\\_statistics/Documents/Martinson-What%20Works%201974.pdf](http://www.pbpp.pa.gov/research_statistics/Documents/Martinson-What%20Works%201974.pdf).
12. Douglas S. Lipton, Robert Martinson, and Judith Wilks, *The Effectiveness of Correctional Treatment: A Survey of Treatment Evaluation Studies*, New York Office of Crime Control Planning, August 1975.
13. Ted Palmer, *Correctional Intervention and Research: Current Issues and Future Prospects* (Lexington, MA: Lexington Books, 1978); and J. S. Wholey, *Evaluation: Promise and Performance* (Washington, DC: Urban Institute, 1979).
14. William Spelman, "Crime, Cash, and Limited Options: Explaining the Prison Boom," *Criminology & Public Policy* 8, no. 1 (February 2009): 29–77, <http://dx.doi.org/10.1111/j.1745-9133.2009.00546.x>.
15. Ibid.
16. Steven D. Levitt, "Understanding Why Crime Fell in the 1990s: Four Factors That Explain the Decline and Six That Do Not," *Journal of Economic Perspectives* 18, no. 1 (Winter 2004): 163–90, <http://pricetheory.uchicago.edu/levitt/Papers/>

LevittUnderstandingWhyCrime2004.pdf.

17. Daniel S. Nagin, "Imprisonment and Crime Control: Building Evidence-Based Policy," in *Contemporary Issues in Criminological Theory and Research: The Role of Social Institutions*, ed. Richard Rosenfeld, Kenna Quinet, and Crystal A. Garcia (Belmont, CA: Wadsworth Cengage Learning, 2010); and Daniel S. Nagin, "Deterrence in the Twenty-First Century," in *Crime and Justice in America: 1975–2025*, ed. Michael Tonry (Chicago, IL: University of Chicago Press, 2013).
18. James M. Byrne, "After the Fall: Assessing the Impact of the Great Prison Experiment on Future Crime Control Policy," *Federal Probation* 77, no. 3 (December 2013): 3–44, <https://www.researchgate.net/publication/288414984>.
19. Hilde Wermink et al., "The Incapacitation Effect of First-Time Imprisonment: A Matched Samples Comparison," *Journal of Quantitative Criminology* 29, no. 4 (December 2013): 579–600, <https://doi.org/10.1007/s10940-012-9189-3>; and E. W. Zedlewski, *Making Confinement Decisions: The Economics of Disincarceration* (Washington, DC: National Criminal Justice Reference Service, 1987).
20. Tomislav Kovandzic and Lynne M. Vieraitis, "The Effect of County-Level Prison Population Growth on Crime Rates," *Criminology & Public Policy* 5, no. 2 (May 2006): 213–44, <http://dx.doi.org/10.1111/j.1745-9133.2006.00375.x>; Robert H. DeFina and Thomas M. Arvanites, "The Weak Effect of Imprisonment on Crime: 1971–1998," *Social Science Quarterly* 83, no. 3 (September 2002): 634–52, [http://www.antonioacasella.eu/nume/DeFina\\_Arvanites\\_2002.pdf](http://www.antonioacasella.eu/nume/DeFina_Arvanites_2002.pdf); Steven D. Levitt, "The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Legislation," *Quarterly Journal of Economics* 111 (May 1996): 319–51, <http://piketty.pse.ens.fr/files/Levitt1996.pdf>; Lawrence E. Cohen and Kenneth C. Land, "Age Structure and Crime: Symmetry Versus Asymmetry and the Projection of Crime Rates Through the 1990s," *American Sociological Review* 52, no. 2 (April 1987): 170–83, <http://www.jstor.org/stable/2095446>; Joel A. Devine, Joseph F. Sheley, and Dwayne M. Smith, "Macroeconomic and Social-Control Policy Influences on Crime-Rate Changes, 1948–1985," *American Sociological Review* 53, no. 3 (June 1988): 407–20, <http://www.jstor.org/stable/pdf/2095648.pdf>; and Thomas B. Marvell and Carlisle E. Moody, "The Impact of Out-of-State Prison Population on State Homicide Rates: Displacement and Free-Rider Effects," *Criminology* 36, no. 3 (August 1998), 513–35, <http://dx.doi.org/10.1111/j.1745-9125.1998.tb01257.x>.
21. Spelman, "Crime, Cash, and Limited Options"; and Gary Sweeten and Robert Apel, "Incapacitation: Revisiting an Old Question with a New Method and New Data," *Journal of Quantitative Criminology* 23, no. 4 (July 2007): 303–26, <https://doi.org/10.1007/s10940-007-9032-4>.
22. William D. Bales and Alex R. Piquero, "Assessing the Impact of Imprisonment on Recidivism," *Journal of Experimental Criminology* 8, no. 1 (December 2011): 71–101, <https://doi.org/10.1007/s11292-011-9139-3>; Jose Cid, "Is Imprisonment Criminogenic? A Comparative Study of Recidivism Rates Between Prison and Suspended Prison Sanctions," *European Journal of Criminology* 6, no. 6 (October 2009): 459–80, <https://doi.org/10.1177/1477370809341128>; Daniel S. Nagin, Francis T. Cullen, and Cheryl L. Jonson, "Imprisonment and Reoffending," *Crime and Justice* 38, no. 1 (2009), <https://doi.org/10.1086/599202>; Lynne M. Vieraitis, Tomislav V. Kovandzic, and Thomas B. Marvell, "The Criminogenic Effects of Imprisonment: Evidence from State Panel Data, 1974–2002," *Criminology & Public Policy* 6, no. 3 (August 2007): 589–622, <http://dx.doi.org/10.1111/j.1745-9133.2007.00456.x>; and Patrice Villettaz, Gwladys Gilliéron, and Martin Killias, *The Effects on Re-Offending of Custodial Versus Non-Custodial Sanctions: A Updated Systematic Review of the State of Knowledge*, National Council for Crime Prevention, 2006, [https://www.bra.se/download/18.6cde4de61493868542d296/1421834737558/2014\\_The+effects+on+re-offending+of+custodial+versus+non-custodial+sanctions.pdf](https://www.bra.se/download/18.6cde4de61493868542d296/1421834737558/2014_The+effects+on+re-offending+of+custodial+versus+non-custodial+sanctions.pdf).
23. Mark W. Lipsey, Nana A. Landenberger, and Sandra J. Wilson, "Effects of Cognitive-Behavioral Programs for Criminal Offenders," *Campbell Systematic Reviews* 6 (August 2007), [https://www.campbellcollaboration.org/media/k2/attachments/1028\\_R.pdf](https://www.campbellcollaboration.org/media/k2/attachments/1028_R.pdf); and David B. Wilson, Leana A. Bouffard, and Doris L. Mackenzie, "A Quantitative Review of Structured, Group-Oriented, Cognitive-Behavioral Programs for Offenders," *Criminal Justice and Behavior* 32, no. 2 (April 2005): 172–204, <https://doi.org/10.1177/0093854804272889>.
24. James Austin, "Prisoner Reentry: Current Trends, Practices, and Issues," *Crime & Delinquency* 47, no. 3 (July 2001): 314–34, <https://doi.org/10.1177/001128701047003002>.
25. James P. Lynch and William J. Sabol, *Prisoner Reentry in Perspective*, Urban Institute, September 18, 2001, <https://www.urban.org/research/publication/prisoner-reentry-perspective>.
26. Christopher J. Mumola, "Substance Abuse and Treatment, State and Federal Prisoners, 1997," US Department of Justice, Bureau of Justice Statistics, January 1999, <http://csdp.org/research/satsfp97.pdf>.

27. Duwe and Clark, "The Rehabilitative Ideal Versus the Criminogenic Reality."
28. Paul Gendreau, Sheila A. French, and Angela Gionet, "What Works (What Doesn't Work): The Principles of Effective Correctional Treatment," *Journal of Community Corrections* 13, no. 3 (September 2004): 4–6, <http://cp.co.hancock.oh.us/wp-content/uploads/2011/09/Gendreau-French-Gionet-2004-What-works-and-what-doesnt.pdf>.
29. Kimberly G. Sperber, Edward J. Latessa, and Matthew D. Makarios, "Examining the Interaction Between Level of Risk and Dosage of Treatment," *Criminal Justice and Behavior* 40, no. 3 (February 2013): 338–48, <https://doi.org/10.1177/0093854812467942>.
30. Edward J. Latessa and Christopher Lowenkamp, "What Works in Reducing Recidivism and How Does It Relate to Drug Courts?," *Ohio Northern University Law Review* 41, no. 3 (2015): 757–89, <https://law.onu.edu/sites/default/files/Latessa.pdf>.
31. Michael S. Caudy, Joseph M. Durso, and Faye S. Taxman, "How Well Do Dynamic Needs Predict Recidivism? Implications for Risk Assessment and Risk Reduction," *Journal of Criminal Justice* 41, no. 6 (November 2013): 458–66, <http://www.sciencedirect.com/science/article/pii/S0047235213000950?via%3Dihub>; and Grant Duwe and Valerie Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment," *Prison Journal* 94, no. 4 (December 2014): 454–78, <https://doi.org/10.1177/0032885514548009>.
32. Durose, Cooper, and Snyder, "Recidivism of Prisoners Released in 30 States in 2005."
33. D. A. Andrews, James Bonta, and J. Stephen Wormith, "The Recent Past and Near Future of Risk and/or Need Assessment," *Crime & Delinquency* 52, no. 1 (January 2006): 7–27, <https://doi.org/10.1177/001128705281756>.
34. Ibid.
35. James Bonta and D. A. Andrews, *Risk-Needs-Responsivity Model for Offender Assessment and Rehabilitation*, Public Safety Canada, 2007, <https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/rsk-nd-rspnsvty/rsk-nd-rspnsvty-eng.pdf>.
36. Francis T. Cullen and Cheryl Lero Jonson, "Rehabilitation and Treatment Programs" in *Crime: Public Policies for Crime Control*, ed. James Q. Wilson and J. Petersilia (San Francisco, CA: ICS Press, 2002).
37. Duwe and Clark, "The Effects of Prison-Based Educational Programming on Recidivism and Employment."
38. Camille L. Ryan and Kurt Bauman, "Educational Attainment in the United States: 2015," US Census Bureau, March 2016, <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf>.
39. Duwe and Clark, "Nothing Will Work Unless You Did"; Jeffrey R. Kling, "Incarceration Length, Employment, and Earnings," *American Economic Review* 96, no. 3 (June 2006): 863–76, <http://www.aeaweb.org/articles?id=10.1257/aer.96.3.863>; Rosa M. Cho and Robert J. Lalonde, "The Impact of Incarceration in State Prison on the Employment Prospects of Women," *Journal of Quantitative Criminology* 24, no. 3 (2008): 243–65; Becky Pettit and Christopher Lyons, "The Consequences of Incarceration on Employment and Earnings: Evidence from Washington State" (unpublished manuscript, University of Washington, Seattle, WA, 2002); and William J. Sabol, "Local Labor-Market Conditions and Post-Prison Employment Experiences of Offenders Released from Ohio State Prisons," in *Barriers to Reentry? The Labor Market for Released Prisoners in Post-Industrial America*, ed. Shawn Bushway, Michael A. Stoll, and David A. Weiman (New York: Russell Sage Foundation, 2007).
40. Seena Fazel and John Danesh, "Serious Mental Disorder in 23,000 Prisoners: A Systematic Review of 62 Surveys," *Lancet* 359 (February 2002): 545–50, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.608.3796&rep=rep1&type=pdf>.
41. Grant Duwe, "Prison-Based Chemical Dependency Treatment in Minnesota: An Outcome Evaluation," *Journal of Experimental Criminology* 6, no. 1 (March 2010): 57–81, <https://doi.org/10.1007/s11292-010-9090-8>.
42. Joan Petersilia, "When Prisoners Return to Communities," in *Federal Probation*, ed. Timothy P. Cadigan, Ellen W. Fielding, and Janice G. Barbour (Washington, DC: Federal Probation, 2000); and Bruce Western and Becky Pettit, *Collateral Costs: Incarceration's Effect on Economic Mobility*, Pew Charitable Trusts, 2010, [http://www.pewtrusts.org/~media/legacy/uploadedfiles/pes\\_assets/2010/collateralcosts1.pdf](http://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2010/collateralcosts1.pdf).
43. Todd R. Clear, Michael D. Reisig, and George F. Cole, *American Corrections* (Belmont, CA: Wadsworth Cengage Learning, 2011).
44. Julia Angwin et al., "Machine Bias," *Pro Publica*, May 23, 2016, <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>.
45. R. M. Dawes, D. Faust, and P. E. Meehl, "Clinical Versus Actuarial Judgment," *Science* 243 (1989): 1668–74.
46. Shawn D. Bushway and Anne M. Piehl, "Judging Judicial Discretion: Legal Factors and Racial Discrimination in Sentencing," *Law & Society Review* 35, no. 4 (2001): 733–64, <http://dx.doi.org/10.2307/3185415>; Brian D. Johnson, "Racial and Ethnic Disparities in

Sentencing Departures Across Modes of Conviction,” *Criminology* 41, no. 2 (May 2003): 449–90, <http://dx.doi.org/10.1111/j.1745-9125.2003.tb00994.x>; and Jon Sorensen and Donald H. Wallace, “Prosecutorial Discretion in Seeking Death: An Analysis of Racial Disparity in the Pretrial Stages of Case Processing in a Midwestern County,” *Justice Quarterly* 16, no. 3 (1999): 559–78, <http://dx.doi.org/10.1080/07418829900094261>.

47. Grant Duwe and Michael Rocque, “Effects of Automating Recidivism Risk Assessment on Reliability, Predictive Validity, and Return on Investment (ROI),” *Criminology & Public Policy* 16, no. 1 (February 2017): 235–69, <http://dx.doi.org/10.1111/1745-9133.12270>.

48. Ibid.

49. Duwe and Rocque, “Effects of Automating Recidivism Risk Assessment on Reliability, Predictive Validity, and Return on Investment (ROI).”

50. Duwe and Clark, “The Rehabilitative Ideal Versus the Criminogenic Reality”; and Duwe and Clark, “Nothing Will Work Unless You Did.”

51. Duwe and Clark, “The Rehabilitative Ideal Versus the Criminogenic Reality.”

52. Dale G. Parent et al., *Responding to Probation and Parole Violations*, US Department of Justice, 1994; State of Utah, Office of the Legislative Auditor General, *A Performance Audit of the Division of Adult Probation and Parole*, September 2013, [https://le.utah.gov/audit/13\\_08rpt.pdf](https://le.utah.gov/audit/13_08rpt.pdf); and Department of Corrections, Missouri Working Group on Sentencing and Corrections, *Missouri Working Group on Sentencing and Corrections Consensus Report*, 2011, <https://archive.org/details/2011MWSCConsenRpt>.

53. Durose, Cooper, and Snyder, “Recidivism of Prisoners Released in 30 States in 2005.”

54. Ibid.

55. Edward J. Latessa, Lori B. Lovins, and Paula Smith, “Final Report: Follow-Up Evaluation of Ohio’s Community Based Correctional Facility and Halfway House Programs—Outcome Study” (unpublished report, University of Cincinnati, Cincinnati, OH, 2010); and Christopher T. Lowenkamp, “Correctional Program Integrity and Treatment Effectiveness: A Multi-Site, Program-Level Analysis” (doctoral dissertation, University of Cincinnati, Cincinnati, OH, 2004).

56. Pew Center on the States, *Time Served: The High Cost, Low Return of Longer Prison Terms*, June 2012, [http://www.pewtrusts.org/-/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/sentencing\\_and\\_corrections/prisontimeservedpdf.pdf](http://www.pewtrusts.org/-/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/sentencing_and_corrections/prisontimeservedpdf.pdf); and Andrew D. Tiedt and William J. Sabol, “Sentence Length and Recidivism Among Prisoners Released Across 30 States in 2005: Accounting for Individual Histories and State Clustering Effects,” *Justice Research and Policy* 16, no. 1 (June 2015): 50–64, <http://journals.sagepub.com/doi/abs/10.1177/1525107115580306>.

57. Tiedt and Sabol, “Sentence Length and Recidivism Among Prisoners Released Across 30 States in 2005.”

58. Grant Duwe, “The Effects of the Timing and Dosage of Correctional Programming on Recidivism,” *Journal of Offender Rehabilitation* (forthcoming).

59. Ibid.

60. Ashley Nellis, “Life Goes on: The Historic Rise in Life Sentences in America,” Sentencing Project, December 11, 2013, <http://www.sentencingproject.org/wp-content/uploads/2015/12/Unlocking-Justice-Historic-Rise-in-Life-Sentences-Webinar.pdf>.

61. Timothy Hughes and Doris James Wilson, “Reentry Trends in the United States,” US Department of Justice, October 2002, <https://www.bjs.gov/content/pub/pdf/reentry.pdf>.

62. Thomas P. Bonczar et al., “National Corrections Reporting Program, 2009—Statistical Tables,” Bureau of Justice Statistics, May 5, 2011, <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=2174>.

63. Christopher T. Lowenkamp, Edward J. Latessa, and Paula Smith, “Does Correctional Program Quality Really Matter? The Impact of Adhering to the Principles of Effective Intervention,” *Criminology & Public Policy* 5, no. 3 (2006): 575–94, <https://www.uc.edu/content/dam/uc/ics/docs/LowenkampLatessaSmithDoesCorrectional.pdf>; Duwe, “Prison-Based Chemical Dependency Treatment in Minnesota”; and Harry K. Wexler, Gregory P. Falkin, and Douglas S. Lipton, “Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment,” *Criminal Justice and Behavior* 17, no. 1 (March 1990): 71–92, <https://doi.org/10.1177/0093854890017001006>.

64. Duwe and Clark, “The Rehabilitative Ideal Versus the Criminogenic Reality.”

65. Duwe, “The Effects of the Timing and Dosage of Correctional Programming on Recidivism.”

66. Bonczar et al., "National Corrections Reporting Program, 2009—Statistical Tables."
67. Clear, Reisig, and Cole, *American Corrections*.
68. Edward J. Latessa, Francis T. Cullen, and Paul Gendreau, "Beyond Correctional Quackery—Professionalism and the Possibility of Effective Treatment," *Federal Probation* 66, no. 2 (September 2002): 43–49, <https://www.uc.edu/content/dam/uc/ccjr/docs/articles/EffectiveTreatment.pdf>.
69. Christopher Zoukis, "Prison Pup Programs a Proven Rehabilitative Tool," *Huffington Post*, August 15, 2017, [https://www.huffingtonpost.com/entry/prison-pup-programs-a-promising-rehabilitative-tool\\_us\\_5993577de4boafd94eb3f58b](https://www.huffingtonpost.com/entry/prison-pup-programs-a-promising-rehabilitative-tool_us_5993577de4boafd94eb3f58b).
70. Lisa Van Cleef, "Gardening Conquers All/How to Cut Your Jail Recidivism Rates by Half," *San Francisco Chronicle*, December 18, 2002, <http://www.sfgate.com/homeandgarden/article/Gardening-Conquers-All-How-to-cut-your-jail-3303782.php>.
71. Patti Verbanas, "Prisoners Find Hope Through Music," *New Brunswick Patch*, February 22, 2016, <https://patch.com/new-jersey/newbrunswick/prisoners-find-hope-through-music>.
72. Julia C. Babcock, Charles E. Green, and Chet Robie, "Does Batterers' Treatment Work? A Meta-Analytic Review of Domestic Violence Treatment," *Clinical Psychology Review* 23 (2004): 1023–53, <http://dx.doi.org/10.1016/j.cpr.2002.07.001>; Marna Miller, Elizabeth Drake, and Mia Nagzifer, "What Works to Reduce Recidivism by Domestic Violence Offenders?," Washington State Institute for Public Policy, January 2013, [http://www.wsipp.wa.gov/ReportFile/1119/Wsipp\\_What-Works-to-Reduce-Recidivism-by-Domestic-Violence-Offenders\\_Full-Report.pdf](http://www.wsipp.wa.gov/ReportFile/1119/Wsipp_What-Works-to-Reduce-Recidivism-by-Domestic-Violence-Offenders_Full-Report.pdf); and Jennifer L. Skeem, Sarah Manchak, and Jillian K. Peterson, "Correctional Policy for Offenders with Mental Illness: Creating a New Paradigm for Recidivism Reduction," *Law and Human Behavior* 35, no. 2 (April 2011): 110–26, <https://doi.org/10.1007/s10979-010-9223-7>.
73. Grant Duwe and Valerie Clark, "Importance of Program Integrity," *Criminology & Public Policy* 14, no. 2 (2015): 301–28.
74. Leana C. Allen, Doris L. MacKenzie, and Laura J. Hickman, "The Effectiveness of Cognitive Behavioral Treatment for Adult Offenders: A Methodological, Quality-Based Review," *International Journal of Offender Therapy and Comparative Criminology* 45, no. 4 (2001): 498–514, <http://journals.sagepub.com/doi/abs/10.1177/0306624X01454009>; Sheila A. French and Paul Gendreau, "Reducing Prison Misconducts: What Works!," *Criminal Justice and Behavior* 33, no. 2 (2006): 185–218, <http://journals.sagepub.com/doi/abs/10.1177/0093854805284406>; Nana A. Landenberger and Mark W. Lipsey, "The Positive Effects of Cognitive-Behavioral Programs for Offenders: A Meta-Analysis of Factors Associated with Effective Treatment," *Journal of Experimental Criminology* 1, no. 4 (2005): 451–76, <https://link.springer.com/article/10.1007/s11292-005-3541-7>; Mark W. Lipsey, Gabrielle L. Chapman, and Nana A. Landenberger, "Cognitive-Behavioral Programs for Offenders," *Annals of the American Academy of Political and Social Science* 578, no. 1 (2001): 144–57; Mark W. Lipsey, Nana A. Landenberger, and Sandra J. Wilson, "Effects of Cognitive-Behavioral Programs for Criminal Offenders," *Campbell Systematic Reviews* 6 (August 2007), [https://www.campbellcollaboration.org/media/k2/attachments/1028\\_R.pdf](https://www.campbellcollaboration.org/media/k2/attachments/1028_R.pdf); Frank S. Pearson et al., "The Effects of Behavioral/Cognitive-Behavioral Programs on Recidivism," *Crime & Delinquency* 48, no. 3 (July 2002): 476–96; and David B. Wilson, Leana A. Bouffard, and Doris L. Mackenzie, "A Quantitative Review of Structured, Group-Oriented, Cognitive-Behavioral Programs for Offenders," *Criminal Justice and Behavior* 32, no. 2 (April 2005): 172–204, <https://doi.org/10.1177/0093854804272889>.
75. Aos and Drake, "Prison, Police, and Programs."
76. Ojmarrh Mitchell, David B. Wilson, and Doris L. MacKenzie, "Does Incarceration-Based Drug Treatment Reduce Recidivism? A Meta-Analytic Synthesis of the Research," *Journal of Experimental Criminology* 3, no. 4 (2007): 353–75, [https://www.researchgate.net/publication/226387590\\_Does\\_incarceration-based\\_drug\\_treatment\\_reduce\\_recidivism\\_A\\_meta-analytic\\_synthesis\\_of\\_the\\_research](https://www.researchgate.net/publication/226387590_Does_incarceration-based_drug_treatment_reduce_recidivism_A_meta-analytic_synthesis_of_the_research).
77. Martin Schmucker and Friedrich Lösel, "The Effects of Sexual Offender Treatment on Recidivism: An International Meta-Analysis of Sound Quality Evaluations," *Journal of Experimental Criminology* 11, no. 4 (2015): 597–630.
78. William D. Bales and Daniel P. Mears, "Inmate Social Ties and the Transition to Society: Does Visitation Reduce Recidivism?," *Journal of Research in Crime and Delinquency* 45, no. 3 (2008): 287–321, <http://journals.sagepub.com/doi/abs/10.1177/0022427808317574>; Joshua C. Cochran, "Breaches in the Wall: Imprisonment, Social Support, and Recidivism," *Journal of Research in Crime and Delinquency* 51, no. 2 (2014): 200–29, <http://journals.sagepub.com/doi/abs/10.1177/0022427813497963>; Grant Duwe and Valerie Clark, "Blessed Be the Social Tie That Binds: The Effects of Prison Visitation on Offender Recidivism," *Criminal Justice Policy Review* 24, no. 3 (2013): 271–96, [https://www.researchgate.net/publication/258129537\\_Blessed\\_Be\\_the\\_Social\\_Tie\\_That\\_Binds\\_The\\_Effects\\_of\\_Prison\\_](https://www.researchgate.net/publication/258129537_Blessed_Be_the_Social_Tie_That_Binds_The_Effects_of_Prison_)

Visitation\_on\_Offender\_Recidivism; and Daniel P. Mears et al., “Prison Visitation and Recidivism,” *Justice Quarterly* 29, no. 6 (2012): 888–918, <http://www.tandfonline.com/doi/abs/10.1080/07418825.2011.583932>.

79. Meghan M. Mitchell et al., “The Effect of Prison Visitation on Reentry Success: A Meta-Analysis,” *Journal of Criminal Justice* 47 (2016): 74–83, [https://econpapers.repec.org/article/eeejjust/v\\_3a47\\_3ay\\_3a2016\\_3ai\\_3ac\\_3ap\\_3a74-83.htm](https://econpapers.repec.org/article/eeejjust/v_3a47_3ay_3a2016_3ai_3ac_3ap_3a74-83.htm).

80. Duwe, “Can Circles of Support and Accountability (COSA) Work in the United States?”; Grant Duwe and Michelle King, “Can Faith-Based Correctional Programs Work? An Outcome Evaluation of the InnerChange Freedom Initiative in Minnesota,” *International Journal of Offender Therapy and Comparative Criminology* 57, no. 7 (2013): 813–41, <http://journals.sagepub.com/doi/abs/10.1177/0306624X12439397>; and Robin J. Wilson, Franca Cortoni, and Andrew J. McWhinnie, “Circles of Support & Accountability: A Canadian National Replication of Outcome Findings,” *Sexual Abuse* 21, no. 4 (2009): 412–30, <http://journals.sagepub.com/doi/abs/10.1177/1079063209347724>.

81. Grant Duwe et al., “Bible College Participation and Prison Misconduct: A Preliminary Analysis,” *Journal of Offender Rehabilitation* 54, no. 5 (2015): 371–90; Grant Duwe and Valerie Clark, “The Effects of Prison-Based Educational Programming on Recidivism and Employment,” *Prison Journal* 94, no. 4 (2014): 454–78, <http://journals.sagepub.com/doi/abs/10.1177/0032885514548009>; and Ryang Hui Kim and David Clark, “The Effect of Prison-Based College Education Programs on Recidivism: Propensity Score Matching Approach,” *Journal of Criminal Justice* 41, no. 3 (2013): 196–204, [https://www.researchgate.net/publication/256919847\\_The\\_effect\\_of\\_prison-based\\_college\\_education\\_programs\\_on\\_recidivism\\_Propensity\\_Score\\_Matching\\_approach](https://www.researchgate.net/publication/256919847_The_effect_of_prison-based_college_education_programs_on_recidivism_Propensity_Score_Matching_approach).

82. Miriam Northcutt Bohmert and Grant Duwe, “Minnesota’s Affordable Homes Program: Evaluating the Effects of a Prison Work Program on Recidivism, Employment and Cost Avoidance,” *Criminal Justice Policy Review* 23, no. 3 (2012): 327–51, <http://journals.sagepub.com/doi/abs/10.1177/0887403411411911>; Kerry M. Richmond, “The Impact of Federal Prison Industries Employment on the Recidivism Outcomes of Female Inmates,” *Justice Quarterly* 31, no. 4 (2014): 719–45, <http://www.tandfonline.com/doi/abs/10.1080/07418825.2012.668924>; and David B. Wilson, Leana Allen Bouffard, and Doris L. MacKenzie, “A Quantitative Review of Structured, Group-Oriented, Cognitive-Behavioral Programs for Offenders,” *Criminal Justice and Behavior* 32, no. 2 (2005): 172–204, <http://journals.sagepub.com/doi/abs/10.1177/0093854804272889>.

83. Elizabeth Drake, “Does Participation in Washington’s Work Release Facilities Reduce Recidivism?,” Washington State Institute for Public Policy, November 2007, [http://www.wsipp.wa.gov/ReportFile/998/Wsipp\\_Does-Participation-in-Washingtons-Work-Release-Facilities-Reduce-Recidivism\\_Full-Report.pdf](http://www.wsipp.wa.gov/ReportFile/998/Wsipp_Does-Participation-in-Washingtons-Work-Release-Facilities-Reduce-Recidivism_Full-Report.pdf); and Grant Duwe, “An Outcome Evaluation of a Prison Work Release Program: Estimating Its Effects on Recidivism, Employment, and Cost Avoidance,” *Criminal Justice Policy Review* 26, no. 6 (2015): 531–54, <http://journals.sagepub.com/doi/abs/10.1177/0887403414524590>.

84. Grant Duwe, “The Benefits of Keeping Idle Hands Busy: An Outcome Evaluation of a Prisoner Reentry Employment Program,” *Crime & Delinquency* 61, no. 4 (2015): 559–86, <http://journals.sagepub.com/doi/abs/10.1177/001128711421653>.

85. Bales and Mears, “Inmate Social Ties and the Transition to Society”; Duwe, “The Effects of the Timing and Dosage of Correctional Programming on Recidivism”; and Duwe and Clark, “Blessed Be the Social Tie That Binds.”

86. Duwe, “The Effects of the Timing and Dosage of Correctional Programming on Recidivism.”

87. Guy Bourgon and Barbara Armstrong, “Transferring the Principles of Effective Treatment into a ‘Real World’ Prison Setting,” *Criminal Justice and Behavior* 32, no. 1 (2005): 3–25, <http://journals.sagepub.com/doi/abs/10.1177/0093854804270618>; Kimberly Gentry Sperber, Edward J. Latessa, and Matthew D. Makarios, “Examining the Interaction Between Level of Risk and Dosage of Treatment,” *Criminal Justice and Behavior* 40, no. 3 (2013): 338–48, <http://journals.sagepub.com/doi/abs/10.1177/0093854812467942>; and Christopher T. Lowenkamp, Edward J. Latessa, and Alexander M. Holsinger, “The Risk Principle in Action: What Have We Learned from 13,676 Offenders and 97 Correctional Programs?,” *Crime & Delinquency* 52, no. 1 (2006): 77–93, <http://journals.sagepub.com/doi/abs/10.1177/001128705281747>.

88. Harry K. Wexler, Gregory P. Falkin, and Douglas S. Lipton, “Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment,” *Criminal Justice and Behavior* 17, no. 1 (March 1990): 71–92, <https://doi.org/10.1177/0093854890017001006>; and Duwe, “Prison-Based Chemical Dependency Treatment in Minnesota.”

89. Duwe and Clark, “The Rehabilitative Ideal Versus the Criminogenic Reality.”

90. Aos and Drake, “Prison, Police, and Programs”; and Duwe, “What Works with Minnesota Prisoners.”

91. Duwe and Clark, "The Rehabilitative Ideal Versus the Criminogenic Reality."
92. Grant Duwe, "The Use and Impact of Correctional Programming for Inmates on Pre-and Post-Release Outcomes," US Department of Justice, Office of Justice Programs, National Institute of Justice, June 2017, <https://www.ncjrs.gov/pdffiles1/nij/250476.pdf>; and US Department of Justice, Office of Justice Programs, National Institute of Justice, "New Paper Looks at the Use and Impact of Correctional Programming for Inmates on Pre- and Post-Release Outcomes," June 2017, <https://www.nij.gov/topics/corrections/institutional/Pages/use-and-impact-of-correctional-programming-for-inmates.aspx>.
93. Durose, Cooper, and Snyder, "Recidivism of Prisoners Released in 30 States in 2005."
94. Duwe and Clark, "The Rehabilitative Ideal Versus the Criminogenic Reality."
95. Michael S. Caudy, Joseph M. Durso, and Faye S. Taxman, "How Well Do Dynamic Needs Predict Recidivism? Implications for Risk Assessment and Risk Reduction," *Journal of Criminal Justice* 41, no. 6 (November 2013): 458–66, <http://www.sciencedirect.com/science/article/pii/S0047235213000950?via%3Dihub>; Durose, Cooper, and Snyder, "Recidivism of Prisoners Released in 30 States in 2005"; and X. Wang et al., "Criminal Propensity, Social Context, and Recidivism: A Multilevel Analysis of Interactive Relationships," *Criminal Justice and Behavior* 41 (March 2014): 300–17, <https://asu.pure.elsevier.com/en/publications/criminal-propensity-social-context-and-recidivism-a-multilevel-an>.
96. Todd R. Clear, *Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse* (Oxford: Oxford University Press, 2009); Michael Massoglia, Glenn Firebaugh, and Cody Warner, "Racial Variation in the Effect of Incarceration on Neighborhood Attainment," *American Sociological Review* 78, no. 1 (2013): 142–65, <http://journals.sagepub.com/doi/abs/10.1177/0003122412471669>; Dina R. Rose and Todd R. Clear, "Incarceration, Social Capital, and Crime: Implications for Social Disorganization Theory," *Criminology* 36, no. 3 (August 1998): 441–80, <http://onlinelibrary.wiley.com/doi/10.1111/j.1745-9125.1998.tb01255.x/abstract>; and Christy Visher, Nancy LaVigne, and Jeremy Travis, *Returning Home: Understanding the Challenges of Prisoner Reentry*, Urban Institute, January 2004, <https://www.urban.org/sites/default/files/publication/42841/410974-Returning-Home-Understanding-the-Challenges-of-Prisoner-Reentry.PDF>.
97. Ruth D. Peterson, Lauren J. Krivo, and Mark A. Harris, "Disadvantage and Neighborhood Violent Crime: Do Local Institutions Matter?," *Journal of Research in Crime and Delinquency* 37, no. 1 (2000): 31–63, <http://journals.sagepub.com/doi/abs/10.1177/0022427800037001002>; and Robert J. Sampson, Stephen W. Raudenbush, and Felton Earls, "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy," *Science* 277, no. 5328 (1997): 918–24, <http://www.d.umn.edu/~jmaahs/MA%20Theory%20Articles/Sampson%20et%20al%20collective%20efficacy.pdf>.
98. Robert J. Kane, "Compromised Police Legitimacy as a Predictor of Violent Crime in Structurally Disadvantaged Communities," *Criminology* 43, no. 2 (2005): 469–98, <http://onlinelibrary.wiley.com/doi/10.1111/j.0011-1348.2005.00014.x/abstract>; and William Terrill and Michael D. Reisig, "Neighborhood Context and Police Use of Force," *Journal of Research in Crime and Delinquency* 40, no. 3 (2003): 291–321, <http://journals.sagepub.com/doi/abs/10.1177/0022427803253800>.
99. Aos and Drake, "Prison, Police, and Programs"; and Duwe, "What Works with Minnesota Prisoners."
100. Ted R. Miller, Mark A. Cohen, and Brian Wiersema, "Victim Costs and Consequences: A New Look," January 1996, [https://www.researchgate.net/publication/238370377\\_Victim\\_Costs\\_and\\_Consequences\\_A\\_New\\_Look](https://www.researchgate.net/publication/238370377_Victim_Costs_and_Consequences_A_New_Look).
101. Mark A. Cohen and Alex R. Piquero, "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology* 25, no. 1 (2009): 25–49, <https://utdallas.influent.utsystem.edu/en/publications/new-evidence-on-the-monetary-value-of-saving-a-high-risk-youth>; Matt DeLisi et al., "Murder by Numbers: Monetary Costs Imposed by a Sample of Homicide Offenders," *Journal of Forensic Psychiatry & Psychology* 21, no. 4 (2010): 501–13, <http://www.tandfonline.com/doi/abs/10.1080/14789940903564388>; and Kathryn E. McCollister, Michael T. French, and Hai Fang, "The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation," *Drug and Alcohol Dependence* 108, no. 1 (2010): 98–109, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2835847/>.
102. Matt DeLisi and Jewel Gatling, "Who Pays for a Life of Crime? An Empirical Assessment of the Assorted Victimization Costs Posed by Career Criminals," *Criminal Justice Studies* 16, no. 4 (2003): 283–93, <http://www.tandfonline.com/doi/abs/10.1080/0888431032000183489>.
103. Aos and Drake, "Prison, Police, and Programs"; Marna Miller and Elizabeth Drake, "What Works to Reduce Recidivism by Domes-

tic Violence Offenders?,” Washington State Institute for Public Policy, 2013; and Duwe, “What Works with Minnesota Prisoners.”  
104. Duwe and Clark, “The Rehabilitative Ideal Versus the Criminogenic Reality.”