

# A New Approach to Reducing Incarceration While Maintaining Low Rates of Crime

Steven Raphael and Michael A. Stoll



## MISSION STATEMENT

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth.

We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers — based on credible evidence and experience, not ideology or doctrine — to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that “prudent aids and encouragements on the part of government” are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.





# A New Approach to Reducing Incarceration While Maintaining Low Rates of Crime

Steven Raphael

*Goldman School of Public Policy, University of California, Berkeley*

Michael A. Stoll

*Luskin School of Public Affairs, University of California, Los Angeles*

**MAY 2014**

NOTE: This discussion paper is a proposal from the authors. As emphasized in The Hamilton Project's original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. The authors are invited to express their own ideas in discussion papers, whether or not the Project's staff or advisory council agrees with the specific proposals. This discussion paper is offered in that spirit.

**BROOKINGS**

# Abstract

The United States incarcerates people at a higher rate than any other country in the world. Large increases in the U.S. incarceration rate over the past three decades are costly in terms of explicit expenditures, as well as in terms of the collateral social consequences for those who serve time and for the communities from which they come. Increases in incarceration rates do reduce crime. At the nation's current high incarceration rates, however, the crime-fighting effects of incarceration are much smaller than they were when the incarceration rate was much lower. Based on recent research and the experiences of several states, we believe that there is substantial room to reduce incarceration rates in the United States without adversely impacting crime rates. The policy choices that have increased the nation's incarceration rate since the early 1990s have been particularly ineffective at combating crime. We argue that states should reevaluate their policy choices and reduce the scope and severity of several of the sentencing practices that they have implemented over the past twenty-five or thirty years. We propose that states introduce a greater degree of discretion into their sentencing and parole practices through two specific reforms: (1) a reduction in the scope and severity of truth-in-sentencing laws that mandate that inmates serve minimum proportions of their sentences, and (2) a reworking and, in many instances, abandonment of mandatory minimum sentences. We also propose that states create incentives for localities to limit their use of state prison systems.

# Table of Contents

ABSTRACT	2
CHAPTER 1. INTRODUCTION	5
CHAPTER 2. MASS INCARCERATION IN THE UNITED STATES	7
CHAPTER 3. A PROPOSAL TO REDUCE INCARCERATION THROUGH SMARTER USE OF PRISONS	14
CHAPTER 4. QUESTIONS AND CONCERNS	23
CHAPTER 5. CONCLUSION	26
AUTHORS AND ACKNOWLEDGMENTS	27
ENDNOTES	28
REFERENCES	30



---

# Chapter 1: Introduction

---

The United States currently incarcerates people at a higher rate than any other country in the world (Walmsley 2013). As of 2011, there were approximately 2.2 million persons incarcerated in either a state or federal prison, or in a local jail (Bureau of Justice Statistics [BJS] 2012). Of this total, 1.3 million were in state prison, 215,000 were in federal prison, and 736,000 were in a local jail (Glaze 2012). On a per capita basis, incarceration in federal and state prisons increased nearly five-fold between 1975 and 2009, from a rate of roughly 100 to 500 per 100,000 residents (Raphael and Stoll 2013).

The large increases in the U.S. incarceration rate have certainly impacted the social welfare of many U.S. residents along multiple dimensions. On the positive side, today's crime rates are appreciably lower than past crime rates. Moreover, the largest declines in victimization rates have occurred among low-income households and in the poorest urban neighborhoods. These lowered crime rates are due in some part to our very high incarceration rates. However, the fact that incarceration on average reduces crime does not imply that recent increases in incarceration have generated substantial reductions in crime. In fact, there is ample research documenting that the crime-fighting benefits of incarceration are much smaller at high incarceration rates than they are at low incarceration rates. Moreover, several states have recently enacted policies that have substantially reduced their state prison population totals, with little to no impact on crime rates.

On the negative side, incarceration is costly. The United States spent roughly \$80 billion in 2010 on corrections, or approximately \$260 per resident (U.S. Department of Justice [DOJ] 2013a). The comparable figure for 2010 for the federal Supplemental Nutrition Assistance (SNAP) Program was \$227 (U.S. Department of Agriculture 2014). On average,

states devote roughly 7.5 percent of general fund revenues to corrections, with this figure ranging from a low of 2.7 percent in Minnesota to a high of 22.8 percent in Michigan in fiscal 2009 (Raphael and Stoll 2013). Moreover, there is some evidence that corrections expenditures displace resources that would otherwise be devoted to social services for the poor (Ellwood and Guetzkow 2009).

Less obvious are the collateral consequences of incarceration for former inmates, their families, and the communities from which they come. Young men who serve time often cycle in and out of prison during much of their twenties and early thirties, a period when other young men are accumulating

Young men who serve time often cycle in and out of prison during much of their twenties and early thirties, a period when other young men are accumulating work experience, getting married, having children, and experiencing other markers of a normal transition into responsible adulthood.

work experience, getting married, having children, and experiencing other markers of a normal transition into responsible adulthood. Prison spells tend to obstruct this normal course of development (Raphael 2007). Moreover, former inmates experience legal and sometimes informal barriers to securing employment, sometimes through legal prohibitions restricting access to certain occupations and sometimes through the raw stigma associated with having served time (Pager 2007; Stoll and Bushway 2008). High rates of incarceration have been linked to the spread of infectious diseases in minority communities (Johnson and

Raphael 2009), and to behavioral problems and material poverty among the children of the incarcerated (Johnson 2009; Wakefield and Wildeman 2014). Finally, these negative collateral consequences fall disproportionately on minority communities, and especially on African American communities.

Is incarceration the only way to control crime? Could we have both lower incarceration rates and low crime rates? What alternative policy options could we pursue in conjunction with scaling back incarceration rates that would reduce the social costs of incarceration while controlling crime?

Based on the findings of recent research pertaining to the crime-fighting effects of incarceration as well as the recent experience of several states, we propose that there is currently substantial room to reduce incarceration rates in the United States without adversely impacting crime rates. The policy choices that have increased the nation's incarceration rate since the early 1990s have been particularly ineffective at combatting crime. Hence, we propose that states reevaluate these policy choices and reduce the scope and severity of several of the

sentencing practices that have been implemented over roughly the past twenty-five or thirty years. To be specific, we propose that states introduce a greater degree of discretion into their sentencing and parole practices through two specific reforms: (1) reduce the scope and severity of truth-in-sentencing laws that mandate that inmates serve minimum proportions of their sentences, and (2) rework and in many instances abandon mandatory minimum sentences. We also propose that states create incentives for localities to limit their use of state prison systems. Such incentives could take the form of an explicit tax on the locality for sending lower-level offenders to prison or of a system whereby states share cost-savings with localities, conditional on the locality reinvesting their portion of those savings in an alternative crime-control strategy. Given the height of current incarceration rates, many states are in a position where potential cost savings, and in turn the pool of resources to be shared with localities, are substantial. Strategies involving the sharing of resources saved are more likely to be seen as win-win from the perspective of both state and local policymakers.



# Chapter 2: Mass Incarceration in the United States

Incarceration rates in the United States were not always as high as they are today. In fact, for much of the twentieth century the U.S. prison population per capita closely mirrored the current rates of other developed countries. Figure 1 presents the U.S. incarceration rate for the period 1925–2012. The prison incarceration rate exhibited remarkable stability for the first fifty or so years in the figure. Beginning in 1975, however, the prison incarceration rate increased nearly five-fold over four decades, peaking at 506 per 100,000 in 2007 and then declining slightly to a rate of 480 by 2012. In 2012 federal prisons contributed about 62 inmates per 100,000 U.S. residents, while state prisons contributed the remainder—over 400 inmates per 100,000 residents.

In this section we discuss three issues that provide a background for our policy proposals. First, we discuss why the U.S. incarceration rate is so high. Second, we document the

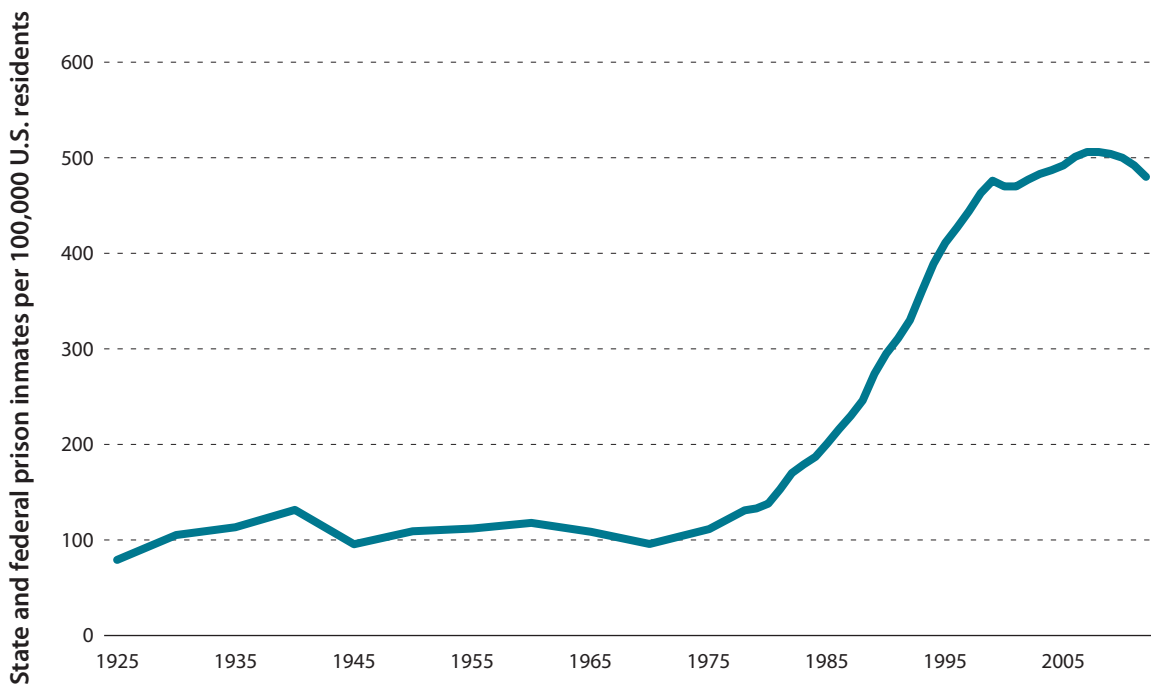
disproportionate impact of mass incarceration on minority communities. Finally, we discuss what we know about the effectiveness of incarceration as a crime-control tool.

## A. WHY ARE SO MANY AMERICANS IN PRISON?

The size of the nation’s prison population depends on how many people we send to prison and for how long. To illustrate the factors driving growth in the U.S. incarceration rate, we find the analogy of what determines the size of the student body at a university to be particularly useful. Suppose a newly established four-year undergraduate institution admitted an inaugural freshman class of 1,000 students. The population would be 1,000 in year one, and would grow by 1,000 in years two through four, at which time the student body would number 4,000. In year five, however, the 1,000 admitted freshman would be perfectly offset by the graduation of the original cohort of 1,000 students—stabilizing the population

FIGURE 1.

State and Federal Prison Inmates per 100,000 U.S. Residents, 1925 through 2012



Source: Authors' computation based on Bureau of Justice Statistics, National Prisoner Statistics (various years).

at 4,000. Increasing the admission rate would lead to long-run changes in the size of our student body. For example, a permanent increase in freshman admissions to 1,100 would increase the student body to 4,100 in the first year, but the full impact of this policy change would only be realized after four years when the student body stabilized at a population of 4,400. Alternatively, suppose we believe that the students aren't learning enough in four years, prompting us to add one more year of study to the undergraduate program. With 1,100 admits per year and five required years of study, our student population will eventually stabilize at 5,500.

The parallel to prisons is clear. If prison admissions permanently increase, so will the prison population. Such an increase in admissions may result from higher crime rates or policy changes that increase the likelihood that a given offense results in a prison term. Similarly, if we enact policies that punish offenders with enhanced sentences (increasing the amount of time prisoners can expect to serve), our prison population will increase.

Since the early 1980s, there have been very large increases in prison admissions rates for relatively less-serious crimes such as property crime and, in particular, drug offenses. For example, the number of annual admissions to state prison for drug crimes increased from 9 per 100,000 U.S. residents in 1984 to 47 per 100,000 in 2009. In addition, there have been sizable increases in the amount of time offenders can expect to serve conditional on being sent to prison, especially for those convicted of violent offenses. For example, between 1984 and 2009 expected time served in state prisons increased by roughly five years for those convicted of murder, three years for those convicted of sexual assault, eighteen months for those convicted of robbery, and six months for those convicted of burglary (Raphael and Stoll 2013). Moreover, these effective changes in sentencing severity have occurred against a backdrop of crime rates that have declined to historic lows across the country.

## **B. THE DISPARATE IMPACT OF MASS INCARCERATION**

Those who serve time are far from a representative cross-section of the U.S. adult public. In general, men, racial and ethnic minorities, and those with very low levels of educational attainment make up the majority of prison and jail inmates. For example, roughly 92 percent of state prison inmates are male. Approximately one fifth of state prison inmates and one quarter of federal prisoners are Hispanic. Slightly fewer than half of both state and federal prisoners are African American. By comparison, African Americans and Hispanics account for roughly 11 and 13 percent, respectively, of the general adult population (Raphael and Stoll 2013, chap. 1). The overrepresentation of certain demographic groups (e.g., men and African Americans) among the incarcerated necessarily

translates into a higher proportion incarcerated on any given day among these groups. Overall, the proportion of men incarcerated on any given day is 0.022 (or, alternatively stated, 2.2 percent of the male population), with most incarcerated in state or federal prison. The proportion of women who are incarcerated is much lower (0.002, or 0.2 percent of all U.S. female residents).

There are enormous racial and ethnic disparities in incarceration rates. On any given day, nearly 8 percent of African American men are incarcerated, with 91 percent of those individuals held in a state or federal prison. In contrast, only 1.1 percent of non-Hispanic white men are incarcerated on any given day. Hispanic men occupy a spot between black men and white men, with an overall proportion incarcerated of 2.7 percent and the proportion incarcerated in a federal or state prison of 2.4 percent.

We have already noted that the less-educated, male, and minority populations are heavily overrepresented among prison and jail inmates. These demographics interact to disproportionately concentrate incarceration among even narrower subpopulations. There are much higher incarceration rates among the less-educated relative to the general adult population. And within racial/ethnic groups and educational attainment categories, the proportion incarcerated is highest among those thirty-one to forty years of age. Incarceration rates are also considerably higher among those without a high school diploma relative to those with a high school diploma or GED within all race-age groupings.

Perhaps the starkest differences are the very large racial and ethnic disparities in incarceration rates among the least-educated males. Roughly 26 percent of non-Hispanic black men between the ages of eighteen and thirty with less than a high school diploma are in prison or jail on any given day, with the majority of these being men in prison. Among black male high school dropouts that are thirty-one to forty years old, fully 34 percent are incarcerated on any given day. The comparable two figures for white men in these age/education categories are 5.5 and 6.9 percent, respectively, while the comparable figures for Hispanic men are 6.1 and 4.2 percent, respectively.

The incarceration proportions for high school graduates reveal more-muted yet still sizable racial disparities. Whereas 12 percent of black men in their thirties with a high school diploma or GED are incarcerated on any given day, the comparable figures for white and Hispanic men are 2.9 and 3.1 percent, respectively. Notably, the percentage incarcerated for black high school graduates actually exceeds the comparable figures for white and Hispanic high school dropouts.

An alternative characterization of who serves time focuses on the cumulative or lifetime risk of going to prison. Because the

U.S. prison population tends to turn over relatively quickly (annual prison admissions and releases are consistently equal to half the prison population), the drastic increases in incarceration rates experienced over the past three decades have left in their wake an increasingly large population of former inmates. The distribution of former prisoners across demographic subgroups of the noninstitutionalized population is an important determinant of social inequality, since former inmates tend to be stigmatized by their experience and face substantial hurdles in the labor market. Moreover, given the racial and socioeconomic concentration of former inmates among certain groups, prior incarceration experience is a factor that is likely contributing to racial inequality in the United States above and beyond such factors as educational attainment, family background, and racial labor market discrimination.

Two metrics are commonly employed to measure the cumulative risk of incarceration: the proportion of adults who have ever served time, and the projected lifetime likelihood for a person born in a specific year of serving time. Table 1 presents tabulations produced by BJS for both measures for 1974 and 2001 (Bonczar 2003). The share of those who have ever been incarcerated basically doubles over this period, with the largest absolute increase for black males. As of 2001 roughly 5 percent of all adult men had served time in a state or federal prison, while the figure for black men stood at 16.6 percent.

The final two columns of table 1 show the BJS estimate of the lifetime risk of incarceration for individuals born in 1974 and in

2001. The lifetime risk of serving prison time for a person born in 2001 stood at 6.6 percent for all people and 11.3 percent for males. For black males born that year, BJS estimates a lifetime risk at the startlingly high level of 32.2 percent, implying that one of every three black males born in 2001 will do time.

### C. MASS INCARCERATION AND CRIME CONTROL: A CLASSIC CASE OF DIMINISHING MARGINAL RETURNS

The crime-reduction gains from higher incarceration rates depend critically on the incarceration rate itself. When the incarceration rate is low, marginal gains from increasing the incarceration rate are higher. This follows from the fact that when prisons are used sparingly, incarceration is reserved for the highest-risk and most-serious offenders. By contrast, when the incarceration rate is high, the marginal crime-reduction gains from further increases tend to be lower, because the offender on the margin between incarceration and an alternative sanction tends to be less serious. In other words, the crime-fighting benefits of incarceration diminish with the scale of the prison population. These diminishing marginal returns from incarceration can be seen clearly when comparing the incarceration-reduction experiences in Italy and California.

On July 31, 2006, the Italian Parliament passed legislation that reduced the sentences of most Italian prison inmates convicted prior to May of that year by three years, effective the following day. The Collective Clemency Bill was spurred in large part by the activism of the Catholic Church and the personal

TABLE 1.

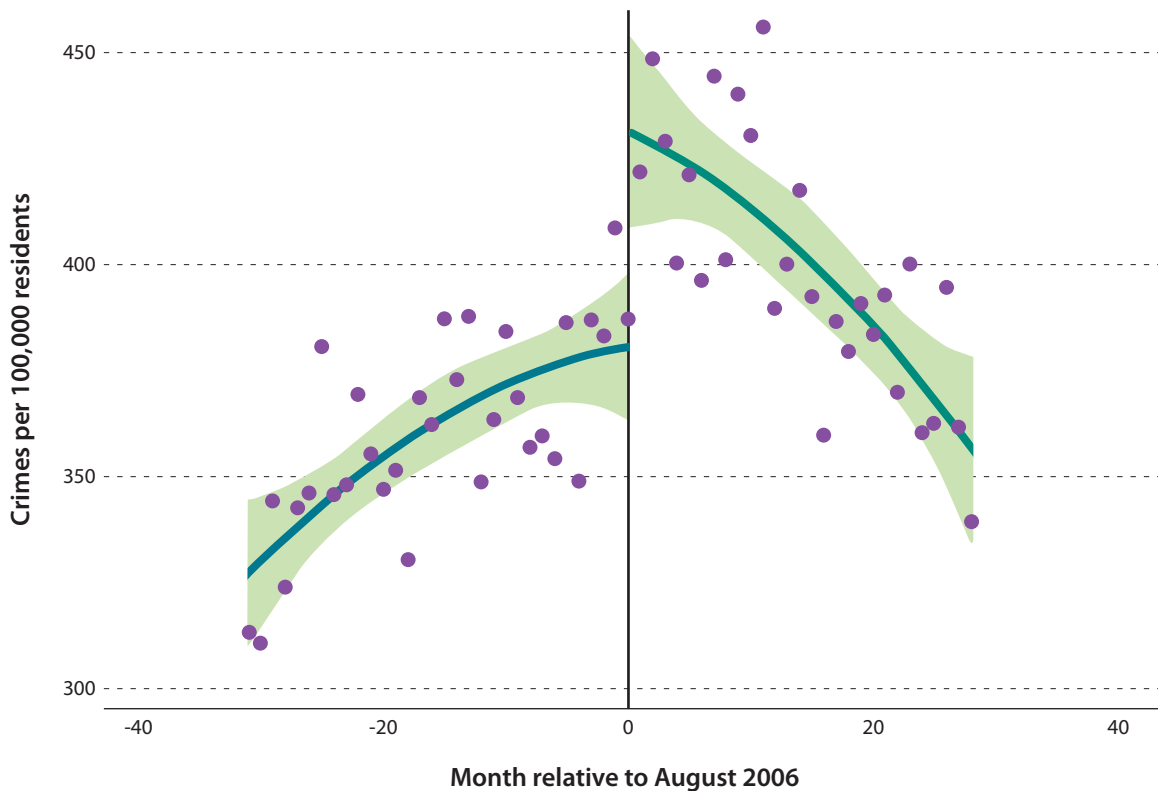
## Percent of Adults Who Have Ever Served Time and the Projected Lifetime Risk of Serving Prison Time by Year of Birth

	Percent of adults ever serving time in a state or federal prison in . . .		Projected lifetime percent chance of serving time in a state or federal prison for an individual born in . . .	
	1974	2001	1974	2001
Total	1.3	2.7	1.9	6.6
Males	2.3	4.9	3.6	11.3
White	1.4	2.6	2.2	5.9
Black	8.7	16.6	13.4	32.2
Hispanic	2.3	0.7	4.0	17.2
Females	0.2	0.5	0.3	1.8
White	0.1	0.3	0.2	0.9
Black	0.6	1.7	1.1	5.6
Hispanic	0.2	0.7	0.4	2.2

Source: Bonczar 2003.

FIGURE 2.

Total Monthly Crimes per 100,000 Italian Residents by Month Relative to August 2006



Source: Buonanno and Raphael 2013.



involvement of Pope John Paul II. With Italian prisons filled to 130 percent of capacity, the one-time pardon was principally motivated by the need to relieve prison overcrowding.

Figure 2 depicts trends in Italy’s crime rate for the period spanning January 2004 through December 2008. Italy’s incarceration rate over this period was quite low by the U.S. standard, never exceeding 110 per 100,000. The effect of the collective pardon on incarceration is clearly visible in the data, as there is a sharp decline in the incarceration rate between August and September 2006. The effect on crime is also clearly visible in figure 2, with a corresponding sharp increase. The magnitude of the increase in crime coinciding with the mass prisoner release suggests that on average each released inmate generates fourteen reported felony crimes per year (Buonanno and Raphael 2013).

Italy’s experience with the 2006 Collective Clemency Bill contrasts sharply with California’s recent experience. Under pressure from a federal court to relieve prison overcrowding, California enacted broad corrections reform legislation under the banner of corrections realignment in April 2011 with implementation beginning on October 1, 2011. The legislation halted the practice of revoking parolees back to prison for technical violations and diverted many nonserious,

nonviolent, nonsexual offenders to jail sentences and sentences to be served via some form of community corrections.

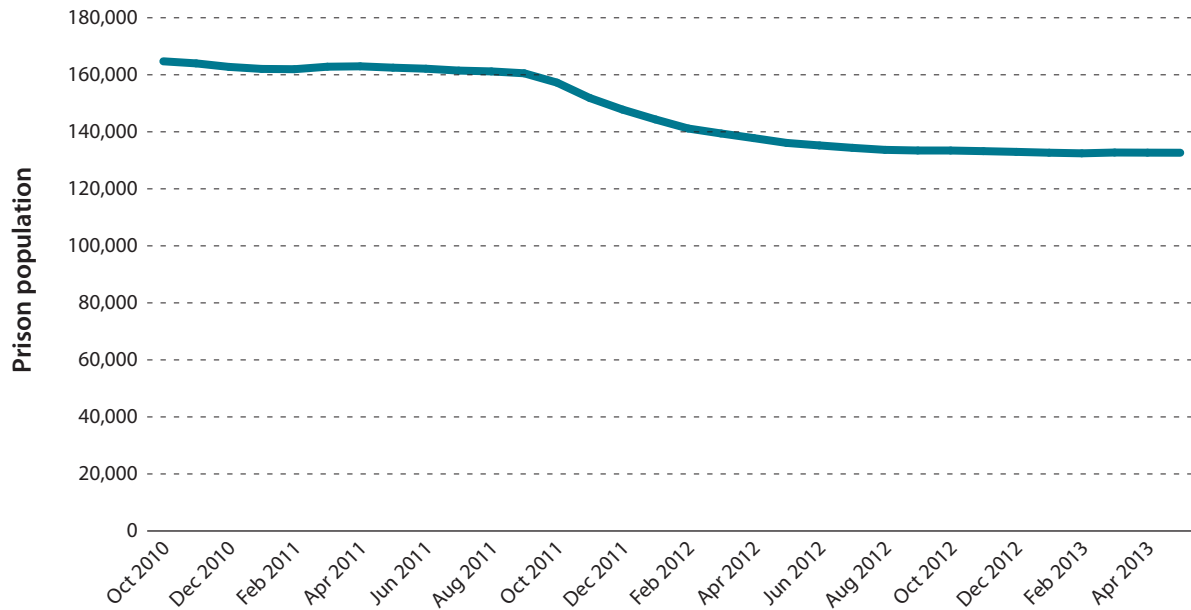
The impact of prison reform on the prison population was more sudden in Italy than in California. However, realignment did result in a relatively quick reduction in the California prison population that was larger in magnitude than that experienced in Italy (in terms of both the numeric reduction in the prison population and the decline in the incarceration rate). Figure 3A displays California’s prison population for each month between October 2010 and May 2013. Realignment caused a sharp decline in the prison population count beginning in October 2011. By the end of 2011 (three months into the implementation of reforms) the prison population declined by roughly 13,000 (an 8 percent decline). By May 2013 the prison population declined by nearly 28,000 relative to September 2011 (a 17 percent decline). In terms of incarceration rates, by the end of 2012 California’s prison incarceration rate stood at 354 per 100,000, a rate comparable to the rate in 1992 prior to the passage of the state’s tough “three strikes” sentencing reform. This is in comparison to an incarceration rate on the eve of realignment’s implementation of 426 per 100,000. The reduction in the state’s prison population was partially offset by an increase in the population in county jails of roughly

8,600 inmates (Lofstrom and Raphael 2013a). However, even accounting for this factor, there were approximately 20,000 additional individuals in noninstitutionalized society who, prior to the reform, would have been incarcerated.

And what has been the impact on California crime rates? Figure 3B displays monthly violent-crime totals for January 2010 through December 2012. We see little evidence of an increase in violent crime associated with the reduction in

FIGURE 3A.

### California Prison Population at the End of Each Month, October 2010 through May 2013

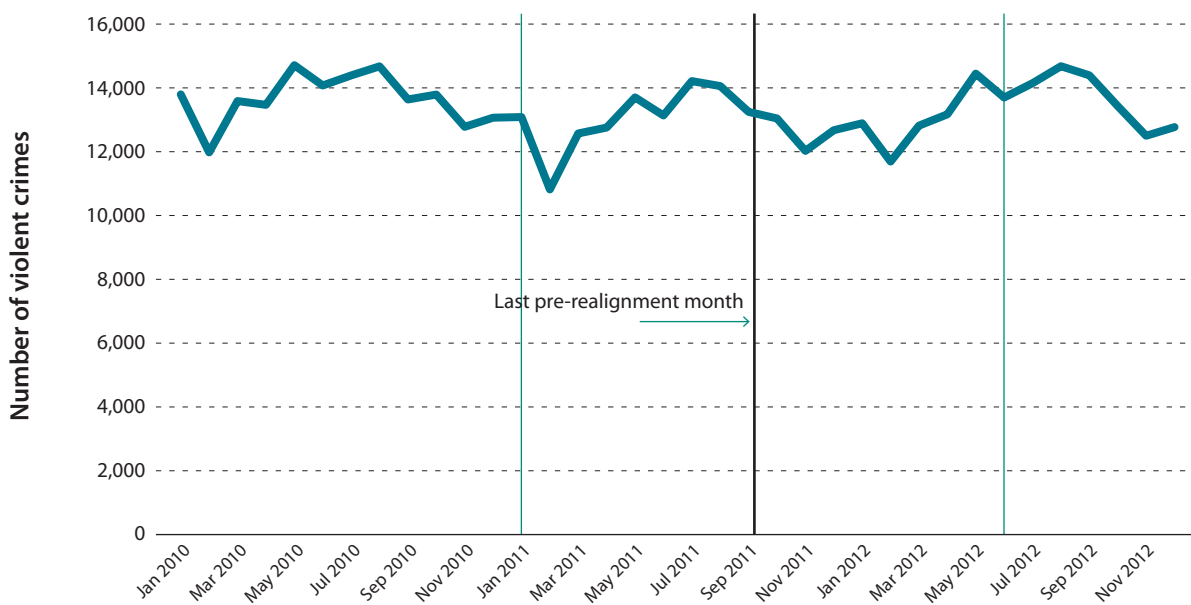


Source: Lofstrom and Raphael 2013b.



FIGURE 3B.

### Total Monthly Violent Crimes in California, January 2010 through December 2012

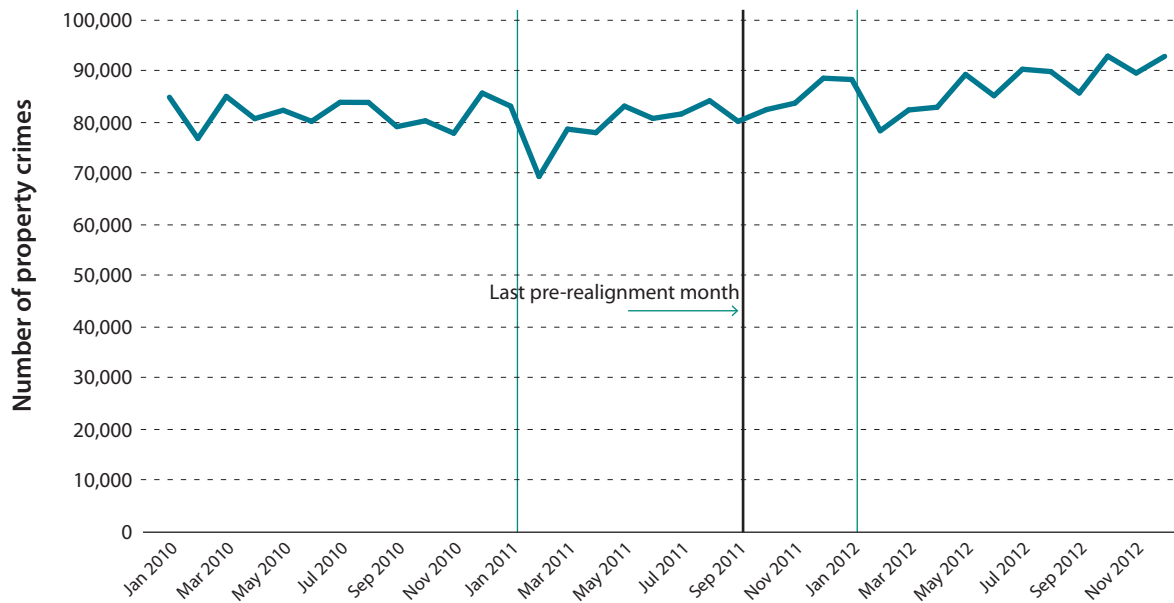


Source: Lofstrom and Raphael 2013b.



FIGURE 3C.

### Total Monthly Property Crimes in California, January 2010 through December 2012



Source: Lofstrom and Raphael 2013b.



the state’s prison population, but figure 3C reveals a gradual and sustained increase in total property crimes following the reform. During the prereform period, monthly property crime totals oscillate around 80,000 incidences per month. Following realignment, monthly incidents drift upward to more than 90,000 incidents per month.

Lofstrom and Raphael (2013b) analyze the effects of the realignment reforms on California crime rates by comparing crime rate patterns across counties that were differentially impacted by the reforms and by comparing California crime rates to those of states that exhibited crime trends similar to California’s in the past. This analysis finds no evidence of an effect of realignment on violent crime and evidence of a modest effect on property crime operating entirely through auto vehicle theft. Specifically, the authors estimate that each prison year not served as a result of the reform results in 1.2 additional auto thefts. Comparing the social costs of auto theft to the costs of incarceration for one year, the analysis documents the very low crime-fighting returns to incarceration for the offenders targeted by this reform.

The modesty of realignment’s impact on California crime rates is placed in more stark relief when we analyze crime rates over a longer time frame. Crime in California was very high in the early 1990s. Yet reducing incarceration rates to the levels of the early 1990s has had very little impact on crime. Despite the small upticks in crime, the 2012 property crime rate stood at half the rate in 1992 while the 2012 violent crime rate stood

at 38 percent of the comparable rate in 1992. In other words, despite a very large reduction in the prison population and a large increase in “street time” among a population of convicted felony offenders, the state has not experienced a crime wave.

What explains the difference between the experiences of Italy and California? First, the prepardon incarceration rate in Italy stood at roughly 103 per 100,000 residents, quite close to the U.S. incarceration rates that existed prior to 1980. In California the prereform incarceration rate was between 425 and 430 per 100,000, more than four times the prereform rate in Italy. If we add California’s 75,000 jail inmates (a more appropriate comparison to Italy’s rate since Italy has a unified prison and jail system), this rate increases to 625 per 100,000. Hence, one possible explanation is that California casts a much wider net in terms of who is sent to prison and for how long. Consequently, the average prereform inmate in California is perhaps less criminally prone than is the average inmate in Italy, where prison is used more sparingly.

Second, Italy’s collective pardon was broadly applied to all inmates with three years or less left on their sentence, with exceptions for inmates convicted of offenses involving organized crime, felony sex offenders, and those convicted of terrorism, kidnapping, or exploitation of prostitution. California reduced its prison population more selectively, largely by discontinuing the policy of returning to custody parole violators who have not been convicted of a new felony. Hence, California’s policy experiment may have been more effective at selectively reducing

the prison population in a manner that is increasing the street time of the least-serious offenders.

All of these factors are suggestive of great heterogeneity among those serving time in their propensity to offend when they are on the street. Moreover, in situations where policy choices increase the scope and scale of incarceration, this heterogeneity will increase, with individuals who pose relatively little threat to society being more likely to be caught up in the criminal justice system alongside more-dangerous convicted felons. In sum, we would expect that as the incarceration rate grows, diminishing returns to scale will set in. Hence, reducing the use of incarceration from relatively high levels should have smaller effects on crime rates than reducing incarceration rates from relatively low levels.

Criminologists posit that incarcerating a criminal offender impacts crime through several channels. First, prison effectively incapacitates the criminally active. Second, some potential offenders may be deterred from committing crime by the threat of a prison spell, an effect referred to as “general deterrence.” Finally, the experience of serving time in prison may alter the future offending trajectories of former prison inmates for better or worse. Some might be changed in a positive way by the experience and so do whatever is necessary to avoid returning to prison. On the other hand, the prison experience might enhance the criminality of others through exposure to criminal networks, the development of antisocial attitudes, adaption to prison culture, and so on.

Existing empirical research on the crime-incarceration relationship suggests that most of the impact of incarceration on crime operates through incapacitation.<sup>1</sup> Moreover, this empirical research strongly suggests that this incapacitation effect—that is, the reduction in crime resulting from physically removing an offender from society—declines quite rapidly as the incarceration rate increases. For example, a thorough analysis of the Italian collective pardon found that provinces with higher prepardon incarceration rates experienced very small increases in crime associated with the prison release (Buonanno and Raphael 2013). This is particularly interesting because high-incarceration provinces had rates hovering below 200 per 100,000.

Our research on the incarceration–crime relationship in the United States suggests that increases in the prison population in most recent years have generated considerably less crime reduction than have increases in years past (Raphael and Stoll 2013, chap. 7), with the increase occurring since 1990 being

particularly ineffective. To be specific, we assembled annual data for every state on crime rates and incarceration rates, and analyzed the relationship between changes in incarceration and changes in crime for three separate periods: 1977–88, 1989–99, and 2000–10. During the earliest period, the average state incarceration rate stood at 171 per 100,000. The comparable figures per 100,000 for the latter two periods are 349 and 449, respectively. To the extent that the crime-fighting effects of incarceration diminish with scale, one would expect weaker impacts of incarceration on crime during the latter periods relative to the earliest period we studied.

Our estimates indicate that, during the late 1970s and early 1980s, each one-person increase in the nation’s incarceration rate reduced the annual violent crime rate by between 1 and 2 incidents per 100,000 residents. For property crime, we estimate that each one-person increase in the incarceration rate lowered the property crime rate by between 9 and 18 incidents per 100,000. Note that these figures are quite close to the estimated per inmate impacts of the Italian collective pardon. Not surprisingly, these estimates for the United States are for a period when the nation’s incarceration rate was much closer to Italy’s rate on the eve of its mass prisoner release.

In contrast, our estimates of the effects of prison increases on crime during the 1990s and the 2000s are much smaller by comparison; these effects are generally concentrated on property crime. Our research indicates that each one-person increase in the incarceration rate lowers the property crime rate between 1 and 2 incidents per 100,000. Remarkably, these estimates are quite consistent with the estimates for California. Note that since California’s reforms reduced the state incarceration rate from 425 per 100,000 to 356 per 100,000, these estimates based on the California experience apply to incarceration rates around a comparable level, a level observed for the average state during the 1990s and early 2000s.

These results are also consistent with the analysis presented by Liedka, Piehl, and Useem (2006). Using state-level data on crime and incarceration, these authors analyze how the overall effect of incarceration on crime varies with the scale of incarceration. Similar to other research on this topic, these authors find significant negative effects of incarceration on crime at low incarceration rates that are quite substantial in magnitude. However, these effects diminish rapidly with scale. In fact, the authors estimate that the effect of incarceration on crime may actually turn positive somewhere between an incarceration rate of 325 per 100,000 and 425 per 100,000.

---

## Chapter 3: A Proposal to Reduce Incarceration through Smarter Use of Prisons

---

The explosive growth in the U.S. incarceration rate, coupled with crime-fighting benefits that rapidly diminish with the scale of incarceration, implies that there is currently substantial room to reduce incarceration rates without impacting crime. Even absent a compensating social investment, a selective scaling back of the use of incarceration as punishment would likely have relatively small effects on crime rates. However, such a scaling back would reduce corrections costs and generate budgetary savings that could be diverted to other, more-cost-effective, and less-socially harmful interventions.

While there are multiple reasons why we use prison to punish felony offenders, crime control is clearly high on the list of objectives and motivations. That being said, the policy options that we outline below are intended to increase the general allocative efficiency of the use of prison beds—that is, to increase the degree to which prison is reserved for those who pose the greatest risk to society. Hence, we propose two broad policy strategies: introduce a greater degree of discretion into U.S. sentencing and parole practices, and incentivize local authorities to reserve prison for those who pose the greatest risk.

### A. INTRODUCE GREATER DISCRETION INTO U.S. SENTENCING AND PAROLE PRACTICES

Until the mid-1970s all state prison sentences and the actual amount of time that a criminal offender would serve were governed by a set of sentencing practices often referred to as “indeterminate sentencing.” Under indeterminate sentencing, judges specify a minimum and maximum sentence; the actual time an inmate serves falls within this range. Once an inmate has been sentenced and admitted to prison, actual time served is determined by parole boards, with the decision to release governed by interviews with inmates, the inmate’s behavior while incarcerated, elements of the offense, demonstrable remorse, evidence of rehabilitation, and perhaps the personal biases of parole board members pertaining to the specific characteristics of the inmate in question. In principle, indeterminate sentencing reserves prison and long prison sentences in particular for those who commit the most serious crimes and those who pose the greatest threat to society. Such a sentencing regime is characterized by a high degree of discretion afforded to criminal justice actors, judges, and, in particular, parole boards (Tonry 1996).

The rise of mass incarceration coincides with and in fact was caused by a drastic change in sentencing practices in most states. While sentencing practices vary to a great degree across states, there are several common qualitative patterns that describe many of the changes observed over the past three decades. First, judges generally have less discretion today than they had in the past regarding which inmates are sent to prison and the length of effective sentences. Second, release decisions are more constrained by administrative rules and the role of parole boards in the release decision has been greatly diminished. Third, states have implemented a number of reforms intended to increase uniformity in sentencing for inmates convicted of similar offenses. Fourth, through legislation targeted at specific types of offenders and offenses as well as legislation reforming overall sentencing, sentences have become considerably more structured. Finally, sentencing practices have become increasingly punitive (Stemen, Rengifo, and Wilson 2006).

This greater uniformity, structure, and harshness in sentencing often results in prison spells that cannot be justified by the risk posed by the offender. Moreover, the reduced discretion afforded to judges and parole boards leaves less room to alter sentences after the fact for inmates who prove to be compliant and who make steady progress toward rehabilitation. Our analysis of the effect of incarceration on crime revealed that increases since the early 1990s have been particularly ineffective at combatting crime. Hence, we propose to reintroduce greater discretion into sentencing and parole decisions by reversing some of the sentencing changes that swept through the nation during the past two or three decades and that constrain prison admission and release decisions.<sup>2</sup>

*Revise the scope and severity of truth-in-sentencing laws.* Truth-in-sentencing laws extend actual time served by requiring that certain subsets of offenders serve a minimum proportion of their sentences (Ditton and Wilson 1999; Sabol et al. 2002). For states with determinate sentencing, the minimum percentage to serve usually applies to the fixed sentence imposed by the judge. In indeterminate sentencing states, the provision may apply to either the maximum or the minimum sentence as prescribed by law. Truth-in-sentencing laws figured prominently in the federal 1994 Violent Crime Control and Law Enforcement Act. In addition to providing federal funds to augment the number of local police throughout the country, the legislation



created federal matching grants under the Violent Offender Incarceration and Truth-in-Sentencing (VOI/TIS) program directed toward expanding the capacity of state prisons and local jails (Ditton and Wilson 1999). A condition for receiving funds from the VOI/TIS program was that states must have a truth-in-sentencing provision requiring that violent offenders serve a minimum of 85 percent of their sentence. The number of states with truth-in-sentencing laws has increased considerably. Moreover, Stemen, Rengifo, and Wilson (2006) show that for states that base their time served requirements on either the maximum sentence (in indeterminate sentencing states) or the fixed sentence (in determinate sentencing states), the average time served requirement increases considerably, with notable increase in 1994 with the creation of the VOI/TIS grant program. By 2008 twenty-eight states had truth-in-sentencing laws that met the federal 85 percent requirement for violent offenders. Some states extend the time served requirements to nonviolent offenders, as well.

We propose that states take a hard look at their truth-in-sentencing laws and either modify the parameters to reduce scope and severity or abandon the practice entirely. To be specific, states could alter the minimum percent of sentences to be served, reduce the scope of the set of crimes subject to truth-in-sentencing constraints, reduce the scope of truth-in-sentencing constraints by applying them to repeat offenders only, or abandon the practice altogether. These changes would permit parole review for greater proportions of inmates in indeterminate sentencing states while increasing the proportion of inmates able to earn good time credits in states with more-structured sentencing practices. Making these changes would necessarily increase the discretion of parole boards in the decision-making process and allow criminal justice professionals to have a greater role in deciding who is and who is not ready for release. Such a change would free the hands of corrections authorities to release those inmates who, through objective risk assessment, are deemed low risk.

The potential benefits from such a change are illustrated by a recent provocative analysis of prison release decisions in Georgia conducted by Ilyana Kuziemko (2013). Using administrative data on prison releases and recidivism, Kuziemko documents the following: First, recidivism risk declines with time in prison, likely due to the aging of the inmate and the well-documented fact that the propensity to offend declines sharply with age. Second, parole boards are quite good at distinguishing high-risk from low-risk inmates based on observation during the inmate's incarceration, and on information that extend beyond the inmate's age, demographics, and criminal history on entering prison. Third, when discretion is wrested from parole boards via truth-in-sentencing type practices, inmates engage in more institutional misconduct, are less likely to participate in rehabilitative programming, and are more likely to recidivate

after release. Through a series of back-of-the-envelope calculations, Kuziemko concludes that restricting the discretion of parole boards both increases the incarceration rate through longer sentences and increases crime through higher recidivism rates among those with little incentive to rehabilitate while incarcerated.

Truth-in-sentencing not only creates allocative inefficiency, but may also increase the postrelease offending of some inmates beyond what it otherwise would be. The first factor occurs due to the one-size-fits-all nature of this sentencing practice. Namely, regardless of one's behavior, efforts made toward rehabilitation, and objective signals of low recidivism risk, the practice ties the hands of parole authorities, leading to incarceration spells that are unjustifiably long for some inmates. The second factor occurs through the elimination of the incentive to behave and conform.<sup>3</sup> Precluding the possibility of early release through parole eliminates incentives to not engage in misconduct and to participate in programming, increasing the likelihood that the individual will be returned to custody soon after release.

Of course, one could increase the role of parole boards in release decisions in a more-structured manner while creating incentives for inmates to engage in rehabilitated programming and to behave in a positive manner while incarcerated. Moreover, such an effort could be targeted at offenders who commit relatively less-serious crimes rather than those who come under the purview of truth-in-sentencing laws. For example, Pennsylvania's Recidivism Reduction Incentive (RRI) legislation passed in 2008 creates a parallel sentencing structure for relatively low-risk inmates whereby in addition to the specified minimum and maximum sentences handed down at sentencing, offenders are given an alternative RRI minimum sentence below the standard minimum. For the lower minimum to apply, the inmate must refrain from institutional misconduct and must participate in several predetermined rehabilitative programs to be deemed RRI certified. Through 2013 the Pennsylvania Department of Corrections estimates that roughly 9,000 inmates have served approximately five months less on average due to the RRI program, saving the state roughly \$14,000 per inmate (Bucklen, Bell, and Russell 2014). In a nonexperimental evaluation of the program, RRI-certified inmates are found to be rearrested over the three-year period following their release at a rate that is 8 percentage points lower than that for a matched comparison group. There is no statistically measurable effect on reincarceration, however. Moreover, because the program is targeted toward relatively low-risk inmates with short sentences, a sizable minority are released prior to participating in the prescribed programming.

*Take inventory of and reevaluate legislatively mandated minimum sentences.* Mandatory sentencing laws specify minimum prison sentences for specific offenses or offenses

with aggravating circumstances that are targeted by specific legislation. Stemen, Rengifo, and Wilson (2006) note that mandatory minimum sentences usually constrain both the decision regarding whether an offender should be sentenced to prison and the minimum amount of time that an inmate must serve. Between 1975 and 2002 every state, the District of Columbia, and the federal government adopted some form of mandatory minimum sentencing targeted at a specific offense. Nearly three quarters of all states and the federal government enacted mandatory minimum sentences for possession or trafficking of illegal drugs. Mandatory minimum penalties are also often encountered for violent offenses, offenses involving weapons, carjackings, offenses victimizing minors, and offenses committed in close proximity to schools. Federal law is riddled with mandatory minimum sentences, with disproportionate mandatory minimums for drug offenses involving crack cocaine receiving perhaps the greatest scrutiny.

## Similar to truth-in-sentencing provisions, mandatory minimum sentences and repeat-offender laws often tie the hands of criminal justice actors (judges and parole boards, in particular) and greatly increase the bargaining power of prosecutors in criminal proceedings.

Closely related to mandatory minimum sentences are state laws mandating specific sentencing for repeat offenders. Repeat-offender laws refer to sentence enhancements for criminal offenders who repeatedly commit crimes. The laws are often described using the baseball metaphor “three strikes and you’re out,” conveying the idea that those who serially offend may ultimately face life terms. Repeat-offender laws first appeared in most states during the early- to mid-1990s under the label of “three strikes,” with the first in Washington state in 1993. By the close of the twentieth century, roughly half of all states had such provisions in their sentencing systems. The provisions of actual repeat-offender laws vary considerably across states. For example, in California a “second striker” (someone with a prior conviction for a violent offense convicted of a second felony) receives a sentence equal to twice the sentence normally handed down for the specific

second offense. Until recently, all “third strikers” (someone with two prior violent felony convictions) were given an indeterminate sentence of twenty-five years to life for any additional felony offenses.<sup>4</sup> In contrast, Pennsylvania’s “three strikes” law is triggered only when an offender who has already been convicted of two prior felonies is subsequently convicted of one of eight specified offenses. Moreover, the law gives the sentencing court discretion to increase the sentence for the underlying offense by up to twenty-five years.

Similar to truth-in-sentencing provisions, mandatory minimum sentences and repeat-offender laws often tie the hands of criminal justice actors (judges and parole boards, in particular) and greatly increase the bargaining power of prosecutors in criminal proceedings.

In addition to increasing the likelihood of a prison term and sentence length for convicted offenders, research has shown that these practices often result in stiffer penalties for those convicted of lesser yet related offenses than those covered directly by the statute, which likely reflects a net-widening with regard to the range of offenses experiencing enhanced penalties under the law (Owens 2011).

In most instances, offenders that commit crimes covered by mandatory minimum statutes would be eligible for a prison sentence in any case. The requirement of a prison sentence, however, prevents individual case-by-case assessments and may result in excessive use of prison for certain offenders.

With this in mind, we propose that states and the federal government take inventory of their mandatory minimum sentence laws and, on a statute-by-statute basis, investigate the following questions:

- Does existing state or federal law (not inclusive of the mandatory minimum in question) already allow for the incarceration of offenders convicted of the targeted offense?
- Does the mandatory minimum introduce horizontal inequity in sentencing for other offenders convicted of similar crimes?
- Are the specified sentences disproportionate to the offense?
- Does the law often result in a prison sentence for relatively low-risk offenders?

An answer of yes to any or all of these questions is likely indicative of a sentencing statute that is either unnecessary, indefensibly harsh, and/or not particularly cost-effective. For example, laws that mandate minimum sentences for offenses that would normally result in stiff prison terms likely serve only to increase the bargaining power of prosecutors and facilitate net-widening of the sentence enhancement to offenses that may be subject to the mandatory minimum only under very broad interpretations of the law. Sentences that result in differential punishments for relatively similar offenses are likely punishing the group targeted by the mandatory minimum more harshly than can be justified by any crime-reducing effect. For example, the powder versus crack cocaine sentencing disparity in federal law comes to mind. Sentences that are grossly disproportionate to the offense likely reflect legislation where politics rather than analysis and best-practice guided the content of the law. For example, prior to recent voter-approved reforms, California's "three strikes" law often resulted in indeterminate sentences of twenty-five years to life for very minor third-strike offenses, sometimes involving petty theft. Finally, sentences frequently resulting in the incarceration of low-risk offenders by definition generate little crime-fighting bang per buck.

Such sentencing reform would have a substantial impact on incarceration rates. In our book *Why Are So Many Americans in Prison?*, we assess the relative contribution to prison growth in the United States of changes in offending behavior and changes in sentencing policies that have increased the likelihood of going to prison if one is caught, as well as the amount of time one can expect to serve. We conclude that nearly all of the increase in incarceration rates from the mid-1980s to the present is attributable to changes in sentencing policy, while very little can be explained by higher offending rates among the general public. This is true for large increases in both state prison incarceration rates and federal prison incarceration rates.

The conclusion that tougher sentencing policy is the chief factor that drove up U.S. incarceration rates implies that bringing incarceration rates down requires that we reverse many of the changes in sentencing practices that have occurred over the past several decades. Of course, to the extent that we could reduce criminal offending, this would also reduce incarceration rates. Moreover, there are many communities throughout the country where crime rates remain high. However, given our current sentencing practices, even appreciable further declines in crime (say, on the order of 10 to 20 percent) would generate relatively modest reductions in incarceration.<sup>5</sup> With that in mind, how important are the tougher sentencing practices for specific offenses? Alternatively stated, if, for example, we were to roll back sentencing practices for federal drug offenses to practices that existed prior to the rise of mass incarceration, how much would this impact the nation's incarceration rate?

Using data on the frequency with which apprehended offenders are sent to prison and the amount of time they could expect to serve, we estimate how rolling back specific sentencing practices to early years in the state and federal systems would impact the national incarceration rate.<sup>6</sup> Moderating sentences for violent offenders would have by far the largest effect on incarceration rates. Specifically, rolling back sentencing practices for violent offenders processed in state courts to those of the early 1980s would reduce the national incarceration rate by 139 per 100,000 (roughly 30 percent). This is not particularly surprising because violent offenders make up half of state prisoners, serve the longest sentences, and have experienced the sharpest increases in effective sentence length since the early 1980s. Drug offenders processed in state courts make up the next most important category we single out for tougher sentencing. Reversing drug sentencing practices to those of the early 1980s would reduce the national incarceration rate by 64 inmates per 100,000 residents (roughly 13 percent). The smallest declines would occur for reductions in parole violation rates. Despite the fact that parolees account for a disproportionately large share of prison admissions in any given year, their relatively short stays in prison translate into small reductions in incarceration rates associated with reversing increases in parole violation rates.

Our estimates suggest that reversing changes in federal sentencing practices have much smaller impacts on the national incarceration rate, because only 13 percent of inmates are in federal prisons. Nonetheless, the federal prison system is larger than any of the individual state systems. Moreover, the federal prison system disproportionately comprises nonviolent drug offenders and hence is likely a setting in which sentencing reforms would generate substantial reductions and perhaps encounter less political resistance. According to our estimates, reversing drug sentencing practices to the levels of the mid-1980s would reduce the national incarceration rate by 30 per 100,000, while changes in weapons sentencing would reduce the national incarceration rate by 12 per 100,000. Tougher sentences for violent and property offenses in federal courts have played a limited role in explaining the rapid growth of the federal prison population. Consequently, reversing these sentencing practices would likely have little impact on the national incarceration rate.<sup>7</sup>

Our analysis of the factors contributing to prison growth in the United States suggests that tougher drug sentencing, while not the only factor driving incarceration growth, was certainly an important factor, especially when we account for prosecutions in federal courts. This seems like a natural place for states to begin with such a reevaluation, as several states already have. (See box 1 on the experience of states that have deliberately reduced their incarceration rates.)

## BOX 1.

### The Experience of Four States with Efforts to Bring Down the Prison Population

In recent years the nation's incarceration rate has actually declined slightly. After peaking at 506 per 100,000 in 2007, the U.S. prison incarceration rate declined to 480 by year-end 2012. Across the country, states are beginning to seek alternatives to incarceration and to enact policy changes aimed at reducing reliance on prison. The motivations behind these changes are several and varied. Some states have sought reform with an eye on minimizing the collateral consequences. Others are motivated by tight state budgets. In one salient instance, a federal court forced a state to act to reduce its prison population. Here we highlight specifics behind recent prison population reductions experienced in four states. This box focuses on Texas, Michigan, California, and New York; within the past decade, each of these states has experienced a sizable reduction in incarceration rates.

In 2005 the Texas legislature began a reform process aimed at reducing the state's incarceration rate (Levin 2011a, 2011b). To start, the state invested heavily in reducing probation caseloads and shifted toward swift and certain yet moderate and graduating sanctions for probationers who miss appointments, test positive for drugs, or engage in other technical violations. Lower caseloads and investments in intermediate sanctions and treatment facilities permitted early, swift responses to any probation violations and required inmates to be more accountable for their own behavior. In addition, the state increased resources for within-prison treatment programs as well as various treatment programs and intensive case-management efforts for parolees and those on probation. Texas has also experimented with efforts to align the fiscal incentives of local governments with those of the state. Specifically, local probation departments are permitted to opt to participate in a program whereby some portion of the costs savings associated with a reduction in probation revocation rates accrue to the locality.

While the Texas prison incarceration rate peaked at 754 per 100,000 in 2000, between 1997 and 2005 the state's incarceration rate hovered around 700 per 100,000. In the seven years following the shift in Texas' budget priorities and new emphasis on treatment and alternatives to incarceration, the state's incarceration rate has dropped by 92 per 100,000 (a 13 percent decline since 2005). The 2012 incarceration rate of 606 per 100,000 equals rates not seen in the state since the early 1990s.

A 2002 sentencing reform package in Michigan permitted judges greater discretion to send sentenced inmates to treatment in lieu of prison and effectively reversed all mandatory minimum sentences for drug offenses. The reform was applied retroactively (Green and Mauer 2010). Michigan also greatly expanded its efforts to facilitate prisoner reentry. The 2007 expansion of the Michigan Prisoner Reentry Initiative led to comprehensive reentry planning in each county of the state, with assessments of local county assets, identification of gaps in the needed continuum of care, and the greater use of risk assessment in release and service provisions decisions. The statewide implementation of this initiative coincided with increases in parole approval rates, likely the result of greater confidence of the parole authorities in local community corrections (Green and Mauer 2010).

Michigan's 2002 incarceration rate stood at 504 per 100,000. The legislation led to immediate declines in incarceration, followed by some retrenchment in the face of three high-profile murders committed by former prisoners and a reduction in the parole approval rate. With subsequent introduction and expansion of the Michigan Prisoner Reentry Initiative and increase in parole approval rates, the state's incarceration rate declined to levels not seen since the mid- to late-1990s. Between 2002 and 2012 the state experienced a 12.5 percent decline in its incarceration rate, with an absolute decline in the incarceration rate of 63.

California began to experiment with policies to relieve prison overcrowding as early as 2000, when voters approved a statewide ballot initiative mandating diversion of low-level drug offenders to treatment in lieu of prison. The reform had only a modest and short-lived effect on the state incarceration rate. Under pressure from a federal court, the state passed two reforms—one in 2009 and one in 2010. The first provided a fiscal incentive for counties to reduce probation revocation rates, with a provision for revenue sharing out of corrections savings (California Administrative Office of the Courts 2012). The second reform defined a new class of low-risk parolees who could not be revoked to prison for technical violations. Together, these two reforms resulted in reduction in the state's incarceration from roughly 460 per 100,000 residents to 425 per 100,000. The more-profound reforms passed under the banner of corrections realignment was passed in 2010 and went into effect on October 1, 2011. Realignment introduced two changes to sentencing practices that caused a sharp decline in

the state's incarceration rate. First, any offender convicted of a nonserious, nonviolent, nonsexual crime who lacks any such crimes on his criminal history records now either serves time in county jail or is sentenced to a split sentence of jail time and probation rather than prison. Second, paroled offenders are no longer returned to state prison for technical violations, with many former inmates now supervised by local probation departments rather than by state parole authorities.

In conjunction, these two reforms caused a sharp decline in the state prison incarceration rate from roughly 425 per 100,000 on the eve of realignment's implementation to 353 per 100,000 by year-end 2012. Roughly one third of this decline was offset by higher local jail population counts (Lofstrom and Raphael 2013a). California's current incarceration rate is now at a level not seen since the early 1990s.

Incarceration growth in the state of New York during the 1980s and 1990s was driven primarily by a set of sentencing reforms that prescribed harsh and mandatory prison sentences for drug offenders and offenders with multiple felony convictions. Reform in New York began from the bottom up—from the local level upwards to the state level. Pioneering efforts by the Kings County (encompassing Brooklyn) District Attorney to divert convicted drug offenders to treatment programs in lieu of prison demonstrated the effectiveness of such efforts, opening the door to such experimentation in other boroughs of New York City and other counties throughout the state. In conjunction, the New York State Department of Corrections began to employ various population control measures that incentivized good behavior among inmates as well as participation in rehabilitative programming. To these changes in practice, Green and Mauer (2010) also note an important shift in policing priorities in New York City away from drug crime, with consequent reduction in drug arrests and prison admissions for drug offenses. The most salient and important reforms in New York involved moderating the 1970s Rockefeller drug laws. Legislation in 2003 partially relaxed these mandatory minimum sentencing practices; more-fundamental and far-reaching reforms passed in 2009 in conjunction with one another reduced the scope of crimes subject to mandatory minimum sentences, reduced the severity of such sentences, and greatly increased the discretion of judges in assigning sentences that are proportionate to the underlying offense. Between 1999 and 2012 incarceration in the state fell by roughly 26 percent. In 2012 the state's incarceration rate stood at 276 per 100,000, a rate comparable to that of the late 1980s.

In all four of these states—California, Michigan, New York, and Texas—crime rates in 2012 were near historic lows. Moreover, the periods of reform and prison reduction generally correspond to periods of declining crime rates in each for these four states.

## **B. CREATE INCENTIVES SO THAT COUNTY GOVERNMENTS HAVE SOME SKIN IN THE GAME**

We believe that, short of explicit changes to sentencing policy, states could achieve modest declines in incarceration and improve the efficiency with which prison beds are filled by better aligning the incentives faced by counties with the interests of the average taxpayer. Currently there is a fundamental disconnect between the incentives faced by counties across the country (the main administrative unit that generates prison admissions) and the incentives faced by state governments (the level of government that pays the bill for state prison systems). At the county level, a criminal offender is a nuisance local resident who, when convicted and sent off to state prison, becomes someone else's problem. The marginal cost of committing an additional inmate is effectively zero, whereas the marginal benefit in terms of criminal incapacitation and savings in policing and monitoring resources can only be positive. While the prison spell may generate substantial costs for the family and intimates of the convicted offender, and perhaps additional costs for the county when the individual is released from prison, these costs are effectively off the current

year's budget. Moreover, these costs likely receive less weight in the decision-making of local elected officials.

If counties were made to face some portion of the marginal costs generated by each prison admission, one might expect local officials to be more selective in who is sent to prison and for how long. In legal parlance, "wobblers" refer to offenses and offenders that can be charged either as misdemeanors or felonies, with only the latter eligible for prison time. With a positive marginal cost of sending someone to prison, wobblers may be more likely to be charged with a misdemeanor. Moreover, those offenders who appear to be wobbling, so to speak, between a sentence of probation and one of imprisonment, may be more likely to receive the probation sentence when the county either stands to lose (if faced with a tax) or gain (if presented with the prospect of sharing in the resultant cost-savings) from such a sentence.

The recent experience of California is illustrative of both the great heterogeneity across counties in their use of state prison systems as well as the existing leeway to bring down prison populations without generating a marked increase in crime by

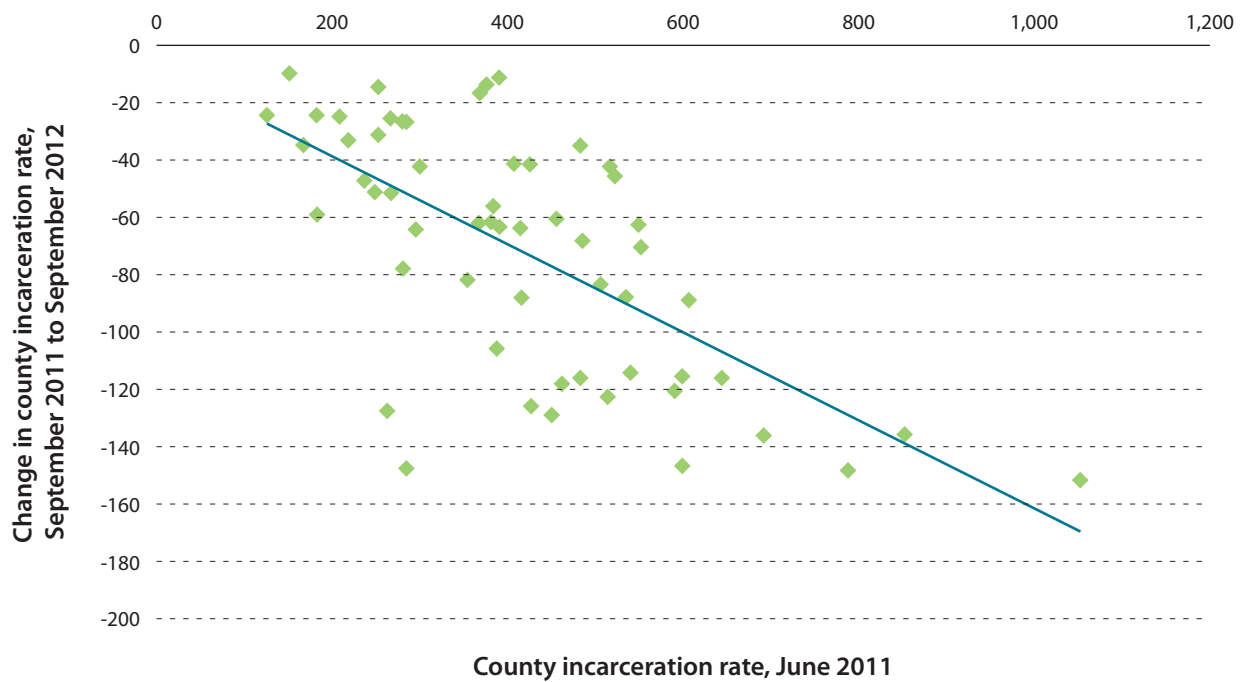
getting the incentives right. Recall, California’s reform stopped the practice of revoking parolees back to prison for technical violation and diverted other low-level offenders to serve their sentences in local jails or in some form of community-corrections-based alternative sanctions. Prior to the passage of this reform, the rate at which counties incarcerated their residents in state prison varied dramatically, from below 200 per 100,000 residents in counties such as San Francisco to above 800 and even 1,000 per 100,000 residents in counties in the state’s central valley. Figure 4 presents a scatter plot of the change in each county’s prison incarceration rate between September 2011 and September 2012 (the first year of the reform) against each county’s prereform incarceration rate in June 2011. The pattern in the figure is very clear: Those counties that experience the greatest reduction in their incarceration rates as a result of the reform are the counties with the highest prereform incarceration rates. Since the reform essentially scaled back the incarceration of low-level offenders, this is clear evidence that the high incarceration counties tend to punish low-level offenders with prison with relatively greater frequency.<sup>8</sup>

Aside from demonstrating room for decline, recent reforms in California have also demonstrated that counties can be quite responsive to both fiscal carrots and fiscal sticks. Reform to

the state’s juvenile justice system provides a vivid example of the latter. In 1996 the state legislature passed a bill that greatly increased the monthly costs for juvenile admissions to the California Youth Authority (CYA), the state agency that at the time ran state juvenile corrections facilities. Prior to this legislation, counties paid \$25 per month per CYA ward. Starting in 1997 the monthly payment increased to \$150 per month for serious offenders (with severity defined in terms of the commitment offenses). For less-serious offenders, counties were required to pay anywhere from 50 to 100 percent of the custody costs to the state. Subsequent legislation passed in 1998 capped the maximum annual per ward payment from the counties to \$31,200. Nonetheless, for all juvenile commitments, and especially for less-serious offenders, the increases in costs to counties created by the reform were substantial (CYA 2000).

Figure 5 displays annual admissions to CYA institutions, 1980–2009. A vertical line is drawn to indicate the last year (1996) preceding the increase in county costs for youth commitments. The results of the reform are self-evident. There is an immediate and sustained drop in admissions to CYA beginning in 1997. To be sure, there have been other reforms over the years that have reduced youth admissions and the youth inmate population further. Additional legislation

**FIGURE 4.**  
**Change in California’s County-Level Incarceration Rates from September 2011 to September 2012 against the County’s Incarceration Rate in June 2011**

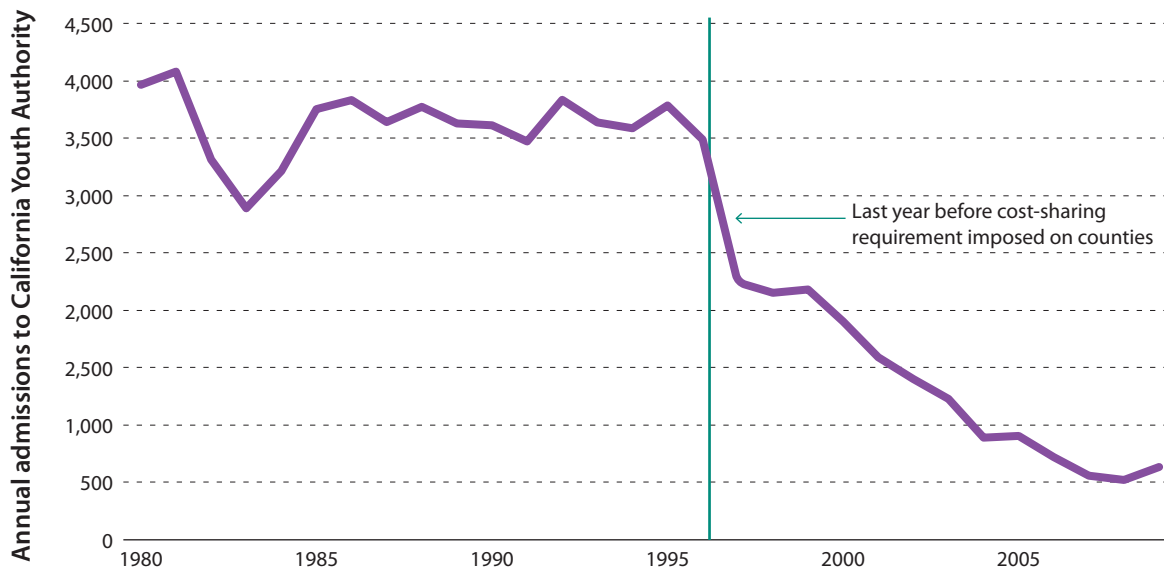


Source: Lofstrom and Raphael 2013b.



FIGURE 5.

## Annual Admission to California Youth Authority State Institutions, 1980 through 2009



Sources: California Department of Corrections and Rehabilitation 2002; Lofstrom and Raphael 2013b.



passed in 1996 facilitated the transfer to adult prisons of youth inmates who had been convicted in criminal court and who would not complete their sentences before the age of twenty-one. In addition, a state ballot initiative passed in 2000 increased the proportion of serious youth offenders tried in adult criminal courts, with those receiving lengthy sentences admitted directly into adult prisons. However, these provisions apply to a small proportion of convicted youth in the state, with the lion’s share of the declining admissions evident in figure 5 driven by the new costs of admissions faced by counties.

Evidence of responsiveness of counties to positive incentives can be found in the evaluation of the California Community Corrections Performance Incentives Act of 2009 (California Administrative Office of the Courts 2012). The Act creates mechanisms by which the state shares with the county any cost savings associated with reductions in incarceration driven by lower rates of probation failures. The county probation department must employ evidence-based community supervision practices and bring down probation failure rates and admission to prison below a benchmark rate measured for the three-year period preceding the legislation’s passage. In the three years since its implementation, probation failure rates have declined by 33 percent.

These policy examples suggest a reform option for reducing incarceration and fostering efficiency in the use of existing prison capacity. A change in policy that ensures that counties

have some “skin in the game” is likely to unleash efforts at the local level to be more sparing in the use of incarceration, especially for relatively low-risk offenders. Of course, one would not want to punish poorer counties with an intergovernmental finance structure that charges higher fees to areas with demographics and other local conditions that lead to higher crime rates. However, some creative thinking could certainly generate schemes that better target incentives regarding marginal cases, and perhaps combine an implicit tax on counties with a corresponding transfer that leaves county budgets whole while discouraging excessive admissions to the state prisons.

For example, the CYA fee structure in the example above nominally increased the cost for the most serious offenders—in other words, the state still picked up the tab for those committing the most serious offenses, where diversion to a nonincarceration punishment was simply out of the question. One could imagine a scheme that levied differential tax rates that increased as offense severity (and perhaps the severity of an offender’s criminal history) decreased, and that increased the levy for offenses where there is the greatest degree of cross-jurisdiction heterogeneity in the proportion of offenders sent to prison.

Alternatively, one could imagine a block grant combined with an incarceration tax. A state could transfer to each county a fixed amount of state funds for the purposes of criminal justice and safety expenditures to be allocated across potential

uses at the locality's discretion. The amount of the block grant could be conditioned on local population, crime rates, and demographics. Pairing the block grant with an annual tax for each person admitted from the county to the state prison system would create an incentive to use prison sparingly. In addition, the block grant structure does not alter the marginal cost of jail admission (i.e., the marginal cost of a local jail inmate would still be positive), because the intergovernmental grant is decoupled from the size of the local correctional population. Moreover, the additional resources in the block grant and the higher relative price of using prison admissions would create incentives for local officials to seek alternative policies that control crime while reducing prison admissions.

Another alternative strategy may assign a target incarceration rate to each county based on existing state prison capacity, past crime rates, age structure, and whatever other demographic characteristics are deemed important and legally and ethically appropriate, and permit use of the state prison system free of cost within some narrow band around the target. Counties

that come in sufficiently below the target could be rewarded with a grant for criminal justice expenditures that increases further in magnitude as the county comes in further below the target, while counties whose county-specific incarceration rates exceed their targets could be symmetrically taxed in proportion to how much they come in above the target. Such a strategy may be particularly effective at identifying the marginal low-risk offenders because counties that overuse the prison system the most relative to a defined benchmark would face the largest tax bill. In other words, achieved reduction in incarceration would be generated largely by reductions in incarceration for outlier counties that have unusually high incarceration rates.

There is much room for policy experimentation here. Currently, incentives are designed to generate too many admissions to prison. Moreover, local officials are quite sensitive to cost incentives. This type of incentive structure should be harnessed in fostering a more humane and cost-effective crime-control policy.



---

## Chapter 4: Questions and Concerns

---

**W**e are proposing to reduce the scale of incarceration through increasing the degree of discretion in state sentencing practice, through moderating sentences for less-serious offenses, and through changing the incentive structure faced by local county governments. We are not the first to suggest such changes. In fact, as box 1 on specific state experiences illustrates, several large states have already implemented such reforms and struggled with the attendant challenges.

In this section, we discuss some concerns that proponents of such a reform agenda are likely to encounter. In particular, we discuss the following three topics: First, wouldn't the proposed reforms return crime rates back to the high rates that existed during the 1990s? Second, is there an evidence base for alternative crime-control policies? Third, are the political constraints to such reforms insurmountable?

### WON'T THIS INCREASE CRIME?

Our discussion of the effectiveness of prison as a crime-control tool noted the strong evidence that the crime-fighting benefits of incarceration decline sharply with increase in scale. That being said, the research discussed does in general find that, all else held equal, increases in the nation's incarceration rate since the 1990s have had moderate per inmate effects on property crime. Here we perform some simple back-of-the-envelope calculations of what recent research suggests would happen to crime if we were to reduce incarceration by, say, 20 percent. We base these calculations on recent research on the crime effects of California's recent reduction in incarceration rates.

California's prison incarceration rate has declined from 425 per 100,000 to 356 per 100,000. Roughly one third of this decrease, however, was offset by an increase in the county jail population. Hence, this reform effectively reduced incarceration rates from roughly 425 to 379. Suppose we were to reduce the national incarceration rate from 480 to 379 per 100,000 (a decline of roughly 21 percent). This would reduce the national incarceration rate to the level in 1994.

In their analysis of California's realignment reform, Lofstrom and Raphael (2013b) present two principal sets of estimates of the crime effects of the reform based on cross-county differences in the effect of realignment on the county's

committed prison population. The first set does not control for time trends in crime common to all California counties and generally yields larger estimated crime effects. To be specific, these results imply that each prison year served for those offenders impacted by the reform prevented roughly one half a violent crime (more or less evenly split between robbery and aggravated assault) and 1.9 property crimes (evenly split between larceny and motor vehicle theft). Our preferred specification, however, controls for time trends common to all counties and finds that each prison year served prevents 1.2 auto thefts per year and has no measurable impact on violent crime. Neither set of estimates finds evidence of an effect on the most serious crimes of murder and rape.

Although we believe that the smaller set of estimates is closer to the true impact of the reform, here we present calculations of the impact of a 21 percent decline in the nation's incarceration rate based on both sets of estimates.<sup>9</sup> Hence, we provide what we believe to be upper- and lower-bound estimates of the effect of such a reduction on crime rates.

Applying the larger of the two sets of estimates predicts that a national decline in the incarceration rate of 101 per 100,000 would cause an increase in the violent crime rate of roughly 50 per 100,000 and an increase in the property crime rate of roughly 192 per 100,000. Applying the smaller estimates to such a decline predicts no increase in violent crime and an increase in property crime of 121 per 100,000.

To put these figures into perspective, note that between 1994 and 2012 the nation's violent crime rate fell from 713.6 to 386.9 per 100,000, while the nation's property crime rate fell from 4,660 to 2,859 per 100,000. The larger of the two sets of estimates implies that reducing the nation's incarceration rate to 1994 levels would increase the violent crime rate to 436.9 (amounting to a 13 percent increase relative to 2012). This hypothetical violent crime rate is two thirds that of 1994 and equals the nation's violent crime rate in 2009. Regarding property crime, the larger set of estimates imply an increase of 192 per 100,000, akin to a 7 percent increase in property crime over 2012 levels and which would still yield an overall rate of property crime substantially below 1994 levels (3,051 per 100,000 equal to 65 percent of the property crime rate in 1994). The smaller set of estimates predicts no increase in

violent crime and an increase in the overall property crime rate to 2,980 incidents per 100,000 (equal to 64 percent of the 1994 property crime rate).<sup>10</sup> Hence, even in the presence of such a change, violent and property crime rates would not return to the levels observed in the early to mid-1990s.

An alternative manner in which these crime impacts could be characterized is in terms of the dollar value of the crimes prevented per year of incarceration. Paul Heaton (2010) provides a summary of recent research on estimations of the economic costs of specific criminal incidents. We use the summary measures in this review to put a price on the costs associated with the increases in crime discussed here. The smaller set of estimates for how much lowering rates of incarceration increases rates of crime suggests that each prison year served generates roughly \$11,000 in benefits in terms of crimes prevented. The higher-end set of estimates suggests crime-prevention benefits on the order of \$48,000 per year.<sup>11</sup> Both figures are below average costs per inmate in California, and, given the court prohibition on capacity constraints, likely sufficiently below the marginal costs as well. This range incorporates a ratio of benefits relative to costs associated with incarceration that for other states, however, is likely both above and below one, depending on the state.

A full benefit–cost analysis, of course, would require that we account for the collateral and other social costs of incarceration not reflected in expenditures per inmate, which would certainly diminish the relative benefits from incarcerating these marginal offenders. Moreover, benefit–cost exercises do not account for the equity implications of alternative crime-control strategies. For example, might we be willing to accept slightly higher crime rates in exchange for a criminal justice system that did not bear down so hard on poor minority communities?

Of course, one can imagine a selective reduction in the incarceration rate that might yield even smaller or perhaps no effect on the national crime rate. For example, in light of diminishing crime-fighting returns to scale, reducing incarceration rates through reductions in jurisdictions with particularly high incarceration rates would minimize the effects on crime. For example, we have seen that in California, prior to realignment, county-specific incarceration across the state’s fifty-eight counties varied from below 200 per 100,000 in San Francisco to above 1,000 per 100,000 in Kings County. While demographics and underlying crime rates explain some of this variation, these large differences also appear to be attributable in part to interregional differences in ideology pertaining to crime and punishment (Lofstrom and Raphael 2013b). Reductions in incarceration that fall disproportionately on counties that overuse state prisons would likely result in the smallest effects on crime. A similar argument could be made for reductions in incarceration driven by declines in high incarceration states. Hence, the impacts on crime could

be further minimized by selective reduction in incarceration rates targeting jurisdictions (whether counties or states) with unusually high incarceration rates.

Of course, prison is not the only policy tool available for controlling crime. Cost savings generated by reduced prison populations could be reallocated toward other crime-fighting public interventions.

## IS THERE AN EVIDENCE BASE FOR ALTERNATIVE INTERVENTIONS?

Suppose that society wishes to maintain crime rates at or below a specified level and has at its disposal several policy options for doing so—for example, hiring more police, investing in early childhood education, incarcerating convicted criminals, and so on. Presumably, we would like to achieve our objective (a crime rate below the specified threshold) in the most efficient manner possible. That is to say, we would like to employ the mix of policy interventions that delivers our desired low crime rate at the lowest possible cost, where costs are broadly defined to include both the budgetary outlays and the social costs of our policy choices.

Our discussion of the crime–prison relationship noted the low returns in terms of crime prevention of increases in incarceration since the mid-1990s. Is there evidence that other interventions generate higher returns per dollar spent?

Perhaps the most obvious policy tool with the strongest research base regarding impacts on crime concerns the expansion of local police forces. There is considerable empirical evidence of the general effectiveness of higher police staffing levels on crime. Broad city-level analyses (Chalfin and McCrary 2013; Levitt 2002), studies that exploit temporary increases in policing (Di Tella and Schargrodsky 2004), studies analyzing surges in hiring associated with federal policy (Evans and Owens 2007), as well as high-frequency time-series analysis (Corman and Mocan 2000) consistently find relatively large effects of expanding a city’s police force on local crime rates. Paul Heaton (2010) estimates that the benefits in terms of reduced crime of hiring an additional police officer exceed \$300,000 per year in several cities, a figure substantially exceeding the annual cost of an additional officer. Chalfin and McCrary (2013) conservatively estimate that each dollar spent on policing generates \$1.60 worth of crime reduction.<sup>12</sup> While part of the benefits from expanding police forces most certainly derive from apprehending and incapacitating individuals who are highly criminally active, a more-consistent police presence is also likely to deter criminal activity, especially among those who may be transitionally passing through a high-offending age range, where a future life in crime is certainly not preordained. Hence, one can certainly envision an outcome where sentencing reforms geared toward reducing incarceration rates coupled with expanded policing

lead to lower incarceration rates, no increase or perhaps a decrease in crime, and no increase in public spending on crime control.

Aside from expanded policing, there is growing evidence that more-targeted and more-moderate use of incarceration can be as effective in preventing crime as, if not more effective than, a policy regime that relies on long sentences. For example, Hawaii's Opportunity Probation with Enforcement (HOPE) program entails the careful monitoring and frequent drug testing of those on probation coupled with targeted service provision for those with the most serious substance abuse problems. Those testing positive for drugs or missing an appointment are immediately arrested and forced to serve very short jail sentences (a few days to a week), with sanctions graduating upward for repeat violators. Expectations are clearly communicated to HOPE participants by a presiding judge, and the sanctions for violations are swift and certain. The predictability and certainty of the sanctions regime creates a high level of compliance among those on HOPE. A randomized-control evaluation found large reductions in the likelihood of a probation violation and much less incarceration among the treated (Hawken and Kleiman 2009). Based on Hawaii's experience, this approach to managing probationers has been adopted statewide in Washington, is being tested in four counties across the country, and has influenced sanctions and case management practices in community corrections programs nationwide.

### ARE POLITICAL CONSTRAINTS INSURMOUNTABLE?

Over the past three decades, political competition over crime and corrections policy has been quite one-sided. Elected officials of both parties have generally staked claims and reputations on being tough on crime, with each side often trying to outdo the other. The power of such a political strategy was fully on display in the 1988 presidential election, where the famous Republican political advertisement featuring

Willie Horton was thought by many to contribute to the loss of the Democratic candidate for president, Michael Dukakis. More recently, a potential Republican candidate for the California gubernatorial election announced his campaign on a stage with enlarged photographs of former inmates who had committed violent felonies after their release.

Historically, it has been much easier politically to be tough on crime than it has been to be deliberative and judicious. In fact, many believe that it is this asymmetric nature of the politicization of criminal justice policy that has led to the drastic changes in sentencing practices in the United States. This being said, one does sense a change in the political landscape surrounding corrections policy debate. In addition to open calls for reform from the political left, there are several prominent conservatives who have expressed support for corrections reform that deemphasizes the use of incarceration and enhances efforts to rehabilitate while still holding criminal offenders accountable for their actions.

This shift in politics is also evident in the results of several recent policy debates. California voters over the past decade have passed several state initiatives to scale back the use of incarceration, the most recent being an initiative that limited the application of "third strike" sentences to those convicted of the most serious felony offenses. Interestingly, this initiative passed with a majority in all fifty-eight counties of the state. At the federal level, the Fair Sentencing Act of 2010 amended the mandatory minimum sentences for drug offenses involving crack cocaine, reducing the crack-powder sentencing severity ratio from 100:1 to 18:1. The law passed in the Senate and House with bipartisan support. All of these reforms would have been unthinkable in the political climate of the 1990s.

While political barriers to sentencing reform are certainly present and formidable, there are several recent examples where calm and measured deliberations have led to substantial changes in sentencing policy.

---

## Chapter 5: Conclusion

---

In August 2013 Attorney General Eric Holder announced that U.S. Attorneys would no longer list drug quantities in cases where the accused is being tried for a federal drug crime (DOJ 2013b). By abstaining from listing specific quantities, prosecutors in federal cases essentially bypass the mandatory minimum sentences under federal law, permitting judges more liberty to graduate the sanction according to the severity of the offense. This change in sentencing policy was announced in a very public manner during a speech to the American Bar Association (DOJ 2013b). In addition to noting the budgetary and social costs associated with incarcerating low-level offenders, the Attorney General noted that many who are serving long sentences pose very little threat to society: “It’s clear—as we come together today—that too many Americans go to too many prisons for far too long, and for no truly good law enforcement reason. It’s clear, at a basic level, that twentieth-century criminal justice solutions are not adequate

to overcome our twenty-first-century challenges. And it is well past time to implement common sense changes that will foster safer communities from coast to coast.”

This quote from the top law enforcement official in the country signals an opportunity for a reevaluation of our approach to crime and corrections. Excessive incarceration is costly both in terms of explicit outlays and in terms of the socioeconomic consequences for the communities on whom the burden of our extraordinarily high incarceration rates disparately falls. There is momentum for reform both at the federal level and at the state level throughout the country. A systematic reassessment of our sentencing practices that is evidenced-based will generate benefits to many segments of society and hopefully usher in a more sensible approach to crime control in the United States.

---

# Authors

---

## Steven Raphael

*Goldman School of Public Policy, University of California, Berkeley*

Steven Raphael is a professor of public policy at the University of California, Berkeley. His research focuses on the economics of low-wage labor markets, housing, and the economics of crime and corrections. His most recent research focuses on the social consequences of the large increases in U.S. incarceration rates. Raphael also works on immigration policy, research questions pertaining to various aspects of racial inequality, the economics of labor unions, social insurance policies, homelessness, and low-income housing. Raphael is editor-in-chief of *Industrial Relations* and a research fellow at the University of Michigan National Poverty Center, the University of Chicago Crime Lab, the Public Policy Institute of California, and IZA, Bonn Germany. Raphael holds a Ph.D. in Economics from UC Berkeley.

## Michael A. Stoll

*Luskin School of Public Affairs, University of California, Los Angeles*

Michael A. Stoll is a professor and chair of public policy at the Luskin School of Public Affairs at the University of California, Los Angeles. He received a Ph.D. in Urban Planning from the Massachusetts Institute of Technology. His main research interests include the study of urban poverty and inequality (specifically the interplay of labor markets, race/ethnicity, geography and policy), and crime and prisons.

Dr. Stoll's published work includes an examination of the labor market difficulties of less-skilled workers, with a particular emphasis on urban economics and the economics of crime and discrimination. Currently, Dr. Stoll is working on major research projects that examine the labor market consequences of mass incarceration, the benefits and costs of the prison boom, the reasons for the prison boom in the United States, the impact of immigration on racial segregation, and the sources and consequences of the Great Recession on migration patterns in the United States.

# Acknowledgments

We thank Ben Harris, Melissa Kearney, Jens Ludwig, and Joe Sullivan for helpful comments and suggestions on earlier drafts of the paper and The Hamilton Project team for their assistance and professionalism during the production process.

---

# Endnotes

---

1. Early work on pure incapacitation effects reviewed in Spelman (1994, 2000) suggests that each incarcerated offender during the 1970s and 1980s prevented ten to twenty index felony crimes per year through incapacitation. This figure is quite close to estimates from panel data studies of the overall joint effects of general deterrence and incapacitation associated with changes in incarceration over those two decades (see Johnson and Raphael 2012), suggesting that most of the effect is operating through incapacitation. Owens (2009) provides a more-recent estimate of pure incapacitation that suggests that this effect has declined considerably in more-recent years (to one to two property crimes for the marginal offender per year of incarceration). Again, this is comparable in magnitude to more-recent estimates from panel data of the joint incapacitation/deterrence effect of prison (Johnson and Raphael 2012; Liedka, Piehl, and Useem 2006). Finally, the estimates discussed above from the Italian collective pardon provide a lower-bound pure incapacitation effect estimate because sentencing policy was not changed by this one-time release, pardoned inmates faced a sentence enhancement equal to their unserved time if they reoffend, and the probability of subsequent pardons in the foreseeable future diminished. Again, the average estimates for Italy are quite close to panel data estimates of the joint deterrence/incapacitation effects from panel data studies.
2. To be sure, the introduction of determinate sentencing, greater sentencing structure, and the legislative mandatory minimums was driven by general dissatisfaction from both the left and the right with regard to sentencing practices under pure indeterminate sentencing systems. Wilson (1975) provides a scathing critique of sentencing practices during the indeterminate sentencing era, and argues that the wide disparities between maximum and minimum sentences and the fact that many offenders ended up serving only a small fraction of the maximum sentence provided a poor deterrent effect and created real risks to public safety. On the other hand, concerns with regard to arbitrary and perhaps discriminatory practices by parole boards were perceived as creating horizontal inequities in the release decision that could not be justified based on risk or inmate behavior (Tonry 1996). We are not arguing that we should return completely to the highly unstructured sentencing practice of the past. Instead, we argue that some discretion should be restored to corrections authorities in a manner that would permit more-efficient use of prison space than is currently possible under highly rules-bound sentencing practices.
3. In a conversation that we had with a former corrections department chief for a state that has highly structured sentencing, the former official recounted a common problem that his system experienced with soon-to-be-released inmates. Because the release decision was largely decoupled from institutional misconduct, inmates with more time to serve often called on soon-to-be-released inmates to settle outstanding debts on their behalf. Often this debt settling took the form of the soon-to-be-released person physically attacking another inmate with whom the “shot caller” was in conflict. Correctional officers have to closely monitor near-releases for such behavior. A simpler alternative would be to condition release on behavior and eliminate the incentive for such arrangements.
4. In November 2012 California voters passed a ballot initiative that effectively narrowed the definition of a third strike, with the aim of reserving life sentences for those who commit serious offenses.
5. To make this point clear, we performed some simple simulations of the nation’s steady-state incarceration rate (the rate that eventually would be reached with time and stable sentencing practices) for 2005 using actual figures for prison admissions rates and parole failure rates for that year. Our simple simulation suggested that the nation’s steady-state incarceration rate stood at 553 per 100,000. To simulate the effects of a 10 and 20 percent decline in the crime rates, we reduced the prison admissions rates for new commitments by 10 and 20 percent and recalculated the steady-state incarceration rates. A 10 percent reduction in the crime rate generates a decline in the steady-state incarceration rate for this year to 526 per 100,000. A 20 percent reduction in crime rates reduces the steady-state incarceration rate to 499. While these declines in incarceration are indeed substantial, they are small relative to the scale of incarceration in the United States. Hence, even with appreciably lower crime rates relative to current levels, our sentencing practices would still yield a very high incarceration rate.
6. The details of these simulations are discussed in Raphael and Stoll (2013, chap. 3 and chap. 3 appendix). We use 1984 since this is the first year for which there is sufficient participation in the National Corrections Reporting Program to generate the underlying estimates of prison admission and time served for state prisons. Since these are key inputs into our simulation model, we cannot perform a similar exercise for an earlier year.
7. Our simulations focus on the effects of specific changes in sentencing policy on the nation’s state and federal prison incarceration rates. One might argue that for the purposes of assessing the contribution of different sentencing policies to the collateral consequences caused by the incarceration boom we should be focusing on the determinants of the proportion of the population that had ever been incarcerated rather than on the overall incarceration rate. Certainly, offense categories that receive relatively short prison sentences but that have experienced pronounced increases in admissions rates would be more important in explaining growth in the population of current and former inmates than in explaining growth in the incarceration rate. Hence, such an analysis would likely reveal an overwhelming role for tougher sentences for drug offenses.
8. In a regression analysis of prereform county incarceration rates in California, differences in crime rates explain very little of the cross-county variation in the use of the prison system. On the other hand, penal ideology as measured by the proportion of local voters supporting sentencing reform initiatives and local poverty rates are very strong predictors of county incarceration rates. This analysis suggests that relatively conservative counties with high poverty rates are the most likely to send their offenders to state prison in California, holding constant the effects of violent and property crime (Lofstrom and Raphael 2013b).
9. The authors prefer the estimates adjusting for time trends because there is evidence of higher violent crime in neighboring states in 2012 relative to 2011 and in Western states more generally. Moreover, the effect estimates for violent crime omitting controls for time trends are quite poorly measured and are generally sensitive to very small changes in specification. The results for auto theft, on the other hand, are quite robust, precisely measured, and comparable in sign, magnitude, and degree of statistical significance across various model specifications. In fact, the largest estimates for motor vehicle theft are those that adjust for state-level time trends. Here we use both to conservatively represent the range of possible estimated effects on crime.

10. An alternative manner of characterizing these predictions of effect size is in terms of the elasticity of crime with respect to a change of incarceration. The elasticity of crime with respect to incarceration is defined as the percent change in crime caused by a percent change in prison, and is a standard metric for comparing effect sizes across studies. The larger set of estimates predicts that a 21 percent decline in incarceration would cause an increase in violent crime of 15 percent and an increase in property crime of 7 percent, yielding elasticities for the two crime types of  $-0.7$  and  $-0.3$ . Such elasticities are much larger than those presented in Liedka, Piehl, and Useem (2006), who find elasticities close to zero in the incarceration rate range being analyzed here. The smaller set of

estimates implies a violent-crime prison elasticity of zero and a property-crime-prison elasticity of  $-0.2$ . The range of elasticity estimates from the two sets of calculations are largely consistent with the elasticity estimates in Johnson and Raphael (2012); Levitt (1996); Liedka, Piehl, and Useem (2006); and Raphael and Stoll (2013).

11. We use the average estimates of Heaton (2010) for the costs for specific crimes from three influential studies on the economic costs of crime. The specific values we employ are \$67,277 for a robbery, \$87,238 for an aggravated assault, \$2,139 for a larceny, and \$9,079 for a motor vehicle theft.
12. The authors employ estimates of the costs of crime from the low end of extant findings.

---

# References

---

- Bonczar, Thomas P. 2003, August 17. "Prevalence of Imprisonment in the U.S. Population, 1974–2001." Bureau of Justice Statistics Special Report, NCJ 197976, Bureau of Justice Statistics, Washington, DC. <http://www.bjs.gov/index.cfm?ty=pbdetail&iid=836>.
- Bucklen, Kristofer Bret, Nicolette Belle, and D. Lorraine Russell. 2014. "Recidivism Risk Reduction Incentive, 2014 Report." Pennsylvania Department of Corrections, Mechanicsburg, PA. [https://www.portal.state.pa.us/portal/server.pt/document/1396360/2014\\_rrri\\_report\\_pdf](https://www.portal.state.pa.us/portal/server.pt/document/1396360/2014_rrri_report_pdf).
- Buonanno, Paolo, and Steven Raphael. 2013. "Incarceration and Incapacitation: Evidence from the 2006 Italian Collective Pardon." *American Economic Review* 103 (6): 2437–65.
- Bureau of Justice Statistics (BJS). 2012, November. "Correctional Population in the United States, 2011." Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, Washington, DC. <http://www.bjs.gov/content/pub/pdf/cpus11.pdf>.
- . Various years. "National Prisoner Statistics (NPS)." Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, Washington, DC. <http://www.bjs.gov/index.cfm?ty=dcdetail&iid=269>.
- California Administrative Office of the Courts. 2012, July. "SB 678 Year 2 Report: Implementation of the California Community Corrections Performance Incentives Act of 2009." Criminal Justice Court Services Office, Community Corrections Program, California Administrative Office of the Courts, San Francisco. <http://www.courts.ca.gov/documents/SB678-Year-2-report.pdf>.
- California Community Corrections Performance Incentives Act of 2009. S.B. 678. <http://www.courts.ca.gov/documents/sb678.pdf>.
- California Department of Corrections and Rehabilitation. 2002. "Characteristics of First Admissions: 1959–2001." Division of Juvenile Justice, California Department of Corrections and Rehabilitation, Elk Grove, CA. [http://www.cdcr.ca.gov/reports\\_research/docs/research/charfa\\_59-01.pdf](http://www.cdcr.ca.gov/reports_research/docs/research/charfa_59-01.pdf).
- California Youth Authority (CYA). 2000. "Population and Facilities Management Master Plan 2001–2006." California Division of Juvenile Justice, California Department of Corrections and Rehabilitation, Sacramento. [http://www.cdcr.ca.gov/Reports\\_Research/docs/research/five\\_year.pdf](http://www.cdcr.ca.gov/Reports_Research/docs/research/five_year.pdf).
- Chalfin, Aaron, and Justin McCrary. 2013. "Are U.S. Cities Under-Policed? Theory and Evidence." Working Paper, University of California, Berkeley. [http://emlab.berkeley.edu/~jmccrary/chalfin\\_mccrary2013.pdf](http://emlab.berkeley.edu/~jmccrary/chalfin_mccrary2013.pdf).
- Corman, Hope, and H. Naci Mocan. 2000. "A Time-Series Analysis of Crime, Deterrence, and Drug Abuse in New York City." *American Economic Review* 90 (3): 584–604. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.90.3.584>.
- Di Tella, Rafael, and Ernesto Schargrodsky. 2004. "Do Police Reduce Crime? Estimates Using the Allocation of Police Forces after a Terrorist Attack." *American Economic Review* 94 (1): 115–33. <https://www.aeaweb.org/articles.php?doi=10.1257/000282804322970733>.
- Ditton, Paula M., and Doris J. Wilson. 1999. "Truth in Sentencing in State Prisons." Bureau of Justice Statistics Special Report NCJ 170032, Bureau of Justice Statistics, Washington, DC. <http://www.bjs.gov/content/pub/pdf/tssp.pdf>.
- Ellwood, John, and Joshua Guetzkow. 2009. "Footing the Bill: Causes and Budgetary Consequences of State Spending on Corrections." In *Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom*, edited by Steven Raphael and Michael Stoll, 208–38. New York: Russell Sage Foundation.
- Evans, William N., and Emily G. Owens. 2007. "COPS and Crime." *Journal of Public Economics* 91 (2): 181–201. <http://ideas.repec.org/a/eee/pubeco/v91y2007i1-2p181-201.html>.
- Fair Sentencing Act of 2010. Pub. L. No. 111-220. <http://www.gpo.gov/fdsys/pkg/PLAW-111publ220/pdf/PLAW-111publ220.pdf>.
- Green, Judith, and Mark Mauer. 2010. "Downscaling Prisons: Lessons from Four States." The Sentencing Project, Washington, DC. [http://www.sentencingproject.org/doc/publications/publications/inc\\_DownscalingPrisons2010.pdf](http://www.sentencingproject.org/doc/publications/publications/inc_DownscalingPrisons2010.pdf).
- Hawken, Angela, and Mark Kleiman. 2009. "Managing Drug Involved Probationers with Swift and Certain Sanctions: Evaluating Hawaii's HOPE." Final Report to U.S. Department of Justice Award # 2007-IJ-CX-0033, National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, Washington, DC. <https://www.ncjrs.gov/pdffiles1/nij/grants/229023.pdf>.
- Heaton, Paul. 2010. "Hidden in Plain Sight: What Cost-of-Crime Research Can Tell Us About Investing in Police." RAND Corporation, Santa Monica, CA. [http://www.rand.org/pubs/occasional\\_papers/OP279.html](http://www.rand.org/pubs/occasional_papers/OP279.html).
- Johnson, Rucker. 2009. "Ever-Increasing Levels of Parental Incarceration and the Consequences for Children." In *Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom*, edited by Steven Raphael and Michael Stoll, 177–206. New York: Russell Sage Foundation.



- Johnson, Rucker, and Steven Raphael. 2009. "The Effect of Male Incarceration Dynamics on AIDS Infection Rates among African-American Women and Men." *Journal of Law and Economics* 52 (2): 251–93. <http://gspp.berkeley.edu/research/selected-publications/the-effect-of-male-incarceration-dynamics-on-aids-infection-rates-among-afr>.
- . 2012. "How Much Crime Reduction Does the Marginal Prisoner Buy?" *Journal of Law and Economics* 55 (2): 275–310. <http://gspp.berkeley.edu/research/selected-publications/how-much-crime-reduction-does-the-marginal-prisoner-buy>.
- Kuziemko, Ilyana. 2013. "How Should Inmates Be Released from Prison? An Assessment of Parole versus Fixed Sentence Regimes." *Quarterly Journal of Economics* 128 (1): 371–424. <http://qje.oxfordjournals.org/content/128/1/371.full.pdf+html>.
- Levin, Marc. 2011a. "Unlocking the Key Elements of the Adult Corrections Budget." Policy Perspective, Texas Public Policy Foundation, Austin. <http://www.texaspolicy.com/center/effective-justice/reports/unlocking-key-elements-adult-corrections-budget>.
- . 2011b. "Adult Corrections Reform: Lower Crime, Lower Costs, The Texas Model." A Texas Public Policy Foundation Publication, Austin. <http://www.texaspolicy.com/center/effective-justice/reports/texas-model-adult-corrections-reform>.
- Levitt, Steven D. 1996. "The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Legislation." *Quarterly Journal of Economics* 111 (2): 319–51. <http://pricetheory.uchicago.edu/levitt/Papers/LevittTheEffectOfPrison1996.pdf>.
- . 2002. "Using Electoral Cycles in Police Hiring to Estimate the Effects of Police on Crime: Reply." *American Economic Review* 92 (4): 1244–50. <https://www.aeaweb.org/articles.php?doi=10.1257/00028280260344777>.
- Liedka, Raymond, Anne Morrison Piehl, and Bert Useem. 2006. "The Crime Control Effect of Incarceration: Does Scale Matter?" *Criminology and Public Policy* 5: 245–75. <http://onlinelibrary.wiley.com/doi/10.1111/j.1745-9133.2006.00376.x/abstract>.
- Lofstrom, Magnus, and Steven Raphael. 2013a. "Impact of Realignment on California Jail Populations." Public Policy Institute of California, San Francisco. [http://www.ppic.org/content/pubs/report/R\\_613MLR.pdf](http://www.ppic.org/content/pubs/report/R_613MLR.pdf).
- . 2013b. "Incarceration and Crime: Evidence from California's Public Safety Realignment." IZA Working Paper #7838, IZA, Bonn, Germany. <http://ftp.iza.org/dp7838.pdf>.
- Owens, Emily G. 2009. "More Time, Less Crime? Estimating the Incapacitative Effects of Sentence Enhancements." *Journal of Law and Economics* 52 (3): 551–79. <https://ecommons.library.cornell.edu/bitstream/1813/15104/2/Owens%2009%20pub%2001.pdf>.
- . 2011. "Truthiness in Punishment: The Far Reach of Truth-in-Sentencing Laws in State Courts." *Journal of Empirical Legal Studies: Judgment by the Numbers—Converting Qualitative to Quantitative Judgments in Law* 8 (S1): 239–61. <http://onlinelibrary.wiley.com/doi/10.1111/j.1740-1461.2011.01228.x/abstract>.
- Pager, Devah. 2007. *Marked: Race, Crime and Finding Work in an Era of Mass Incarceration*. Chicago: University of Chicago Press.
- Raphael, Steven. 2007. "Early Incarceration Spells and the Transition to Adulthood." In *The Price of Independence: The Economics of Early Adulthood*, edited by Sheldon Danziger and Cecilia Elena Rouse, 278–306. New York: Russell Sage Foundation.
- Raphael, Steven, and Michael Stoll. 2013. *Why Are So Many Americans in Prison?* New York: Russell Sage Foundation.
- Sabol, William J., Katherine J. Rosich, Kamala Mallik Kane, David Kirk, and Glenn Dubin. 2002. "Influences of Truth-in-Sentencing Reforms on Changes in States' Sentencing Practices and Prison Populations." Research Report, Justice Policy, Center, Urban Institute, Washington, DC. [http://www.urban.org/UploadedPDF/410470\\_FINALTISRpt.pdf](http://www.urban.org/UploadedPDF/410470_FINALTISRpt.pdf).
- Spelman, William. 1994. *Criminal Incapacitation*. New York: Plenum Press.
- . 2000. "The Limited Importance of Prison Expansion." In *The Crime Drop in America*, edited by Alfred Blumstein and Joel Wallman, 97–129. Cambridge: Cambridge University Press.
- Stemen, Don, Andres Rengifo, and James Wilson. 2006. "Of Fragmentation and Ferment: The Impact of State Sentencing Policies on Incarceration Rates, 1975–2002." National Institute of Justice, Washington, DC. <https://www.ncjrs.gov/pdffiles1/nij/grants/213003.pdf>.
- Stoll, Michael A., and Shawn Bushway. 2008. "The Effect of Criminal Background Checks on Hiring Ex-Offenders." *Criminology and Public Policy* 7 (3): 371–404. <http://onlinelibrary.wiley.com/doi/10.1111/j.1745-9133.2008.00516.x/abstract>.

- Tonry, Michael. 1996. *Sentencing Matters*. Oxford: Oxford University Press, New York.
- U.S. Department of Agriculture. 2014. "Supplemental Nutrition Assistance Program Participation and Costs." Accessed on April 6, 2014. Data last updated on April 4, 2014. <http://www.fns.usda.gov/pd/snapssummary.htm>.
- U.S. Department of Justice (DOJ). 2013a. "Smart on Crime: Reforming the Criminal Justice System for the 21st Century." <http://www.justice.gov/ag/smart-on-crime.pdf>, p. 2.
- . 2013b. "Attorney General Eric Holder Delivers Remarks at the Annual Meeting of the American Bar Association's House of Delegates." San Francisco, August 12. <http://www.justice.gov/iso/opa/ag/speeches/2013/ag-speech-130812.html>.
- Violent Crime Control and Law Enforcement Act of 1994. Pub. L. 103-322. <http://www.gpo.gov/fdsys/pkg/BILLS-103hr3355enr/pdf/BILLS-103hr3355enr.pdf>.
- Wakefield, Sara, and Christopher Wildeman. 2014. *Children of the Prison Boom: Mass Incarceration and the Future of American Inequality*. New York: Oxford University Press.
- Walmsley, Roy. 2013. "World Prison Population List (tenth edition)." International Centre for Prison Studies, University of Essex, UK. [http://www.prisonstudies.org/sites/prisonstudies.org/files/resources/downloads/wppl\\_10.pdf](http://www.prisonstudies.org/sites/prisonstudies.org/files/resources/downloads/wppl_10.pdf).
- Wilson, James Q. 1975. *Thinking About Crime*. New York: Basic Books.



## ADVISORY COUNCIL

GEORGE A. AKERLOF  
Koshland Professor of Economics  
University of California, Berkeley

ROGER C. ALTMAN  
Founder & Executive Chairman  
Evercore

ALAN S. BLINDER  
Gordon S. Rentschler Memorial Professor  
of Economics & Public Affairs  
Princeton University

JONATHAN COSLET  
Senior Partner & Chief Investment Officer  
TPG Capital, L.P.

ROBERT CUMBY  
Professor of Economics  
Georgetown University

JOHN DEUTCH  
Institute Professor  
Massachusetts Institute of Technology

CHRISTOPHER EDLEY, JR.  
Dean and Professor, Boalt School of Law  
University of California, Berkeley

BLAIR W. EFFRON  
Founding Partner  
Centerview Partners LLC

JUDY FEDER  
Professor & Former Dean  
Georgetown Public Policy Institute  
Georgetown University

ROLAND FRYER  
Robert M. Beren Professor of Economics  
Harvard University  
CEO, EdLabs

MARK T. GALLOGLY  
Cofounder & Managing Principal  
Centerbridge Partners

TED GAYER  
Vice President & Director  
of Economic Studies  
The Brookings Institution

TIMOTHY GEITHNER  
Former U.S. Treasury Secretary

RICHARD GEPHARDT  
President & Chief Executive Officer  
Gephardt Group Government Affairs

ROBERT GREENSTEIN  
President  
Center on Budget and Policy Priorities

MICHAEL GREENSTONE  
3M Professor of Environmental Economics  
Massachusetts Institute of Technology

GLENN H. HUTCHINS  
Co-Founder  
Silver Lake

JIM JOHNSON  
Chairman  
Johnson Capital Partners

LAWRENCE F. KATZ  
Elisabeth Allison Professor of Economics  
Harvard University

MARK MCKINNON  
Former Advisor to George W. Bush  
Co-Founder, No Labels

ERIC MINDICH  
Chief Executive Officer  
Eton Park Capital Management

SUZANNE NORA JOHNSON  
Former Vice Chairman  
Goldman Sachs Group, Inc.

PETER ORSZAG  
Vice Chairman of Global Banking  
Citigroup, Inc.

RICHARD PERRY  
Managing Partner & Chief Executive Officer  
Perry Capital

MEEGHAN PRUNTY EDELSTEIN  
Senior Advisor  
The Hamilton Project

ROBERT D. REISCHAUER  
Distinguished Institute Fellow and  
President Emeritus  
The Urban Institute

ALICE M. RIVLIN  
Senior Fellow, The Brookings Institution  
Professor of Public Policy  
Georgetown University

DAVID M. RUBENSTEIN  
Co-Founder & Co-Chief Executive Officer  
The Carlyle Group

ROBERT E. RUBIN  
Co-Chair, Council on Foreign Relations  
Former U.S. Treasury Secretary

LESLIE B. SAMUELS  
Senior Counsel  
Cleary Gottlieb Steen & Hamilton LLP

SHERYL SANDBERG  
Chief Operating Officer  
Facebook

RALPH L. SCHLOSSTEIN  
President & Chief Executive Officer  
Evercore

ERIC SCHMIDT  
Executive Chairman  
Google Inc.

ERIC SCHWARTZ  
76 West Holdings

THOMAS F. STEYER  
Business Leader & Investor

LAWRENCE SUMMERS  
Charles W. Eliot University Professor  
Harvard University

PETER THIEL  
Technology Entrepreneur, Investor,  
and Philanthropist

LAURA D'ANDREA TYSON  
S.K. and Angela Chan Professor of Global Man-  
agement, Haas School of Business  
University of California, Berkeley

---

MELISSA S. KEARNEY  
Director

## Highlights

In a new Hamilton Project discussion paper, Steven Raphael of the University of California, Berkeley and Michael Stoll of the University of California, Los Angeles offer innovative reforms to reduce incarceration without significantly increasing crime. These proposals would lower the fraction of the U.S. population behind bars while maintaining historically low rates of crime.

## The Proposal

### **Reduce the scope and severity of state truth-in-sentencing laws for low-risk inmates.**

Not all inmates have the same probability of committing a crime once they are released, and the social cost of crimes committed varies considerably. Yet truth-in-sentencing laws prevent parole boards, which evidence suggests are effective at discriminating between high- and low-risk inmates, from releasing those who are least dangerous and less likely to offend again.

### **Rework—and in some cases even abandon—mandatory minimum sentencing policies at state and federal levels.**

Mandatory minimums impose sentences that are disproportionately harsh for certain individuals and constrain the ability of judges to assign appropriate sentences. Limiting the role of mandatory minimum sentences would allow for better targeting in the justice system.

### **Create fiscal incentives for local governments to consider the cost of incarceration.**

Local governments are largely responsible for generating prison admissions, but bear little of the cost of housing convicted criminals in a state prison. If local governments paid some of the cost of incarceration or were rewarded for more-selective incarceration policies, they would be incentivized to more-selectively choose between prison and alternatives to incarceration. Such an arrangement can benefit both state and local governments.

## Benefits

Incarcerating nonviolent criminals for low-level offenses can impose high costs on taxpayers, former inmates, the families of the incarcerated, and the communities and local economies from which they come. At the same time, the incarceration of low-level criminals has little or no impact on crime rates. By enacting policies that use prison beds more efficiently and send only those who pose genuine threats to society behind bars, these reforms limit the social and economic costs of incarceration while maintaining historically low rates of crime.



1775 Massachusetts Ave., NW  
Washington, DC 20036

(202) 797-6484

BROOKINGS



Printed on recycled paper.

[WWW.HAMILTONPROJECT.ORG](http://WWW.HAMILTONPROJECT.ORG)