

COLORADO'S LICENSURE RULES REDUCE EMPLOYMENT PROSPECTS FOR THOSE WITH CRIMINAL RECORDS

Matthew D. Mitchell, PhD

Director and Senior Research Fellow, Equal Liberty Initiative, Mercatus Center at George Mason University

Colorado House Finance Committee

February 28, 2022

Chair Bird, Vice Chair Snyder, and distinguished members of the committee:

My name is Matthew Mitchell. I am an economist at the Mercatus Center at George Mason University. For several years now, my colleagues and I have been studying occupational licensure and its effects on consumer prices, public health and safety, and the employment prospects of particular populations. As part of that project, my colleague Liya Palagashvili and I recently wrote a policy brief titled “Economic Freedom in the Period of Invisible Punishment: Occupational and Business Licensing Barriers That Restrict Access to Work for Those with Criminal Records.”¹ I hope you find this brief helpful as you debate the merits of easing occupational licensure restrictions for those with criminal records, and I have appended it to my testimony.

The US incarceration rate is far higher than that of other Western nations, but even this rate understates the deleterious effect of the current criminal justice framework on ordinary Americans.

At 629 incarcerated persons per 100,000 residents, the United States locks up more of its citizens than any other country that faithfully reports its data (China, Eritrea, North Korea, and Somalia do not faithfully report their data).² The US incarceration rate is higher than that of Rwanda (580 per 100,000), Turkmenistan (576), El Salvador (564), and Cuba (510); and it dwarfs the incarceration rates of other Western nations such as the United Kingdom (133), Canada (104), Greece (103), and Germany (71).

The US incarceration rate dramatically *understates* the consequences of the US approach to criminal justice. Once an American steps outside of jail, he or she enters a period of “invisible punishment” in which governments deny him or her basic civil and economic liberties.³ Of particular concern for those

1. Matthew D. Mitchell and Liya Palagashvili, “Economic Freedom in the Period of Invisible Punishment: Occupational and Business Licensing Barriers That Restrict Access to Work for Those with Criminal Records” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, January 2022).

2. Helen Fair and Roy Walmsley, *World Prison Population List*, 13th ed. (London: Institute for Crime and Justice Policy Research, 2021), table 2.

3. Jeremy Travis, *But They All Come Back: Facing the Challenges of Prisoner Reentry* (Washington, DC: Urban Institute, 2005); Michelle Alexander, *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*, 10th anniversary ed. (New York: New Press, 2020).

hoping to reenter the workforce is that those with prior convictions can be denied a license to work in the profession of their choosing or denied a license to start a business in the field of their choosing.⁴

In Colorado state law, there are 247 limitations on “occupational and professional licensure and certification” and another 213 limitations on “business licensure and participation” for those with prior offenses.⁵ For example, any misdemeanor conviction is sufficient grounds for a Colorado board to indefinitely deny, suspend, or revoke a license to operate a feedlot,⁶ and a controlled substances offense is sufficient grounds for a Colorado board to indefinitely deny, suspend, or revoke a landscape architecture license.⁷ And any felony is sufficient to allow a board to indefinitely deny, suspend, or revoke a license to be an electrician.⁸

Figure 1 shows the types of offenses for which Colorado boards may bar business or occupational licensure. It shows, for example, that there are 253 ways that a business or occupational license may be denied for any felony. Colorado imposes more restrictions for those found guilty of misdemeanors and substance abuse crimes than for those found guilty of violent or sexual offenses.

FIGURE 1. NUMBER OF LICENSURE BANS IN COLORADO BY TYPE OF OFFENSE



Source: National Inventory of Collateral Consequences of Conviction (database), accessed February 10, 2022, <https://niccc.nationalreentryresourcecenter.org/consequences>.

This problem is compounded by the fact that, although a small minority of Americans are currently incarcerated at any particular time, large numbers of Americans have had contact with the criminal

4. In 31 states, boards may deny a license to anyone who has been arrested, even if the arrest did not result in a conviction. In 33 states, boards may deny a license because of a prior offense even when the offense is unrelated to the profession for which an individual is seeking a license. Colorado is not among these states. See Nick Sibilla, *Barred from Working: A Nationwide Study of Occupational Licensing Barriers for Ex-offenders* (Arlington, VA: Institute for Justice, 2021).

5. National Inventory of Collateral Consequences of Conviction (database), accessed February 2, 2022, <https://niccc.nationalreentryresourcecenter.org/consequences>.

6. COLO. REV. STAT. § 35-53.5-112 (2021).

7. COLO. REV. STAT. § 12-45-114 (2021).

8. COLO. REV. STAT. § 12-23-118 (2021).

justice system. About 66 million Americans have criminal records.⁹ Extrapolating to Colorado, this means that some 1.2 million Coloradoans have a criminal record and may potentially be denied a license to work or to start a business in the state.

These limitations on economic freedom explain, in part, the considerable evidence that the mark of a criminal record reduces employment prospects.¹⁰ Beyond the staggering personal costs for those with criminal records, occupational and business licensing barriers can have negative consequences for states at large because obtaining a job is one of the most important ways that formerly incarcerated individuals can get their lives back in order and avoid returning to prison.¹¹

To add insult to injury, the evidence is not at all clear that licensure protects the public. In theory, licensure might protect the public by weeding out incompetent workers, or “bad apples.” But licensure might undermine public safety by limiting competition and driving some consumers to avoid purchasing services altogether (or to perform services themselves, as has been shown with stringent licensure of electricians).¹² In figure 2 I present a survey of the empirical work on licensure and quality. Most studies find that licensure has either mixed, unclear, or neutral effects on quality. Interestingly, however, more studies find a negative effect of licensure on quality than find a positive effect. To my knowledge, no one has yet studied whether licensure prevents fraud or theft by keeping people with criminal histories from working.

Economic theory unambiguously predicts that licensure raises prices—and indeed, that is what the data show. In a Mercatus assessment of 19 peer-reviewed studies, my colleagues and I find that licensure is associated with higher prices in all 19.¹³ Reviewing many of the same studies, Obama administration officials similarly conclude that the association between licensing and higher prices is “unequivocal.”¹⁴ The effects of these increased prices are not trivial. For example, state nurse practitioner licensing is estimated to increase the price of a well-child checkup by 3 to 16 percent,¹⁵ dental hygienist and dental assistant licensing is estimated to increase the price of a dental visit by 7 to 11 percent,¹⁶ and optometry licensing is estimated to increase the price of eye care by 5 to 13 percent.¹⁷ What’s more, none of these studies find that licensing increases quality.

9. Terry-Ann Craigie, Ames Grawert, and Cameron Kimble, *Conviction, Imprisonment, and Lost Earnings: How Involvement with the Criminal Justice System Deepens Inequality* (New York: Brennan Center for Justice at New York University School of Law, 2020), 7, table 1.

10. Robert Apel and Gary Sweeten, “The Impact of Incarceration on Employment during the Transition to Adulthood,” *Social Problems* 57, no. 3 (2010): 448–79; Christopher Uggen et al., “The Edge of Stigma: An Experimental Audit of the Effects of Low-Level Criminal Records on Employment,” *Criminology* 52, no. 4 (2014): 627–54; Devah Pager, “The Mark of a Criminal Record,” *American Journal of Sociology* 108, no. 5 (2003): 937–75; Devah Pager, Bruce Western, and Bart Bonikowski, “Discrimination in a Low-Wage Labor Market: A Field Experiment,” *American Sociological Review* 74, no. 5 (2009): 777–99.

11. See notes 29–33 in the appended policy brief.

12. Sidney L. Carroll and Robert J. Gaston, “Occupational Restrictions and the Quality of Service Received: Some Evidence,” *Southern Economic Journal* 47, no. 4 (1981): 959–76.

13. Patrick A. McLaughlin, Matthew D. Mitchell, and Anne Philpot, “The Effects of Occupational Licensure on Competition, Consumers, and the Workforce” (Mercatus on Policy, Mercatus Center at George Mason University, Arlington, VA, November 2017), 5.

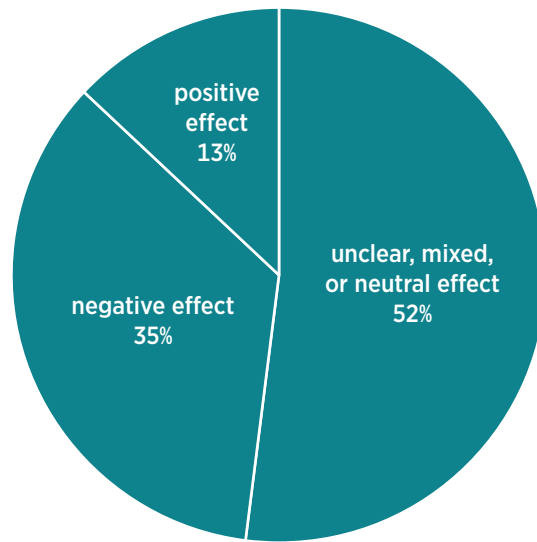
14. US Department of the Treasury, Council of Economic Advisers, and US Department of Labor, *Occupational Licensing: A Framework for Policymakers*, July 2015, 14.

15. Morris M. Kleiner et al., “Relaxing Occupational Licensing Requirements: Analyzing Wages and Prices for a Medical Service” (NBER Working Paper No. 19906, National Bureau of Economic Research, Cambridge, MA, February 2014).

16. Federal Trade Commission, *Restrictions on Dental Auxiliaries: An Economic Policy Analysis*, 1987.

17. Deborah Haas-Wilson, “The Effect of Commercial Practice Restrictions: The Case of Optometry,” *Journal of Law and Economics* 29, no. 1 (1986): 165–68.

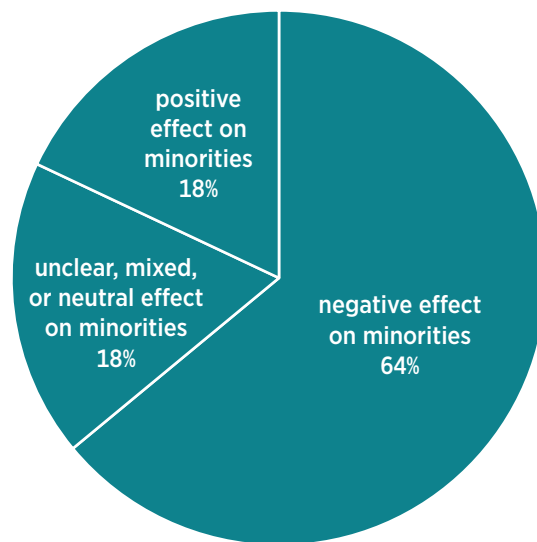
FIGURE 2. STUDIES ASSESSING THE EFFECT OF OCCUPATIONAL LICENSURE ON QUALITY



Source: Author's calculations. See the appendix for a full list of sources on occupational licensure and quality.

Licensure also seems to have a disparate impact on certain populations. As shown in figure 3, 64 percent of the studies that assess the effect of licensure on minorities have found that it has a negative effect. The remaining studies are split evenly between finding a positive effect on minorities or a mixed, neutral, or unclear effect.

FIGURE 3. STUDIES ASSESSING THE EFFECT OF OCCUPATIONAL LICENSURE ON MINORITIES



Source: Author's calculations. See the appendix for a full list of sources on the effects of occupational licensure on minorities.

In the attached policy brief, we outline several simple reforms that states can pursue to address this problem. Colorado has already taken some of these steps (for example, the state prohibits boards from using arrest records or sealed or expunged records, and the state allows boards to deny a license on the basis of a criminal record only if the applicant's crime is relevant to the occupation for which a license is being sought).¹⁸

Colorado occupational licensing law has three main problems remaining, though:

- It does not prevent agencies from using vague standards such as good moral character or moral turpitude in assessing an applicant's qualifications.
- It does not require boards to issue a predetermination letter, which alerts applicants that their prior convictions may jeopardize their license.
- It does not permit applicants to appeal determinations.

HB 22-1098 would remedy the last two of these problems, continuing the good work that has already been done to ease some of the burdens imposed during the period of invisible punishment.

I hope that this information is helpful. Please know that I would be happy to answer any questions you might have about the research or about the experiences of other states.

ATTACHMENT

"Economic Freedom in the Period of Invisible Punishment: Occupational and Business Licensing Barriers That Restrict Access to Work for Those with Criminal Records" (Mercatus Policy Brief)

18. Palagashvili and I also detail more ambitious reforms that will address the broader problem, including enactment of clean-slate, expungement, or rehabilitation certificate laws; reform of negligent hiring laws; and passage of broader criminal justice reforms.

APPENDIX

SOURCES FOR FIGURE 2

Positive Effect:

Arlene Holen, *The Economics of Dental Licensing* (Washington, DC: Public Research Institute, Center for Naval Analysis, 1978); Roger Feldman and James W. Begun, “The Effects of Advertising: Lessons from Optometry,” *Journal of Human Resources* 13 supplement (1978): 247–62; Samuel Claude Martin, “An Examination of the Economic Side Effects of the State Licensing of Pharmacists” (PhD diss., University of Tennessee, 1982); Bradley Larsen, “Occupational Licensing and Quality: Distributional and Heterogeneous Effects in the Teaching Profession” (working paper, 2015); D. Mark Anderson et al., “The Effect of Occupational Licensing on Consumer Welfare: Early Midwifery Laws and Maternal Mortality” (NBER Working Paper No. 22456, National Bureau of Economic Research, Cambridge, MA, July 2016).

Unclear, Mixed, or Neutral Effect:

Kathryn Healey, “The Effect of Licensure on Clinical Laboratory Effectiveness” (PhD diss., University of California, Los Angeles, 1973); John J. Phelan, *Regulation of the Television Repair Industry in Louisiana and California: A Case Study* (Washington, DC: Federal Trade Commission, 1974); John F. Cady, *Restricted Advertising and Competition: The Case of Retail Drugs* (Washington, DC: American Enterprise Institute, 1976); Robert J. Thornton and Andrew R. Weintraub, “Licensing in the Barbering Profession,” *Industrial and Labor Relations Review* 32, no. 2 (1979): 242–49; Ronald Bond et al., *Effects of Restrictions of Advertising and Commercial Practice in the Professions: The Case of Optometry* (Washington, DC: Federal Trade Commission, 1980); Chris Paul, “Physician Licensure Legislation and the Quality of Medical Care,” *Atlantic Economic Journal* 12, no. 4 (1984): 18–30; S. David Young, “Accounting Licensure, Quality, and the ‘Cadillac Effect,’” *Journal of Accounting and Public Policy* 5, no. 1 (1986): 5–19; S. David Young, *The Rule of Experts: Occupational Licensing in America* (Washington, DC: Cato Institute, 1987); Morris M. Kleiner and Daniel L. Petree, “Unionizing and Licensing of Public School Teachers: Impact on Wages and Educational Output,” in *When Public Sector Workers Unionize*, ed. Richard B. Freeman and Casey Ichniowski (Chicago: University of Chicago Press, 1988), 305–19; Tim R. Sass and Mark W. Nichols, “Scope-of-Practice Regulation: Physician Control and the Wages of Non-Physician Health-Care Professionals,” *Journal of Regulatory Economics* 9, no. 1 (1996): 61–81; Dan D. Goldhaber and Dominic J. Brewer, “Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement,” *Educational Evaluation and Policy Analysis* 22, no. 2 (2000): 129–45; Morris M. Kleiner and Robert T. Kudrle, “Does Regulation Affect Economic Outcomes? The Case of Dentistry,” *Journal of Law and Economics* 43, no. 2 (2000): 547–82; David Blau, “Unintended Consequences of Child Care Regulations,” *Labour Economics* 14, no. 3 (2007): 513–38; Joshua D. Angrist and Jonathan Guryan, “Does Teacher Testing Raise Teacher Quality? Evidence from State Certification Requirements,” *Economics of Education Review* 27, no. 5 (2008): 483–503; Thomas J. Kane, Jonah E. Rockoff, and Douglas O. Staiger, “What Does Certification Tell Us about Teacher Effectiveness? Evidence from New York City,” *Economics of Education Review* 27, no. 6 (2008): 615–31; Thomas J. Kane and Douglas O. Staiger, “Estimating Teacher Impacts on Student Achievement: An Experimental Evaluation” (NBER Working Paper No. 14607, National Bureau of Economic Research, Cambridge, MA, December 2008); Benjamin Powell and Evgeny Vorotnikov, “Real Estate Continuing Education: Rent Seeking or Improvement in Service Quality?,” *Eastern Economic Journal* 38, no. 1 (2012): 57–73; Dick M. Carpenter II, “Testing the Utility of Licensing: Evidence from a Field Experiment on Occupational Regulation,” *Journal of Applied Business and Economics* 13, no. 2 (2012): 28–41; Mark A. Klee, “How Do Professional Licensing Regulations Affect Practitioners? New Evidence” (working paper no. SEHSD-2013-30, Census Bureau, Washington, DC, June 2013); Morris M. Kleiner et al., “Relaxing Occupational Licensing Requirements: Analyzing Wages and Prices for a Medical Service,” *Journal of Law and Economics* 59, no. 2 (2016): 261–91; John M. Barrios, “Occupational

Licensing and Accountant Quality: Evidence from the 150-Hour Rule” (working paper no. 2018-32, Becker Friedman Institute for Economics at the University of Chicago, Chicago, IL, May 2018).

Negative Effect:

Sidney L. Carroll and Robert J. Gaston, “Occupational Licensing: Final Report” (NTIS No. NSF/FA7704140, National Science Foundation, Alexandria, VA, 1977); Timothy J. Muris and Fred S. McChesney, “Advertising and the Price and Quality of Legal Services: The Case for Legal Clinics,” *American Bar Foundation Research Journal* 4, no. 1 (1979): 179–207; Sidney L. Carroll and Robert J. Gaston, “State Occupational Licensing Provisions and Quality of Services Received: The Real Estate Business,” *Research in Law and Economics* 1 (1979): 1–14; Alex R. Maurizi, “The Impact of Regulation on Quality: The Case of California Contractors,” in *Occupational Licensure and Regulation*, ed. Simon Rottenberg (Washington, DC: AEI Press, 1980), 26–35; Sidney L. Carroll and Robert J. Gaston, “Occupational Restrictions and the Quality of Service Received: Some Evidence,” *Southern Economic Journal* 47, no. 4 (1981): 959–76; Sidney Carroll L. and Robert J. Gaston, “Barriers of Occupational Licensing of Veterinarians and the Incidence of Animal Diseases,” *Agricultural Economic Research* 30 (1978): 37–39; John E. Kwoka, “Advertising and the Price and Quality of Optometric Services,” *American Economic Review* 74, no. 1 (1984): 211–16; Mark C. Berger and Eugenia F. Toma, “Variation in State Education Policies and Effects on Student Performance,” *Journal of Policy Analysis and Management* 13, no. 3 (1994): 477; Catherine Schaumans and Frank Verboven, “Entry and Regulation: Evidence from Health Care Professions,” *RAND Journal of Economics* 39, no. 4 (2008): 949–72; Morris M. Kleiner and Richard M. Todd, “Mortgage Broker Regulations That Matter: Analyzing Earnings, Employment, and Outcomes for Consumers,” in *Studies of Labor Market Intermediation*, ed. David H. Autor (Chicago: University of Chicago Press, 2009), 183–231; Beth Redbird, “The New Closed Shop? The Economic and Structural Effects of Occupational Licensure,” *American Sociological Review* 82, no. 3 (2017): 600–624; Kristen R. Choi et al., “The Relationship of Nursing Practice Laws to Suicide and Homicide Rates: A Longitudinal Analysis of US States from 2012 to 2016,” *BMC Health Services Research* 20, no. 1 (2020): 1–9; Chiara Farronato et al., “Consumer Protection in an Online World: An Analysis of Occupational Licensing” (NBER Working Paper No. 26601, National Bureau of Economic Research, Cambridge, MA, January 2020); Darwyn Deyo, “Testing Licensing and Consumer Satisfaction for Beauty Services,” in *Grease or Sand? Occupational Licensing, Efficiency, and Service Quality across Nations*, ed. Morris M. Kleiner and Maria Koumenta (forthcoming).

SOURCES FOR FIGURE 3

Positive Effect on Minorities:

Peter Q. Blair and Bobby W. Chung, “Job Market Signaling Through Occupational Licensing” (NBER Working Paper No. 24791, National Bureau of Economic Research, Cambridge, MA, July 2018); Beth Redbird, “The New Closed Shop?”

Unclear, Mixed, or Neutral Effect on Minorities:

Marc T. Law and Mindy S. Marks, “Effects of Occupational Licensing Laws on Minorities: Evidence from the Progressive Era,” *Journal of Law and Economics* 52, no. 2 (2009): 351–66; Peter Q. Blair and Bobby W. Chung, “How Much of Barrier to Entry is Occupational Licensing?,” *British Journal of Industrial Relations* 57, no. 4 (2019): 919–43.

Negative Effect on Minorities:

Stuart Dorsey, “The Occupational Licensing Queue,” *Journal of Human Resources* 15, no. 3 (1980): 424–34; Maya N. Federman, David E. Harrington, and Kathy J. Krynski, “The Impact of State Licensing Regulations on Low-Skilled Immigrants: The Case of Vietnamese Manicurists,” *American Economic Review* 96, no. 2 (2006): 237–41; Joshua D. Angrist and Jonathan Guryan, “Does Teacher Testing Raise Teacher Quality? Evidence from State Certification Requirements,” *Economics of Education Review* 27, no. 5 (2008): 483–503; David E. Harrington and Jaret Treber, *Designed to Exclude: How Interior Design*

Insiders Use Government Power to Exclude Minorities and Burden Consumers (Arlington, VA: Institute for Justice, February 2009); Alison Cathles, David E. Harrington, and Kathy Krynski, “The Gender Gap in Funeral Directors: Burying Women with Ready-to-Embalm Laws,” *British Journal of Industrial Relations* 48, no. 4 (2010): 688–705; Daniel B. Klein, Benjamin Powell, and Evgeny S. Vorotnikov, “Was Occupational Licensing Good for Minorities? A Critique of Marc Law and Mindy Marks,” *Econ Journal Watch* 9, no. 3 (2012): 210–33; Jonathan V. Hall et al., “Occupational Licensing of Uber Drivers” (paper presentation, Allied Social Sciences Association 2018 Annual Meeting, Philadelphia, PA, 2018).



Economic Freedom in the Period of Invisible Punishment: Occupational and Business Licensing Barriers That Restrict Access to Work for Those with Criminal Records

Matthew D. Mitchell and Liya Palagashvili

January 2022

In the United States, once people have been convicted of a crime—or, in many cases, even arrested for a crime—those people are marked for life in a way that allows states to deny them the right to earn a living in the profession of their choosing. Instead of preparing those who have made mistakes for a productive return to society, the criminal justice system prepares them for a life of unemployment, underemployment, dependency, and, in many cases, stints in and out of jail.

Occupational and business licensing barriers are obviously harmful for those with criminal records and play a role in rates of recidivism. They also have wider adverse social consequences because

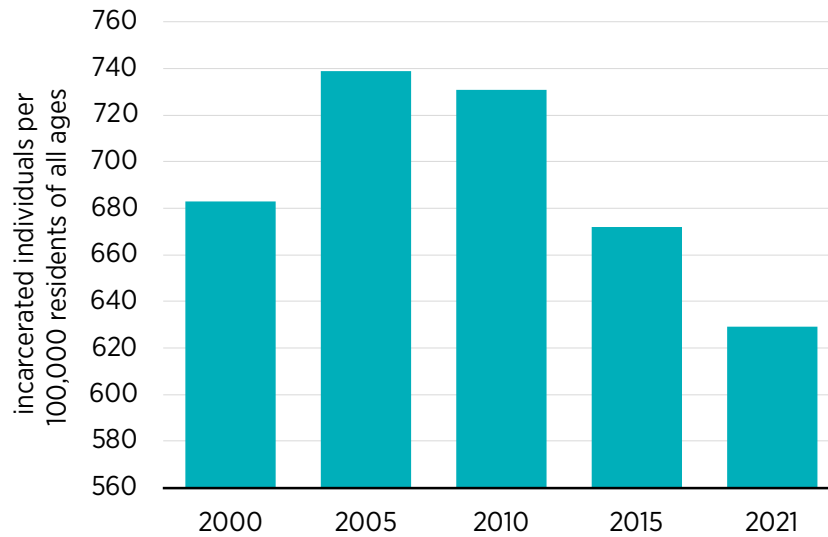
- in general, obtaining a job and staying employed is the most important way for formerly incarcerated individuals to pursue productive lives and experience a lower rate of recidivism;
- states with stricter occupational licensing requirements have higher rates of recidivism among those with criminal histories; and
- areas that have better employment and job opportunities tend to experience lower crime rates.

Modest, as well as more ambitious, reforms to occupational and business licensing can yield large returns by helping individuals with a criminal record pursue work opportunities that put them on a path toward productive reentry into society.

THE US INCARCERATION RATE

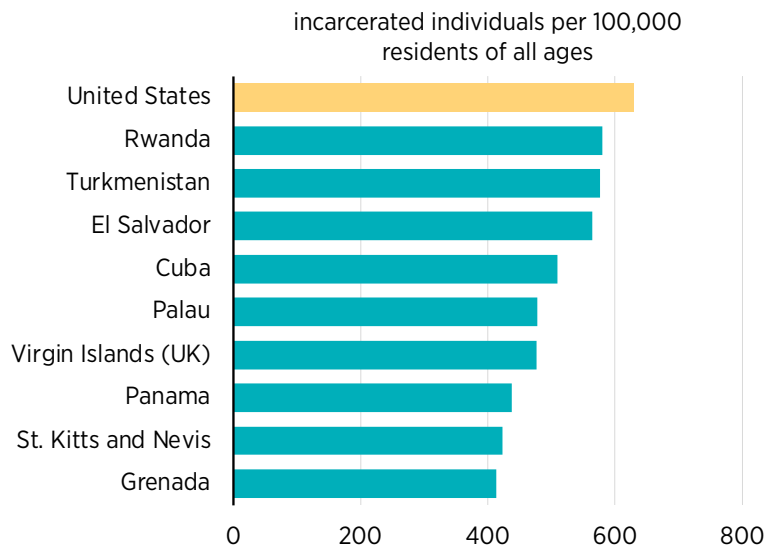
For much of US history, the incarceration rate held steady at about 100 individuals per 100,000 residents. Then, beginning around 1970, the incarceration rate rose precipitously and continued to rise for the next three-and-a-half decades. That growth has tapered off over the past 15 years, so now there are about 629 incarcerated persons per 100,000 residents of all ages (see figure 1).¹

Figure 1. US Incarceration Rate



Source: Helen Fair and Roy Walmsley, *World Prison Population List*, 13th ed. (London: Institute for Crime and Justice Policy Research, 2021), table 2.

Figure 2. Top 10 Incarceration Rates, October 2021



Source: Fair and Walmsley, *World Prison Population List*, table 2.

Figure 3. Incarceration Rates in Select Western Countries, October 2021



Source: Fair and Walmsley, *World Prison Population List*, table 2.

Still, the US incarceration rate is among the highest in the world. Among those countries that faithfully report their data, the United States incarcerates a higher share of its population than any other.² Figure 2 shows the highest reported incarceration rates in the world, and figure 3 compares the US incarceration rate to that of select Western countries.

THE “MARK” OF A CRIMINAL RECORD

In many ways the incarceration rate—the share of the population in prison or jail at any one time—dramatically understates the effect of the criminal justice system on the population, because once one steps outside of a jail cell, he or she enters what Jeremy Travis of the Urban Institute calls the “period of invisible punishment.”³ As Michelle Alexander explains in her book *The New Jim Crow*, this term

is meant to describe the unique set of criminal sanctions that are imposed on individuals after they step outside the prison gates, a form of punishment that operates largely outside of public view and takes effect outside the traditional sentencing framework. These sanctions are imposed by operation of law rather than decisions of a sentencing judge, yet they often have a greater impact on one’s life course than the months or years one actually spends behind bars.⁴

These sanctions include voting restrictions, limits on jury service, limits on government assistance, limits on immigration and travel, and—of particular concern for those attempting to reenter the workforce—limits on economic liberty.⁵

The National Inventory of Collateral Consequences of Conviction, a database maintained by the American Bar Association and funded by the US Department of Justice, keeps tabs on these consequences. It reports that, nationwide, there are more than 16,000 limitations on “occupational and professional licensure and certification” for those who have been convicted of a crime.⁶ In addition, there are nearly 13,000 limitations on “business licensure and participation” for those with convictions.⁷ Taken together, there are over 25,000 barriers to employment for those who have been convicted of crimes (owing to overlap, it is not valid to simply add the occupational and business licensing burdens to arrive at a total).⁸

For example, in Wisconsin, any felony conviction will automatically and indefinitely disqualify an aspiring barber from obtaining a barber’s license.⁹ Similarly, in the District of Columbia, a controlled substance offense gives the licensing board the discretion to indefinitely deny an applicant a general contractor’s license.¹⁰

These limitations on economic freedom explain, in part, the considerable evidence that the mark of a criminal record reduces employment prospects. Those who have had contact with the criminal justice system are less likely to search for work.¹¹ Contingent on searching for work, they are less likely to obtain a job.¹² If they do obtain a job, they are less likely to retain it. And if they do retain it, they are less likely to work full time and are likely to earn less.¹³

The problem is compounded by the fact that, although a small minority of Americans are incarcerated at any particular point in time, a staggeringly large share of Americans have been arrested or convicted of a crime at one point in their lives. According to a report from the Brennan Center for Justice, in 2017 there were 7.7 million formerly imprisoned people in the United States.¹⁴ Another 12.1 million had been convicted of felonies but did not serve time in prison,¹⁵ and another 46.8 million people had been convicted of misdemeanors.¹⁶ Thus, in total, about 66 million Americans—more than one in five—had a criminal record in 2017.¹⁷ Michelle Alexander notes that, unlike the currently incarcerated population, a large majority of those that have had contact with the criminal justice system are nonviolent offenders.¹⁸ More than three-quarters of those on community supervision, for example, were convicted of nonviolent crimes.¹⁹

HOW WIDESPREAD ARE BUSINESS AND OCCUPATIONAL LICENSING RESTRICTIONS FOR THE CRIMINAL JUSTICE POPULATION?

States can bar workers with a criminal record from obtaining a license to work or start a business in two main ways. One way used by many states is a blanket ban, which is a provision that specifically denies a license to applicants who have a criminal conviction. Another way is a provision that requires the applicant to have a “good moral character” or to lack “moral turpitude” in order to obtain the license, which gives licensing agencies broad discretion to reject individuals who have been arrested, even if those individuals were never convicted.²⁰ This justification can be

used by licensing agencies because having a criminal record can serve as sufficient evidence that an individual lacks good character.²¹ Sometimes these blanket bans or good-character provisions apply even when an applicant’s offense is long in the past or when the crime was unrelated to the profession for which the applicant seeks a license.

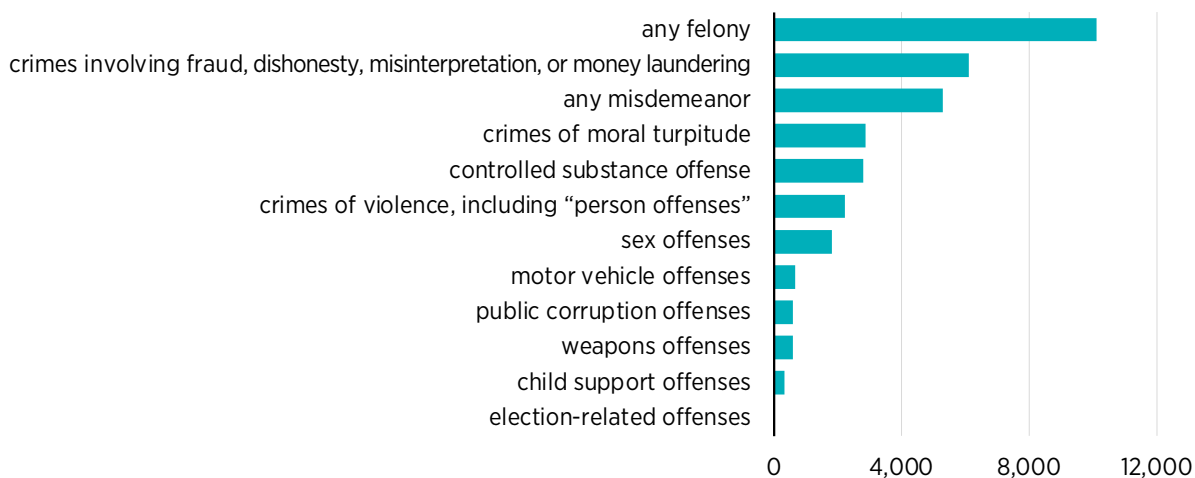
Although these bans can be time limited or conditional, some 16,000 limitations on licensure are indefinite, and nearly 9,000 restrictions specify a “mandatory disqualification,” meaning that licensing agencies are required to reject the license application.²²

Figure 4 shows the types of offenses for which states bar business or occupational licensure. It shows, for example, that there are 10,160 restrictions on occupational and business licensure for individuals found guilty of a felony. Moreover, it shows that states impose more restrictions for those found guilty of misdemeanors and substance abuse crimes than for those found guilty of violent or sexual offenses.

According to a 2020 Institute for Justice report, which provides a state-by-state account of occupational licensing barriers for those with a criminal record, many states today still lack basic protections for ex-offenders who are seeking a license to work.²³ Figure 5 summarizes some of the types of restrictions for ex-offenders and their prevalence across states.

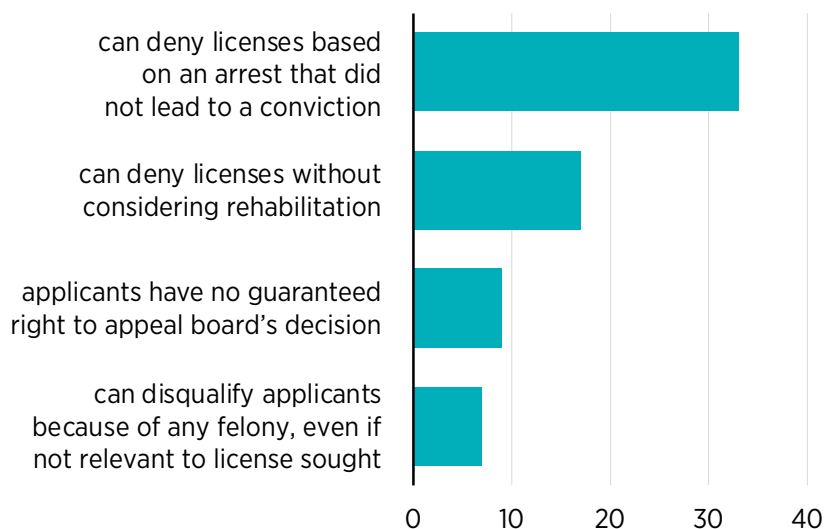
As highlighted in the Institute for Justice report, more than half of US states (33 states) can deny licenses to applicants solely on the basis of arrests, even if an arrest did not lead to a criminal conviction, which means that “boards can refuse to issue a license even though the applicant is functionally innocent.”²⁴

Figure 4. Number of Licensure Bans in the United States by Type of Offense



Source: National Inventory of Collateral Consequences of Conviction (database), accessed January 5, 2022, <https://niccc.nationalreentryresourcecenter.org/consequences>.

Figure 5. Number of States with Common Types of Occupational Licensing Restrictions



Source: Nick Sibilla, *Barred from Working: A Nationwide Study of Occupational Licensing Barriers for Ex-offenders* (Arlington, VA: Institute for Justice, 2020).

WHAT IS THE RELATIONSHIP BETWEEN OCCUPATIONAL LICENSING RESTRICTIONS AND RECIDIVISM AND CRIME?

A 2016 study by Stephen Slivinski examines occupational licensing restrictions, including the good-character provisions, across US states from 1997 to 2007. The study finds that, compared with those states with the lowest occupational licensing barriers and no good-character provisions, those states with the heaviest occupational licensing barriers experienced higher average increases in three-year, new-crime recidivism rates.²⁵ Indeed, states with the highest occupational licensing barriers saw recidivism rates increase by more than 9.0 percent, whereas states with the lowest occupational licensing barriers saw recidivism rates decline by 2.5 percent.

Slivinski's report complements a large body of research that finds more generally that employment (and earnings) are a significant ingredient in reducing recidivism among the criminal justice population.²⁶ For example, a 2018 study examines the availability of local jobs in California and finds that better job opportunities in low-skilled industries (such as construction and manufacturing) are associated with lower recidivism rates.²⁷ A 2020 study also finds that better job opportunities (and media coverage of job creation) in manufacturing reduces recidivism among former inmates.²⁸ The finding that access to jobs is key to lowering recidivism is consistent across different areas, years, and types of study. One paper concludes, for example, that Black ex-prisoners in Florida being released into counties with lower Black unemployment rates have a decreased likelihood of recidivism.²⁹

One sees similar findings in reports that follow specific individuals. For instance, criminologists studied a cohort of 6,561 ex-offenders for five years after release and found that ex-offenders

who found employment were significantly less likely to recidivate, regardless of the type of offense committed.³⁰

More generally, the research consensus is that better job opportunities, wages, and employment also keep crime rates lower.³¹ Even modest improvements in job access can substantially reduce crime, especially drug crime within inner-city neighborhoods.³² By contrast, more local unemployment is associated with more total crime and more of some specific subcategories of crime, such as burglary, car theft, and bike theft.³³

Taken together, there is substantial evidence that successful entry into the labor force for the criminal justice population is a key determinant for lowering recidivism and crime rates. By restricting access to work, occupational licensing for those with criminal histories can thwart the ability of these individuals to reenter the formal economy.

REFORMS

Although the US incarceration rate is among the highest in the world, it understates the full economic and personal impact of the US criminal justice system because a period of invisible punishment that begins once one is released from jail or prison ensures, as Jeremy Travis puts it, that “one’s debt to society is never paid.”³⁴ The restrictions on economic freedom that so often accompany conviction or even arrest cast a long shadow over the lives of those who have been convicted or arrested, limiting those individuals’ ability to work and contribute to society.

Beyond the staggering personal costs for those with criminal records, occupational and business licensing barriers can have negative consequences for states at large because obtaining a job is one of the most important ways that formerly incarcerated individuals can get their lives back in order and avoid returning to prison.

In summary, these occupational licensing restrictions can be counterproductive for states because the restrictions may lead those with criminal records back into unemployment and incarceration.³⁵ States should consider reforming government-imposed barriers that prevent an individual with a criminal record from reintegrating into the labor force and pursuing an honest living.

State reforms of occupational licensing restrictions for those with a criminal record can begin by targeting three basic, low-hanging-fruit solutions:³⁶

- Prohibit agencies from considering arrest records.
- Prohibit agencies from considering old convictions or expunged records.
- Prevent agencies from using vague standards such as good moral character or moral turpitude.

Beyond these simple licensing reforms, state policymakers could consider more ambitious criminal justice reforms, such as the following:

- *Clean slate, expungement, or rehabilitation certificate laws.* A number of states have taken steps to wipe individuals' criminal records clean after specific conditions have been met (for example, by staying crime free for 10 years). Michigan, Pennsylvania, and Utah, for instance, have adopted some form of clean slate law or expungement law.³⁷ Clean slate laws seal criminal records, which means that the vast majority of employers, schools, landlords, and members of the general public do not have access to those records.³⁸ Expungement of a criminal record differs in that the record is destroyed rather than sealed. Because records are sealed or expunged when individuals have been generally crime free, these laws may not carry the same unintended consequences as ban-the-box policies, which restrict employer access to criminal records of any potential applicant. Ban-the-box policies have been criticized for unintentionally harming racial minorities through statistical discrimination,³⁹ but we would not expect similar unintended consequences with clean slate or expungement laws. Moreover, rehabilitation certificate laws can also be effective. Although they do not seal or destroy criminal records, they do give individuals an opportunity to obtain a court order declaring that they have been a law-abiding citizen since they were convicted of a crime. Individuals who obtain a rehabilitation certificate send a signal to employers that they are ready for work, trustworthy, and should be deemed less risky for safety or liability reasons. Some preliminary evidence seems to indicate that these types of initiatives (clean slate, expungement, and rehabilitation certificates) are promising solutions for formerly incarcerated individuals.⁴⁰
- *Reforming negligent hiring laws.* Several studies find that employers are hesitant to hire individuals with a criminal record.⁴¹ One reason that employers, especially small ones, may be hesitant is that the existing legal system can hold employers liable for actions of their employees when the employer knew or should have known about employees' potential risks. Thus, if a formerly incarcerated individual harms another employee or a third party, the employer could be held liable under negligent hiring laws. These negligent hiring lawsuits have large liability costs and thus make it risky and costly to hire individuals with a criminal record. Some states have already passed laws to reduce the liability of employers for hiring individuals with a criminal record.⁴²
- *Broader criminal justice reforms.* State policymakers could consider a number of broader criminal justice reforms. Although addressing each of these is beyond the scope of this policy brief, there is no shortage of promising proposals, including decriminalization of victimless crimes such as drug crimes,⁴³ elimination of qualified immunity for police officers,⁴⁴ reforms to encourage more jury trials and fewer coerced plea bargains,⁴⁵ and relaxation of sentencing guidelines.⁴⁶

Government policies that bar individuals who have had contact with the criminal justice system from access to work encourage poorer outcomes for these individuals and reinforce the narrative

of economic inequality. Even modest reforms in this area can help workers pursue job opportunities and move on a path to a better future.

ABOUT THE AUTHORS

Matthew D. Mitchell is a senior research fellow and director of the Equity Initiative at the Mercatus Center at George Mason University. In his writing and research, he specializes in public choice economics and the economics of government favoritism toward particular businesses, industries, and occupations. Mitchell received his PhD and MA in economics from George Mason University and his BA in political science and BS in economics from Arizona State University.

Liya Palagashvili is a senior research fellow at the Mercatus Center at George Mason University and formerly an assistant professor of economics at State University of New York–Purchase College.

NOTES

1. Note that this number is considerably higher than that reported by the US Department of Justice Bureau of Justice Statistics. According to the latter, the number is 358 per 100,000. The discrepancy appears to arise from the fact that the Bureau of Justice Statistics reports only sentenced prisoners (so it ignores those in pretrial detention) and those prisoners with a sentence of more than one year. For more details see E. Ann Carson, *Prisoners in 2020—Statistical Tables* (Washington, DC: US Department of Justice, 2021), 1.
2. Data for Eritrea, North Korea, and Somalia are not available, and those for China are incomplete because they exclude pretrial detention and other forms of detention. For example, they exclude more than 1 million Uighur Muslims detained in camps in Xinjiang province.
3. Jeremy Travis, *But They All Come Back: Facing the Challenges of Prisoner Reentry* (Washington, DC: Urban Institute, 2005).
4. Michelle Alexander, *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*, 10th anniversary ed. (New York: New Press, 2020).
5. These postconviction penalties have a long history. According to Michelle Alexander, the American colonies barred those convicted of crimes from “a wide variety of jobs and benefits, automatically dissolving their marriages and denying them the right to enter contracts.” Alexander, *The New Jim Crow*, 232.
6. National Inventory of Collateral Consequences of Conviction (database), accessed January 5, 2022, <https://niccc.nationalreentryresourcecenter.org/consequences>.
7. National Inventory of Collateral Consequences of Conviction (database).
8. National Inventory of Collateral Consequences of Conviction (database).
9. Wis. STAT. § 454.23 (2021).
10. D.C. Mun. Regs. tit. 17, § 3908 (2009).
11. Naomi F. Sugie, “Work as Foraging: A Smartphone Study of Job Search and Employment after Prison,” *American Journal of Sociology* 123, no. 5 (2018): 1453–91; Sandra Susan Smith and Nora Broege, “Searching for Work with a Criminal Record,” *Social Problems* 67, no. 2 (2020): 208–32.
12. Robert Apel and Gary Sweeten, “The Impact of Incarceration on Employment during the Transition to Adulthood,” *Social Problems* 57, no. 3 (2010): 448–79; Christopher Uggen et al., “The Edge of Stigma: An Experimental Audit of the Effects of

- Low-Level Criminal Records on Employment,” *Criminology* 52, no. 4 (2014): 627–54; Devah Pager, “The Mark of a Criminal Record,” *American Journal of Sociology* 108, no. 5 (2003): 937–75; Devah Pager, Bruce Western, and Bart Bonikowski, “Discrimination in a Low-Wage Labor Market: A Field Experiment,” *American Sociological Review* 74, no. 5 (2009): 777–99.
13. Bruce Western, “The Impact of Incarceration on Wage Mobility and Inequality,” *American Sociological Review* 67, no. 4 (2002): 526–46; Joel Waldfogel, “Does Conviction Have a Persistent Effect on Income and Employment?,” *International Review of Law and Economics* 14, no. 1 (1994): 103–19; Becky Pettit and Christopher J. Lyons, “Status and the Stigma of Incarceration: The Labor Market Effects of Incarceration by Race, Class, and Criminal Involvement,” in *Barriers to Reentry? The Labor Market for Released Prisoners in Post-Industrial America*, ed. Shawn Bushway, Michael A. Stoll, and David F. Weiman (New York: Russell Sage Foundation, 2007).
 14. Terry-Ann Craigie, Ames Grawert, and Cameron Kimble, *Conviction, Imprisonment, and Lost Earnings: How Involvement with the Criminal Justice System Deepens Inequality* (New York: Brennan Center for Justice at New York University School of Law, 2020), 7, table 1.
 15. Craigie, Grawert, and Kimble, *Conviction, Imprisonment, and Lost Earnings*, 7, table 1.
 16. Craigie, Grawert, and Kimble, 7, table 1.
 17. Craigie, Grawert, and Kimble, 7, table 1.
 18. Violent offenders serve longer sentences than nonviolent offenders, so although a majority of currently incarcerated individuals are serving time for violent offenses, a majority of those who have had contact with the criminal justice systems are nonviolent offenders. Alexander, *The New Jim Crow*, xviii–xxv.
 19. Pew Charitable Trusts, *Probation and Parole Systems Marked by High Stakes, Missed Opportunities*, September 2018, 1.
 20. Bruce E. May, “The Character Component of Occupational Licensing Laws: A Continuing Barrier to the Ex-felon’s Employment Opportunities,” *North Dakota Law Review* 71, no. 1 (1995): 194.
 21. May, “The Character Component of Occupational Licensing Laws,” 187–210.
 22. National Inventory of Collateral Consequences of Conviction (database).
 23. Nick Sibilla, *Barred from Working: A Nationwide Study of Occupational Licensing Barriers for Ex-offenders* (Arlington, VA: Institute for Justice, 2020).
 24. Sibilla, *Barred from Working*, 1.
 25. Stephen Slivinski, “Turning Shackles into Bootstraps: Why Occupational Licensing Reform Is the Missing Piece of Criminal Justice Reform” (Policy Report no. 2016-01, Center for the Study of Economic Liberty at Arizona State University, Tempe, AZ, November 7, 2016).
 26. Crystal Yang, “Local Labor Markets and Criminal Recidivism,” *Journal of Public Economics* 147 (2017): 16–29; Paul E. Bellair and Brian R. Kowalski, “Low-Skill Employment Opportunity and African American–White Difference in Recidivism,” *Journal of Research in Crime and Delinquency* 48, no. 2 (2011): 176–208; Kevin T. Schnepel, “Good Jobs and Recidivism,” *Economic Journal* 128, no. 608 (2018): 447–69; Roberto Galbiati, Aurélie Ouss, and Arnaud Philippe, “Jobs, News and Reoffending after Incarceration,” *Economic Journal* 131, no. 633 (2020): 247–70.
 27. Schnepel, “Good Jobs and Recidivism.”
 28. Galbiati, Ouss, Philippe, “Jobs, News and Reoffending after Incarceration.”
 29. Xia Wang, Daniel P. Mears, and William D. Bales, “Race-Specific Employment Contexts and Recidivism,” *Criminology* 48, no. (4): 1171–211.
 30. John M. Nally et al., “Post-Release Recidivism and Employment among Different Types of Released Offenders: A 5-Year Follow-Up Study in the United States,” *International Journal of Criminal Justice Sciences* 9, no. 1 (2014): 16–34.
 31. Eric Gould and Bruce Weinberg, “Crime Rates and Local Labor Market Opportunities in the United States: 1979–1995,” *Review of Economics and Statistics* 84, no. 1 (2002): 45–61; Joanne M. Doyle, Ehsan Ahmed, and Robert N. Horn, “The

- Effects of Labor Markets and Income Inequality on Crime: Evidence from Panel Data,” *Southern Economic Journal* 65, no. 4 (1999): 717–38; Stephan Machin and Costas Meghir, “Crime and Economic Incentives,” *Journal of Human Resources* 39, no. 4 (2004): 958–79; Naci H. Mocan and Bulent Unel, “Skill-Biased Technological Change, Earnings of Unskilled Workers, and Crime” (NBER Working Paper No. 17605, National Bureau of Economic Research, Cambridge, MA, November 2011); Karin Edmark, “Unemployment and Crime: Is There a Connection?,” *Scandinavian Journal of Economics* 107, no. 2 (2005): 353–73; Denis Fougère, Francis Kramarz, and Julien Pouget, “Youth Unemployment and Crime in France,” *Journal of the European Economic Association* 7, no. 5 (2009): 909–38; Ming-Jen Lin, “Does Unemployment Increase Crime? Evidence from U.S. Data 1974–2000,” *Journal of Human Resources* 43, no. 2 (2008): 413–36; H. Naci Mocan and Daniel I. Rees, “Economic Conditions, Deterrence and Juvenile Crime: Evidence from Micro Data,” *American Law and Economics Review* 7, no. 2 (2005): 319–49; Anna Öster and Jonas Agell, “Crime and Unemployment in Turbulent Times,” *Journal of the European Economic Association* 5, no. 4 (2007): 752–77.
32. Keith R. Ihlanfeldt, “Neighborhood Drug Crime and Young Males’ Job Accessibility,” *Review of Economics and Statistics* 89, no. 1 (2007): 151–64.
 33. Kerry Papps and Rainer Winkelmann, “Unemployment and Crime: New Evidence for an Old Question,” *New Zealand Economic Papers* 34, no. 1 (2000): 53–72; Edmark, “Unemployment and Crime”; Fougère, Kramarz, and Pouget, “Youth Unemployment and Crime in France.”
 34. Travis, *But They All Come Back*, 73.
 35. Some research finds that, although occupational licensing limits opportunities for those with a criminal record, it can benefit young Black or Hispanic men *without* criminal records because it can serve to signal noncriminality. However, if the goal of a state is to help young Black or Hispanic men without a criminal record, then occupational licensing is hardly the most effective way to achieve this aim. It is an extraordinarily costly signal, and far more promising policy proposals such as clean slate laws, expungement laws, and rehabilitation certificates exist to help this demographic group. We plan to discuss this issue in greater detail in a forthcoming paper.
 36. For more types of solutions and reform recommendations for each specific state, see Sibilla, *Barred from Working*.
 37. See, for example, “Utah,” Clean Slate Initiative, accessed January 5, 2022, <https://www.cleanslateinitiative.org/state/utah>; “Pennsylvania,” Clean Slate Initiative, accessed January 5, 2022, <https://www.cleanslateinitiative.org/state/pennsylvania-2>; “Michigan,” Clean Slate Initiative, accessed January 5, 2022, <https://www.cleanslateinitiative.org/state/michigan>.
 38. Sealed records can still be accessed by law enforcement agencies, by employers who are required by federal law to consider the sealed records, or by employers who use FBI background checks.
 39. If employers believe that certain populations are more likely to have committed crimes, then they may statistically discriminate against these groups when they are unable to look up individual records. Jennifer L. Doleac and Benjamin Hansen, “The Unintended Consequences of ‘Ban the Box’: Statistical Discrimination and Employment Outcomes When Criminal Histories Are Hidden,” *Journal of Labor Economics* 38, no. 2 (2020): 321–74; Naomi F. Sugie, “Criminal Record Questions, Statistical Discrimination, and Equity in a ‘Ban the Box’ Era,” *Criminology and Public Policy* 16, no. 1 (2017): 167–76; Amanda Agan and Sonja Starr, “The Effect of Criminal Records on Access to Employment,” *American Economic Review: Papers and Proceedings* 107, no. 5 (2017): 560–64.
 40. J. J. Prescott and Sonja Starr, “The Power of a Clean Slate,” *Regulation* 43, no. 2 (2020): 28–34.
 41. Pager, “The Mark of a Criminal Record”; Pager, Western, and Bonikowski, “Discrimination in a Low-Wage Labor Market”; Uggen et al., “The Edge of Stigma”; Harry J. Holzer, Steven Raphael, and Michael A. Stoll, “Will Employers Hire Former Offenders? Employer Preferences, Background Checks, and Their Determinants,” in *Imprisoning America: The Social Effects of Mass Incarceration*, ed. Mary Patillo, David Weiman, and Bruce Western (New York: Russell Sage, 2004), 205; Harry J. Holzer, Steven Raphael, and Michael A. Stoll, “Perceived Criminality, Criminal Background Checks, and the Racial Hiring Practices of Employers,” *Journal of Law and Economics* 49, no. 2 (2006): 451–80.
 42. Michelle Natividad Rodriguez, Elizabeth Farid, and Nicole Porter, *State Reforms Promoting Employment of People with Criminal Records: 2010–11 Legislative Round-Up* (New York and Washington, DC: National Employment Law Project, National H.I.R.E. Network, and Sentencing Project, 2011).

43. Douglas Husak, *Overcriminalization: The Limits of the Criminal Law* (New York: Oxford University Press, 2009); Harvey Silverglate, *Three Felonies a Day: How the Feds Target the Innocent* (New York: Encounter Books, 2011).
44. Joanna Schwartz, “The Case against Qualified Immunity,” *Notre Dame Law Review* 93, no. 5 (2018): 1797–1851.
45. Clark Neily, “The Jury Is Out—and That’s a Problem: The Key to Combatting Mass Incarceration Is Ending Plea-Driven Mass Adjudication,” *Libertarian-Progressive Papers*, November 29, 2021.
46. James Cullen, *Sentencing Laws and How They Contribute to Mass Incarceration* (New York: Brennan Center for Justice at New York University, 2018).