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# The State of Occupational Licensing

Research, State Policies and Trends

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**OCCUPATIONAL LICENSING: ASSESSING STATE POLICY AND PRACTICE**

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# I. Introduction

Occupational licensing has grown dramatically over the years, leading to a larger share of American workers who need a license to perform their work. Accounting for just 5 percent of the employed population in the 1950s, licensed workers now comprise nearly 25 percent of all employed Americans.<sup>1</sup> Spurred by concerns for public safety, consumer protection or other policy goals, the growth in state licensing over time has created a patchwork of different requirements across states. This inconsistency makes it difficult for workers to move their skills across state lines and, because of varying fees for obtaining licenses, costly for them to work in a licensed profession.

“When designed and implemented carefully, licensing can benefit consumers through higher quality services and improved health and safety standards,” found the 2015 “Occupational Licensing: Framework for Policymakers” report from the U.S. Council of Economic Advisers and departments of Labor and Treasury. The report noted, however, that current licensure rules impose burdens on workers, employers and consumers, and “too often are inconsistent, inefficient, and arbitrary.”<sup>2</sup>

State policymakers play an important role in setting licensure policy and are at the heart of many efforts to strike the right balance needed to protect consumers and promote economic growth and employment opportunity. As described in this report, policymakers are enacting a wide range of strategies to calibrate their regulations to meet the needs of today’s consumers, workers, employers and job markets. Occupational licensing research offers important lessons about the effects, costs and benefits of licensing policies, as well as best practices and tools for designing a smart regulatory approach. Drawing from the vast body of occupational licensing research, this report provides an overview of occupational licensing trends and policy issues, summarizes best practices and recommendations for licensing policies, and highlights state legislative and executive actions that aim to protect consumers, foster employment growth and remove barriers to work.

# II. Methods

This report analyzes occupational licensing literature that addresses the following questions:

1. What is the current occupational licensing landscape in the United States?
2. What are the educational and training barriers to labor market entry for worker populations targeted by the Occupational Licensing Research Consortium project? (see box)
3. What key findings, trends and recommendations can be gleaned from the research to inform this project?
4. What are researchers and industry leaders identifying as policy barriers to interstate portability and reciprocity of occupational licensing and labor market entry for workers?
5. What are occupational licensing best practices and state policy recommendations?

To answer these questions, we identified and reviewed a wide range of primary and secondary sources, including reports, literature reviews, articles, white papers and labor statistics published by federal and state agencies, think tanks, nonprofit organizations, academic experts, trade associations and digital media sources. Legislative research tools and databases, such as LexisNexis State Net and Westlaw, and state agency and legislative webpages, provided many of the state legislative examples profiled in this report. The consortium’s expert panel, which has diverse representation from topical experts, public agencies and the project’s partner organizations (National Conference of State Legislatures, The Council of State Governments and National Governors Association Center for Best Practices), reviewed the list of sources and offered additional recommendations, a process that assured that relevant and key resources were considered for this research. The complete bibliography is presented in Appendix A.

## Occupational Licensing Research Consortium

In 2017, the Department of Labor’s Employment and Training Administration awarded the National Conference of State Legislatures, in partnership with The Council of State Governments and National Governors Association Center for Best Practices, funding on a three-year project to: 1) ensure that existing and new licensing requirements are not overly broad or burdensome and don’t create unnecessary barriers to labor market entry; and 2) improve portability for selected occupational licenses across state lines. The national partners are producing research, including this report, convening state policymakers and experts in the field of occupational licensing, and delivering technical assistance to states. For more information, visit [www.ncsl.org/stateslicense](http://www.ncsl.org/stateslicense)

The report focuses on licensure requirements that affect the types of occupations studied as part of the Occupational Licensing Research Consortium project. The 34 occupations studied in this NCSL-led project, summarized in Appendix B, typically require an entry-level education (i.e., less than a bachelor's degree), are licensed in at least 30 states and have a greater than average projected job growth rate.

### III. Occupational licensing trends and policy issues

An occupational license is a credential that government—most often states—requires a worker to hold in certain occupations.<sup>3</sup> Aspiring workers must meet state-specific educational, training, testing and other requirements to practice in a licensed profession. While some professions, such as physicians and attorneys, are universally licensed in states, a growing number of occupations are now licensed by states.<sup>4</sup> These include jobs that are commonly licensed across all states—e.g., cosmetologists, school bus and truck drivers, and emergency medical technicians—as well as others, like florists and interior designers, which are licensed in a small number of states. Licensing is just one form of occupational regulation, which also includes less restrictive methods, ranging from reliance on market forces to inspections, registration and voluntary certification—a continuum of approaches that are discussed later in this report.

#### STATE POLICYMAKER ROLES AND CONSIDERATIONS

State policymakers play a critical and longstanding role in occupational licensing policies, dating back to the late 19th century when the Supreme Court decision in *Dent v. West Virginia* established states' rights to regulate certain professions. Shortly after, states began developing their own systems of occupational regulation and licensing. State policymakers play a central role in developing and shaping these systems by:

- Establishing licensing requirements for specific occupations
- Authorizing regulatory boards to license applicants and oversee compliance
- Reviewing the merits of existing and proposed licensure requirements
- Proposing strategies or guiding principles to improve the state's overall approach to regulating professions

According to a 2015 brief published by the Council on Licensure, Enforcement and Regulation, “civic leaders, elected officials, and courts have struggled to balance legitimate interests in protecting public health and safety with the preservation of free practice.”<sup>5</sup> Striking the right balance represents an opportunity for policymakers to achieve important public policy goals, including consumer protection, job creation, workforce mobility and economic growth. Removing employment barriers for unique populations, such as immigrants with work authorization, military families and people with criminal records, offers a powerful lever to achieve multiple policy goals. These include employment growth, reduced recidivism for employed ex-offenders, enhanced geographic mobility, and economic stability and opportunity for individuals and their families.

#### LICENSURE TRENDS IN THE U.S.

The share of American workers who hold an occupational license has grown five-fold over the last several decades, from around five percent of the employed population in the 1950s to almost a quarter of all employed workers today (Figure 1).<sup>6</sup> According to the Council of Economic Advisors, a significant increase in the number of licensed professions accounts for two-thirds of this growth, with authors noting that “licensing has expanded considerably into sectors that were not historically associated with it,” such as sales, construction, personal care and protective services.<sup>7</sup> Of the 1,100 occupations that were licensed in at least one state in 2016, a small number—less than 60—were licensed in every state, illustrating the considerable differences in licensure requirements from state to state.<sup>8</sup>

According to the U.S. Bureau of Labor Statistics (BLS), 22 percent of U.S. workers had a state license to work in their designated occupation in 2016.<sup>9</sup> Licensure varies depending on occupation type, education attainment, gender, race and ethnicity, and other variables, the BLS found, noting that:

- Almost three-quarters (72.6 percent) of health care and technical workers had a license in 2016, com-

pared with 28 percent of personal care and service workers, and 21 percent of the transportation and moving workforce.<sup>10</sup>

- Licensure levels increased with educational attainment: 7 percent of people with less than a high school degree held a license, compared with 14 percent of high school graduates, 24 percent of people with some college or an associate’s degree, and 34 percent of bachelor’s or advanced-degree holders.<sup>11</sup> Although higher-income professions such as law and health care were more likely to have licensed workers, licensing is common in middle- and lower-income occupations.<sup>12</sup>
- Working women over age 16 were more likely to have a license than men (25 percent and 20 percent, respectively).
- Among the major race and ethnic groups, white workers were the most likely to hold a license (23 percent), compared with 14 percent of Hispanic workers.<sup>13</sup>

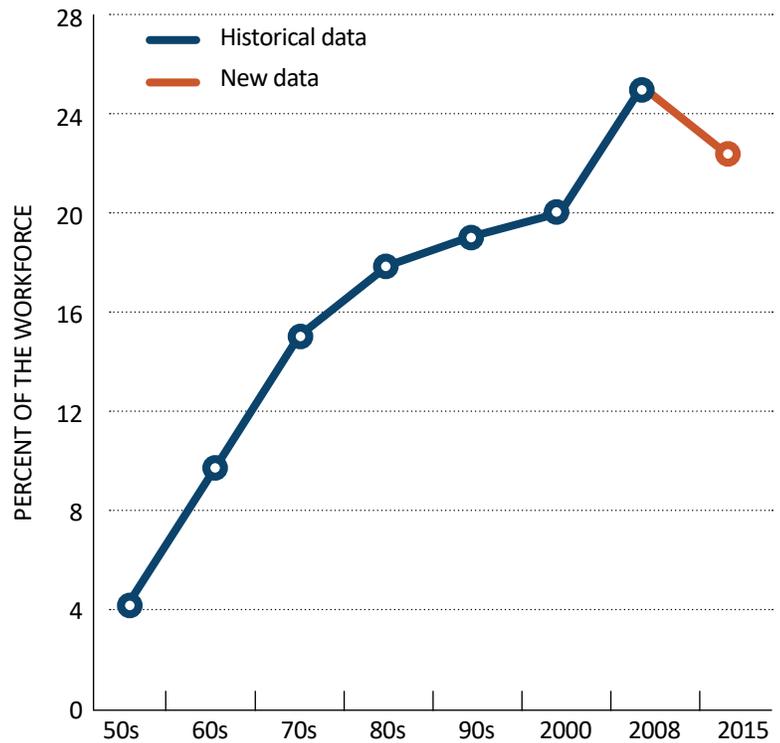
As shown in Figure 2, states vary considerably in the share of their workforce that holds a license, ranging from 12 percent in South Carolina to 33 percent in Iowa. States also differ in which occupations they license. Every state licenses emergency medical technicians, bus and truck drivers, and cosmetologists, while three or fewer states license professions such as home entertainment installers, nursery workers, conveyor operators and florists.<sup>14</sup>

The minimum requirements and costs to obtain and keep a license to work in the same occupation vary widely across states. So does the licensing process itself, with differences in the availability of distance or online learning for continuing education often required to obtain a license.<sup>15</sup> In contrast to Michigan’s requirement that licensed security guards have three years of education and training, most states require 11 days or less. Licensed cosmetologists in Iowa, Nebraska and South Dakota need 16 months of education, double what is required for their counterparts in New York and Massachusetts.<sup>16</sup> The lack of uniformity across state lines makes it difficult for workers in licensed occupations to move across state lines and raises questions about the rules’ rationale and impact on health and safety, or a worker’s ability to perform the occupational tasks.<sup>17</sup> Even among states with uniform, or near-uniform, licensing requirements, workforce mobility may be hindered by a lack of reciprocity in credentialing; for example, states often only recognize training from schools and other institutions outlined in statute or regulation.<sup>18</sup>

### POTENTIAL BENEFITS OF LICENSING

When implemented appropriately, licensing can offer important health and safety benefits and consumer protections, and provide workers with clear professional development and training guidelines, as well as a career path.<sup>19</sup> For decades, policymakers have adopted licensure policies to achieve a va-

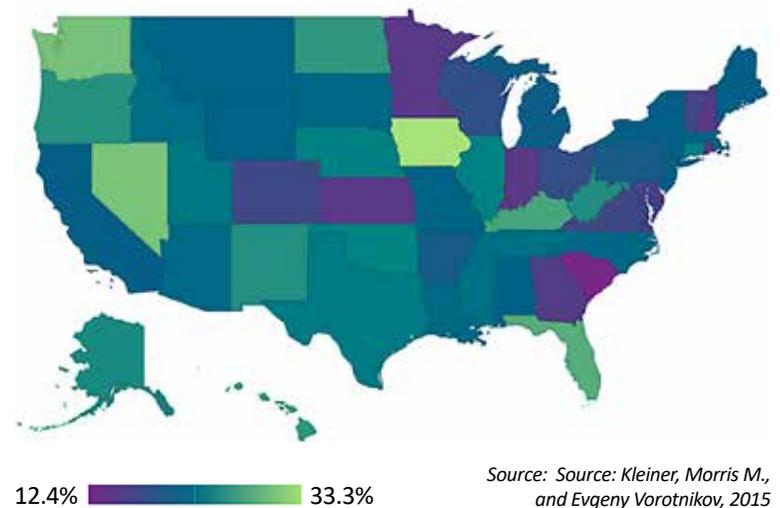
**Figure 1. Share of U.S. Workers with an Occupational License**



Note: Estimates for 1950-2008 are for workers with state licenses; estimates for 2015 include state, federal and local licenses.

Source: *The Council of State Governments (1952); Greene (1969); Kleiner (2006); and Kleiner and Krueger (2013), Westat data; Bureau of Labor Statistics (2015);*

**Figure 2. Percent of Workforce Licensed by State, 2015**



Source: *Source: Kleiner, Morris M., and Evgeny Vorotnikov, 2015*

## Benefits and Costs

The intent of occupational licensure is to:

- Safeguard public health and safety
- Protect consumers by guaranteeing minimum educational requirements and industry oversight
- Support career development and pathways for licensed workers and enhanced professionalism for licensed workers
- Step in when competitive market forces (e.g., litigation or reputation) fail to achieve desired outcomes

However, unnecessary licensing requirements have been found to:

- Reduce employment in licensed occupations
- Reduce geographic mobility
- Reduce wages for unlicensed workers relative to their licensed counterparts
- Reduce market competition and innovation
- Increase the price of goods and services
- Disproportionately burden low-income and the four populations examined in this report: military veterans and families, people with a criminal history, immigrants with work authorization, and dislocated and unemployed workers.

riety of goals. The Federal Trade Commission's 1990 report on the costs and benefits of licensure found that well-designed occupational licensing "can protect the public's health and safety by increasing the quality of professionals' services through mandatory entry requirements—such as education—and business practice restrictions—such as advertising restrictions."<sup>20</sup> The report found that occupational licensing helps consumers when they cannot easily assess the professional's skills, and when the costs related to poor quality are especially high, as is the case with emergency health care providers. Economist Jason Furman testified to Congress in 2016 that the argument for licensing "is strongest when low-quality practitioners can potentially inflict serious harm, or when it is difficult for consumers to evaluate provider quality beforehand." Furman points out that the threats to consumers from incompetent commercial pilots and physicians justify a government intervention; whereas, they face less harm and are better able to assess the quality of florists, barbers or decorators.<sup>21</sup>

Some professional associations argue that licensing protects consumers and promotes public health and safety. The Professional Beauty Association, for example, supports "common-sense, practical changes," including a move to more standardized licensing criteria across state lines. However, it cautions policymakers about the potential consequences of deregulating the 1.1 million professionals working in the beauty industry, stating that "[f]ormal education and industry regulation is necessary for a professional to learn the techniques, principles, sanitation, and chemical procedures to safeguard consumers, and themselves, against injury and illness."

Finally, occupational licensing helps consumers when traditional market mechanisms—such as a provider's concern about possible litigation or damaged reputation—fail to protect them from poorly trained or fraudulent providers. Licensure offers the public an assurance that the individual has met certain educational, training or experience standards.

Today's information-sharing economy and the growth of online consumer review websites help consumers evaluate provider quality and reputation. The enhanced access to information and strong provider incentives to deliver high-quality services bolster claims by experts that alternate regulatory approaches could achieve the same goals as licensing.<sup>22</sup> Harvard and Stanford researchers found that, while licensure is not directly associated with improved quality of goods or services, there is a relationship between licensing and increased consumer confidence that can lead to increased economic activity. Additionally, the study argues that licensure can lead to consumers becoming more informed about the licensed service, which makes it more likely that they will "upgrade to higher quality services." As a result, the researchers find an indirect improvement in the average level of quality provided in a market because of licensing.<sup>23</sup>

## THE POTENTIAL DEFICIENCIES OF LICENSURE

In order to realize the benefits of occupational licensure, rules must "closely match the qualifications needed to perform the job, a goal that is not always achieved or may not be maintained when licensing expands and jobs change," found a 2015 report by the Council of Economic Advisers and the departments of Labor and Treasury. More recently, the Federal Trade Commission asserted that unnecessary licensure regulations "erect significant barriers and impose costs that cause real harm to American workers, employers, consumers and our economy as a whole, with no measurable benefits to consumers or society." Acting FTC Chairman Maureen Ohlhauser asserted this year that "occupational licensing disproportionately affects those seeking to move up the lower and middle rungs of the economic ladder, as well as military families and veterans."<sup>24</sup> She noted that licensing requirements "can prevent individuals from using their vocational skills and entering new professions, as well as starting small businesses or creating new business models."<sup>25</sup>

The growth of occupational licensing in the states, and the inconsistent requirements among them, has come



at a steep price to workers, employers, consumers and government. “In occupational licensing, the prevalent costs are increased prices to consumers for goods and services and lost job opportunities for aspiring workers,” noted Dick M. Carpenter and Lee McGrath in a 2015 policy brief. Moreover, Morris Kleiner, economics professor at University of Minnesota’s Center for Human Resources and Labor Studies, asserted that, “With growth of licensing laws has come a national patchwork of stealth regulation that has, among other things, restricted labor markets, innovation, and worker mobility.” Kleiner further asserted that licensing resulted in 2.85 million fewer jobs nationally, with an annual cost to consumers of \$203 billion.<sup>26</sup>

The burdens to American workers vary by state and occupation. The Institute of Justice’s 2012 License to Work report ranked states based on the burdens imposed across 102 low- and moderate-income licensed occupations. The state comparisons revealed several inconsistencies across states: Many occupations are licensed in a small number of states, the same occupations have significantly different training requirements across states, and licensure requirements do not always align with public health or safety concerns. Researchers point out that cosmetologists require an average of 372 training days, significantly higher than emergency medical technicians, who need an average of 33 training days.

### **EFFECTS ON EMPLOYMENT AND WAGES**

Research indicates that unnecessary licensing requirements reduce employment in licensed occupations and reduce wages for unlicensed workers relative to their licensed counterparts. Occupational licensing requirements—including the need to pass exams, attend continuing education, and pay licensing and renewal fees—present significant barriers to entering a licensed occupation and can reduce total employment in that profession.

- A recent study found that the number of required exams for barber licensure was “robustly associated in a negative way with the number of barber shops per capita in a state.”<sup>27</sup> In other words, the more tests, the fewer barber shops, indicating that the examination requirements had a dampening effect on employment in that occupation.
- A 2015 Goldwater Institute policy report found that licensing hampers entrepreneurship, especially for

lower-income entrepreneurs, such as construction workers. The report concluded that states with higher rates of licensure for low-income occupations had lower rates of low-income entrepreneurship.

- Similarly, a 2016 study found that licensing imposed significant barriers for women entrepreneurs in Missouri by “restricting entry and re-entry into professions, reducing employment, and creating economic inequity.” The authors recommend licensing remedies that provide adequate consumer protections without unduly burdening professionals, such as certification, registration, bonding and insurance, and inspection. The report also recommends that the legislature consider other tools to assess the need for new and existing regulations, including periodic sunrise or sunset reviews, cost-benefit analyses, increased reciprocity with other states, or deregulating an existing licensing board.

Occupational licensing can result in higher wages for licensed workers, which in turn increases consumer costs. Stephen Slivinski from the Goldwater Institute notes that licensing leads to wage inequality in the following ways: “first by keeping people from entering higher-wage occupations, and then by raising wages for those already in high-income occupations.”<sup>28</sup> While higher wages benefit licensed workers, wage disparity can lead to “inefficiency and unfairness, including reducing employment opportunities and depressing wages for excluded workers, reducing workers’ mobility across state lines, and increasing costs for consumers.”<sup>29</sup>

### **EFFECTS ON COSTS, COMPETITION AND INNOVATION**

Research indicates that licensing requirements increase the price of goods and services. Occupational licensing imposes costs in the form of fees and educational requirements on American workers, often because of arbitrary rationale and inconsistent rules across states. The requirements drive away potential workers, especially those for whom the costs of obtaining licensure are too high. “By imposing requirements on people seeking to enter licensed professions—such as additional training and education, fees, exams, and paper-work—licensing reduces employment in the licensed occupation and hence competition, driving up the price of goods and services for consumers.”<sup>30</sup>

- Research from the Upjohn Institute for Employment concluded that “occupational licensing can result in 2.8 million fewer jobs with an annual cost to consumers of \$203 billion. This amount is a transfer of income from consumers to licensed workers.”<sup>31</sup>
- According to a study published in the University of Pennsylvania Law Review, occupational licensing restrictions prevent competition in a number of ways. They create barriers that prevent individuals from entering a profession; enable practice restrictions, such as advertising bans; suppress interstate mobility; and expand scope of practice definitions to regulate those in competitor industries.<sup>32</sup> A recent economic investigation from Florida State University found that training, experience and testing requirements reduced the number of small firms and the overall per-capita number of firms in the private security industry.<sup>33</sup>
- According to a 2012 report from the Progressive Policy Institute, “professional and occupational licensing is blocking innovation and entrepreneurship across large swathes of the American economy.”<sup>34</sup> This claim was echoed in a 2015 working paper from the Mercatus Center that argued licensing “standards may become both a floor and a ceiling as declining competition leads to less incentive to innovate and improve.”<sup>35</sup>

### **EFFECTS ON SERVICE QUALITY AND PUBLIC HEALTH AND SAFETY**

Researchers find little evidence that licensure improves the quality of services or protects consumers from harm. In fact, evidence suggests that the most onerous licensure laws may lead to lower-quality services and increased public safety risks.<sup>36</sup> Licensing reduces the supply of service providers while simultaneously increasing the average operating costs for professionals. The result of limited consumer choice and increased prices can be a provision of licensed services at a rate below true market equilibrium; in other words, consumers forego necessary services because prices are too high or no one is available for hire. This situation can pose a threat to public safety in certain occupations. For example, the inability to legally hire an electrician for repairs may lead to electrocution or fire. Similarly, licensing that limits the supply and increases the cost of veterinarians may prevent animal owners from vaccinating against contagious diseases like rabies.

- According to a 2015 paper published by the Brookings Institution, “[e]conomic studies have found little impact of occupational licensing on service quality in occupations that are not widely licensed; even

in occupations that are widely licensed, studies have found few impacts of tougher requirements for licensing on health measures or quality outcomes.” Further, a 2014 report from the U.S. Bureau of Labor Statistics on the safety of professionals in licensed industries concluded that “the impact of occupational regulation on deaths and injuries is statistically insignificant.”<sup>37</sup>

- Economic research on professions that directly provide health and safety services has shown that licensing requirements may not achieve their intended goals. A study on dental licensing found that dental office visits were reduced and dental health outcomes were hindered because of “licensure restrictions reducing employment.”<sup>38</sup> Similarly, a study of private security guard licensing found that lowering licensing burdens increased the supply of private security guards and was related to a significant drop in violent crime.<sup>39</sup>

## EFFECTS ON GEOGRAPHIC MOBILITY

Licensing rules limit geographic mobility for licensed workers. Licensed workers are less likely than unlicensed workers with similar education to move to a new state, in part because they may be required to complete new training and educational requirements or pay fees.<sup>40</sup> Labor market fluidity—or the ease and prevalence of relocating for a job—is vital to employment growth, particularly for the young and less educated. Among men under 25 without a high school degree, a 1 percent fall in labor fluidity corresponds to a 1.43 percent increase in their unemployment. Strict occupational licensing requirements limit the value of interstate relocation as a tool to combat unemployment.<sup>41</sup>

- Jason Furman from the Council of Economic Advisers wrote, “This patchwork of licensing laws restricts worker mobility—which is costly not only for workers, but also for employers, consumers and the economy at large.”<sup>42</sup> The requirements disproportionately affect low-income workers for whom the costs—e.g., for educational, training and licensing fees—represent a larger share of their income than they do for higher-income workers. According to the 2016 Council of Economic Advisers report, restrictions on worker mobility “should be weighed as costs, both to a state’s own population and to employers in that state who may be seeking to hire licensed workers from a broader, national labor pool.”<sup>43</sup> Moreover, Furman asserted in his 2016 congressional testimony that mobility barriers prevent workers from “matching with the jobs best suited to their skills, which in turn makes our labor market less efficient, reducing productivity and wages.”<sup>44</sup>
- The Kauffman Foundation released a report detailing the barrier to economic growth imposed by occupational licensure in which experts concluded that the lack of interstate reciprocity of licensing is a form of economic protectionism. The report stated that occupational licensing creates “a functional equivalent of a cartel of state [boards] and judges who discourage state competition.”<sup>45</sup>



## EFFECTS ON SPECIFIC POPULATIONS

The barriers described above are especially problematic for low-income individuals, people with criminal records, members of the military and their spouses, and immigrants with work authorization. In 2017, Ryan Nunn wrote that, “...[E]xcessive licensing imposes costs on a wide variety of distinct groups, including people with criminal records, immigrants, military families, low-skilled workers, and entrepreneurs—not to mention consumers.”<sup>46</sup> According to Nunn, an “inflexible vision of how work should be organized” has needlessly prevented individuals with criminal records, military veterans and others from entering licensed professions. The burdens facing specific worker populations are summarized below.

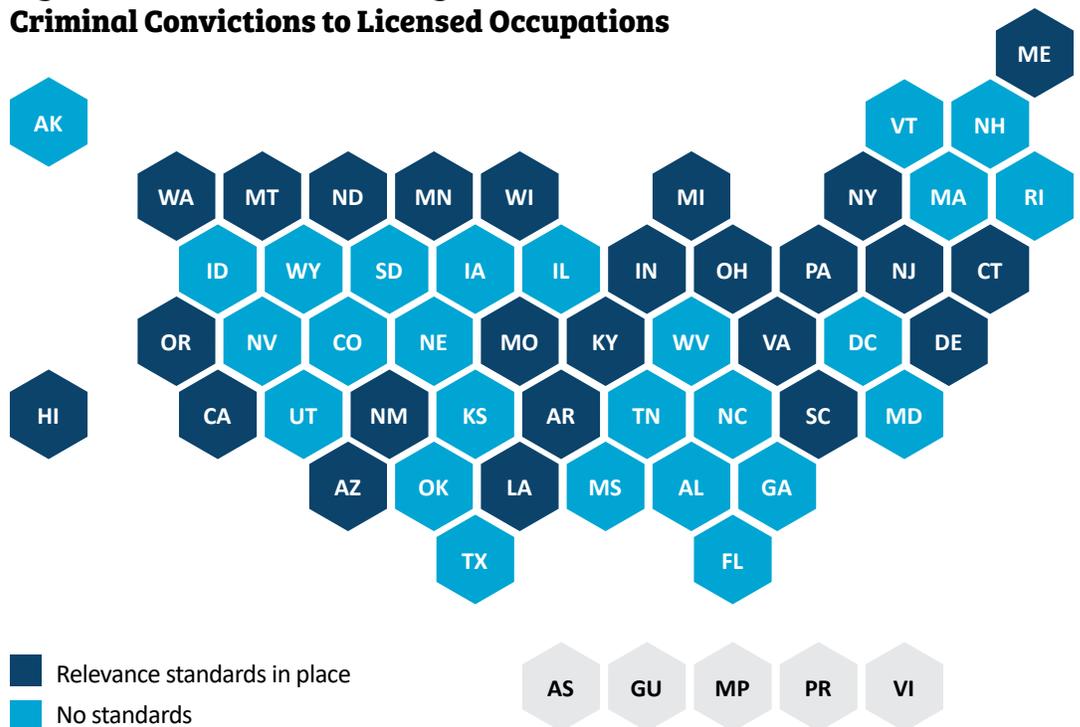
**Active-Duty Military, Veterans and Spouses.** Licensing requirements make it difficult for the 360,000 service members who leave or retire from active duty, guard and reserve service each year, from entering occupations that they may be qualified to practice.<sup>47</sup> Licensing is a burden for the highly mobile population of military

spouses, one-third of whom work in occupations that require licenses or certification.<sup>48</sup> Compared to civilians, military spouses are 10 times more likely to have moved across states in the last year, making it difficult and costly for them to obtain a new license every time they move to a new state.<sup>49</sup> The obstacles may deter military spouses from participating in the labor market altogether.

**Immigrants with Work Authorization.** The current licensure system deters skilled immigrants with work authorization from working in jobs for which they have experience and training, hampering their ability to contribute their skills to the U.S. economy.<sup>50</sup> While 30 percent of working-age immigrants had a college degree in 2010, research suggests that costly and duplicative licensing requirements make it difficult for skilled immigrants with work authorization to find employment that uses their skills.<sup>51</sup>

**People with Criminal Records.** In 2016, economist Stephen Slivinski found that having a good job reduces the likelihood that a former offender will recidivate. Individuals with a criminal record are more likely to succeed and less likely to reoffend if they have a job.<sup>52</sup> However, people with a criminal record—one-third of all Americans—can be denied an occupational license in half the states, regardless of whether their criminal record relates to the job they are seeking or how long ago the conviction occurred.<sup>53</sup> As shown in Figure 3, 25 states require a direct connection between the type of license being sought and the applicant’s criminal history, stating why the offense would disqualify the applicant, while the other 25 states and Washington, D.C. lack such standards. The American Bar Association found more than 27,000 state occupational license restrictions for former offenders, such as provisions that list “good moral character” as a requirement for obtaining a license.

**Figure 3. Standards Governing Relevance of Criminal Convictions to Licensed Occupations**



Source: Legal Action Center

**Low-Income or Unemployed Workers.** Licensing is especially costly to low-income Americans and unemployed or dislocated workers who may lack resources to pay for the necessary education and training, as well as licensing fees and other licensing costs. The Institute for Justice’s 2012 License to Work report found that states impose licensing burdens and costs on low-income occupations. For example, in Arizona, licenses average \$450 in fees, 599 training days, and are required for 64 low-income jobs. According to Veronique de Rugy of George Mason University’s Mercatus Center, “[b]y placing barriers to entry on jobs that could otherwise be performed by low-income individuals, these states remove the bottom rung of the ladder of opportunity for the citizens who need it most.”<sup>54</sup>

## IV. Striking a Balance: Occupational Regulation Options and Best Practices

The costs of occupational licensing have “generated calls, from both sides of the political spectrum, to rethink the system,” Kleiner observed in a 2015 analysis.<sup>55</sup> As described below, research suggests various policy considerations and options for policymakers involved in developing or refining their state’s regulatory approach.

### ASK KEY QUESTIONS AND REVIEW EVIDENCE

According to a 2014 Pew Charitable Trusts’ report, “[e]vidence-based policymaking uses the best available research and information on program results to guide decisions at all stages of the policy process and in each branch of government.” A careful review of costs and benefits data, as well as an accurate understanding about the need for regulations, are critical and foundational steps in occupational regulation. The 2015 “Framework for Policymakers” report recommends that policymakers adopt the best practice of “facilitating a careful consideration of licensure’s costs and benefits.”<sup>56</sup> Sunrise and sunset provisions offer an important way for policymakers to consider the merits of licensure and its effects on public health and safety, provider supply, administrative costs, and the price of goods and services. The report recommends strengthening sunrise and sunset reviews by providing adequate resources, ensuring that the review process is “insulated against political interference.”

### Asking Key Questions: Tools and Resources

The 1994 “Questions Legislators Should Ask” report published by the Council on Licensure, Enforcement and Regulation, offers guidelines and key questions that can help legislators ascertain the need for regulation and develop the most effective approach. Although the questions were developed decades ago, legislators may find them applicable in current licensure deliberations (see Appendix C).

Tennessee’s 2016 How-To Guide provides a step-by-step tool designed to help legislators implement the state’s Right to Earn a Living Act, including suggested questions to ask in hearings, guidance on conducting sunset hearings and strategies for removing unnecessary mandates.<sup>57</sup>

In response to a legislative request for comment on proposed occupational licensure legislation in Nebraska, the Federal Trade Commission’s Office of Policy Planning submitted a letter to legislators in 2017 expressing support for the state’s “ongoing efforts to review and, where possible, streamline the state’s many licensure requirements.” Finding the expansion of occupational licensing in the state and elsewhere both unnecessary and harmful to consumers and competition, the agency urged legislators, regulators and other policy decision-makers to use the following framework and questions when considering changes to the occupational licensing law:

- What legitimate policy justifications, if any, were articulated when the original license requirements were imposed?
- Are there currently any specific, legitimate and substantiated policy objectives that justify continuing these license requirements?
- If current, legitimate policy objectives are identified, does the furtherance of those current objectives likely outweigh the expected harms from licensing? Such harms may include reduced economic opportunities, restricted employment, increases in consumer prices, and reductions in quality or access.
- If state licensing appears justified, are there any less restrictive alternatives to the current licensing system that still address the legitimate policy objectives, while reducing burdens on the public? Are the licensing requirements narrowly tailored to achieve the specific public policy purpose, or is there a less intrusive way to achieve the public policy objective?”

## DEVELOP A TAILORED RESPONSE

After the problem has been defined, policymakers can select the most effective approach from a continuum of regulatory options, including those listed and defined in Table 1. As stated in the 2015 “Framework for Policymakers,” “... licensing policies can be designed in many different ways, and the ways in which they are designed and implemented affect workers’ access to jobs, the wages they are paid, the ease with which they can move across state lines, as well as consumers’ access to essential goods and services.” As shown in Table 1, the spectrum of occupational regulation includes the least restrictive form of no government regulation or relying on market forces, to the most stringent form of regulation, occupational licensing.<sup>58</sup>

**Table 1. Definitions of Occupational Regulation Approaches**

| Regulatory Approach               | Approach Defined  |
|-----------------------------------|---|
| <b>No government intervention</b> | Market forces—e.g., the providers’ desire to grow a business and maintain their reputation among competitors—creates incentives for providers to maintain skills and professionalism and deliver high-quality services.   |
| <b>Private civil action</b>       | A consumer’s ability to pursue civil action may alone compel providers to deliver high-quality services to avoid litigation or loss of reputation.  |
| <b>Inspections</b>                | Random inspections, such as government inspections of restaurants, provide an alternative way to assure cleanliness, safety and necessary skills.   |
| <b>Bonding or insurance</b>       | Mandatory bonding or insurance can protect consumers and the public by ensuring that the provider is able to cover the cost of consumer damages.  |
| <b>Registration</b>               | States require individuals in certain occupations to register with a governmental agency before practicing and sometimes file a surety bond or fee.   |
| <b>Voluntary Certification</b>    | A certificate is a credential that is typically valued by the labor market, but not legally necessary for working a specific occupation. Certified individuals can use a designated title, such as certified mechanic or certified financial planner. Private entities typically provide certificates to people who pass an exam or otherwise demonstrate their skills and knowledge needed for a specific occupation. <sup>59</sup>  |
| <b>Licensure</b>                  | An occupational license is a credential that government requires a worker to hold in certain occupations. <sup>60</sup> While some professions, such as physicians and attorneys, are “universally licensed,” a growing number of occupations are licensed only in certain states, creating inconsistent licensing requirements across states. <sup>61</sup> Prospective workers must meet state educational, training or testing requirements before working in a growing number of licensed occupations. Typically, state legislatures set their own licensing policy and authorize state regulatory boards to license applicants and oversee workforce compliance. <sup>62</sup> |

*Source: Adapted from CLEAR Resource Brief, “The Balance Between Public Protection and the Right to Earn a Living,” Carpenter and McGrath, 2015.*

Among its best practices, the 2015 “Framework for Policymakers” report recommends that policymakers “ensure that licensing restrictions are closely targeted to protecting public health and safety, and are not overly broad or burdensome.” The report discourages policies that categorically exclude individuals with criminal records, and supports policies that only exclude individuals whose convictions are recent, relevant and pose a threat to public safety. In a 2015 paper on occupational licensing reform, Kleiner proposed certification as a substitute for licensing in occupations that don’t pose enough risk to health and safety to warrant licensing, such as locksmiths, ballroom dance instructors, interior designers, pet groomers and auctioneers. The shift would save states money by reducing administrative costs spent on licensure. As described on page 15, Indiana adopted a voluntary state certification program for individuals who wish to use the state-certified designation.

## Tailoring State Responses: Tools and Resources

Institute for Justice legal counsel Lee McGrath developed a hierarchy of regulatory options, which Thomas A. Hemphill and Dick. M. Carpenter, also with the Institute for Justice, later expanded upon, to show a comprehensive continuum ranging from no government intervention all the way to occupational licensure, the most restrictive form of regulation.<sup>63</sup> As shown in Figure 4, the hierarchy offers a process for policymakers and other stakeholders to begin with the least restrictive method and move down the pyramid to identify an approach that meets public needs without hampering employment and economic growth.

**Figure 4. Hierarchy of Occupational Regulation Options**



*Source: Hemphill, T. A., & Carpenter, D. M. (2016). Occupations: A hierarchy of regulatory options. Regulation, 39(3), 20–24.*

The hierarchy provides a menu of options that policymakers can use to develop regulations that are “proportionate to demonstrable need,” wrote Hemphill and Carpenter in a 2016 article. They went on to note that the process “would identify the problem before the solution, quantify the risks, seek solutions that get as close to the problem as possible, focus on the outcome (with a specific focus on prioritizing public safety), use regulation only when necessary, keep things simple, and check for unintended consequences.”<sup>64</sup>

## REDUCE LICENSING’S BARRIERS TO MOBILITY

The “Framework for Policymakers” report recommends synchronizing licensing requirements across states when possible and forming interstate compacts to make it easier for workers who move to another state. In 2017, Federal Trade Commission Acting Chairman Maureen Oehlausen stated that, “reforms that promote reciprocity among states and credit work experience in place of additional requirements are among the changes that would help remove barriers to entry and competition, particularly for military families and veterans.”<sup>65</sup> Existing professional compacts, such as the enhanced nurse licensure compact adopted in 26 states, or the physical therapy interstate compact in effect in 11 states, provide examples of interstate arrangements for specific occupations. The Institute for Justice’s model state legislation seeks to help states remove barriers, including for people with criminal records, and use the least-restrictive methods to protect public health and safety.<sup>66</sup>

## **Licensing Best Practices Featured in “Occupational Licensing: A Framework for Policymakers”<sup>67</sup>**

**Ensure that licensing restrictions are closely targeted to protecting public health and safety, and are not overly broad or burdensome.**

1. When public health and safety concerns are mild, consider using alternative systems that are less restrictive than licensing, such as voluntary state certification (“right-to-title”) or registration (filing basic information with a state registry).
2. Make sure that substantive requirements of licensing (e.g., education and experience requirements) are closely tied to public health and safety concerns.
3. Minimize procedural burdens of acquiring a license, in terms of fees, complexity of requirements, processing time, and paperwork.
4. Where licensure is deemed appropriate, allow all licensed professionals to provide services to the full extent of their current competency, even if multiple professions provide overlapping services.
5. Review licensing requirements for the formerly incarcerated, immigrants and veterans to ensure that licensing laws do not prevent qualified individuals from securing employment opportunities, while still providing appropriate protection for consumers.

**Facilitate careful consideration of licensure’s costs and benefits.**

1. Carry out comprehensive cost-benefit assessments of licensing laws through both sunrise and regular sunset reviews, incorporating criteria like:
  - The presence of legitimate public health and safety concerns or substantial fiduciary responsibilities
  - Whether existing legal remedies, consumer rating and reputation mechanisms, and less-burdensome regulatory approaches are adequate to protect consumers
  - The effect that the license would have on practitioner supply
  - The effect that the license would have on the price of goods and services
  - Administrative costs of enforcing the license
2. Evidence suggests that removing licenses is much more difficult than enacting them, so sunset reviews in particular may be ineffective without certain protections. To strengthen both sunset and sunrise reviews, consider taking such measures as:
  - Providing adequate resources to the agencies or sunrise and sunset commissions responsible for conducting the cost-benefit analysis
  - Ensuring that the cost-benefit review process is insulated against political interference
  - Legislating that a minimum number of votes be required to overrule the sunrise or sunset agency’s recommendation
  - Appointing specialized committees within state legislatures that are responsible for all licensing issues, and that will work with the state agency in charge of conducting the review
3. Promote the appointment of public representatives to licensing boards, alongside professional members.

**Work to reduce licensing’s barriers to mobility.**

1. Synchronize licensing requirements to the maximum extent possible across states.
2. Form interstate compacts that make it easier for licensed workers to practice and relocate across state lines, while also enabling state regulators to share practitioners’ performance histories.
3. When forming an interstate arrangement, avoid categorically excluding individuals with a criminal record or adopting the licensing requirements of the most stringent participating states.
4. If agreeing on common standards for interstate licenses is difficult, consider a “two-tiered” structure that allows states with more flexible requirements to retain their rules while restricting interstate reciprocity to workers who satisfy a higher bar.

## V. Occupational Licensing Frameworks and State Approaches

As states grapple with licensure issues and reforms, many are incorporating the available evidence, described in the previous section, on best practices and policy options for occupational licensing. Routes for occupational licensing reform are summarized below.

### ALTER SPECIFIC LICENSING REQUIREMENTS FOR A PROFESSION

States have adopted new licensing requirements, changed existing ones or eliminated licensing rules altogether. A 2015 U.S. Bureau of Labor Statistics analysis found that state legislatures de-licensed an occupation just eight times over the prior 40 years. For example, the Alabama Legislature de-licensed barbers in 1983, a decision that was later reversed when the Legislature licensed barbers in 2013. Colorado and Virginia eliminated mandatory licensing for private investigators and naturopaths, respectively.<sup>68</sup> A subsequent 2017 analysis by the Wisconsin Institute for Law and Liberty identified additional states—Arizona, Michigan and Rhode Island—that deregulated occupations after formal reviews found that licensure did not serve a compelling state interest.<sup>69</sup>

During the 2012–2013 legislative sessions, Kleiner found that at least seven new occupations were licensed, including scrap metal recyclers in Louisiana, therapeutic shoe fitters in Alabama, and body artists in the District of Columbia. During the same period, governors in Idaho, Indiana and Iowa vetoed legislation that would have licensed several new occupations.<sup>70</sup>

Policymakers have increasingly proposed and enacted legislation to lessen requirements, shift to a less restrictive approach (such as voluntary certification) or restrict the scope of an existing license requirement as it applies to a specific type of worker. The 2015 Occupational Licensing Framework found that since 2012, many states have passed legislation to promote licensing reciprocity for spouses of active military service members.<sup>71</sup> In recent years, several states, including those listed below, proposed legislation that would remove or lessen occupational requirements that were believed to stifle employment growth.

- Florida legislators proposed legislation in 2011, 2013 and 2017 that, if passed, would have deregulated specific licensed occupations, such as hair braiders, interior designers and professional fundraising consultants.
- Arizona Governor Doug Ducey signed HB 2613 into law in May 2016, eliminating licensure requirement for citrus fruit packers, cremationists, assayers and yoga instructors.

### ALTER SPECIFIC LICENSING REQUIREMENTS FOR A POPULATION GROUP

Several states have taken steps to exempt certain types of workers from a licensure requirement, sometimes in response to a federal court ruling that found it unconstitutional. Following court cases that deemed licensure as unconstitutional for hair braiders, for example, several states have revised their cosmetology licensure laws to exempt hair braiders. The Utah Legislature passed a revised cosmetology and hair braiding law in 2013 that exempted hair braiders from licensing requirements and reduced the cosmetologist training requirements from 2,000 hours to 1,600 hours. Other states, including California, Oregon and Mississippi, also exempted hair braiders from licensure.<sup>72</sup> Maryland's 2016 SB 830 created a limited cosmetology license for blow-dry-only salons, reducing the required training hours from 1,500 to 350 hours.

- In 2016, Tennessee lawmakers enacted Public Chapter No. 1053—the Right to Earn a Living Act—declaring that the “burden of excessive regulation is borne most heavily by individuals outside the economic mainstream, for whom opportunities for economic advancement are curtailed.” The law requires state agencies to limit licensing requirements to those needed to protect public health, safety and welfare.
- In 2016, Georgia's governor and Illinois lawmakers prohibited state agencies from barring ex-offenders from working in certain occupations unless their criminal record related to the applicant's work.

### ANALYZE COSTS AND BENEFITS

States have adopted sunrise and sunset reviews, audits, active supervision and other procedures to weigh the costs and benefits of existing and proposed occupational licensure. According to the Council on Licensure,

Enforcement and Regulation, by 2017, at least 14 states adopted a sunrise process for proposed regulations and 36 states had some form of sunset process for existing occupational licensing laws.

- A sunrise process includes a cost-benefit analysis as part of any proposal to regulate a previously unlicensed profession. For example, in Colorado, the Department of Regulatory Agencies must examine any new proposals to license a previously unlicensed occupation and submit recommendations to the state's General Assembly. According to economist Jason Furman's 2016 congressional testimony, under Maine's sunrise process—in which the Department of Professional and Financial Regulation reviews any legislative proposals to establish a licensing board or expand a current provider's scope of practice—just one occupation has been licensed since 1995.
- The sunset review process involves periodic reviews or legislative audits of licensing and licensing boards, and their potential elimination unless the legislature acts to continue them.<sup>73</sup> Texas' 2013 HB 86 identified criteria for the state's Sunset Advisory Commission to use when de-licensing an occupation, such as examining whether licensing serves a “meaningful, defined public interest and provides the least restrictive form of regulation that will adequately protect the public interest.” In 2014, the commission recommended de-licensing several occupations, prompting the 2015 passage of HB 202, which carried out many of the commission's recommendations, such as eliminating licensure for opticians, contact lens dispensers, personal emergency response providers and other providers.
  - In 2016, Tennessee's General Assembly passed the Right to Earn a Living Act, HB 2201, directing the legislature's government operations committees to conduct a thorough review of the state's licensing laws and make recommendations for eliminating or loosening requirements that do not protect consumer health and safety.
  - In 2016, Governor Jack Markell signed an executive order establishing and tasking the Delaware Professional License Review Committee with examining state licenses and recommending legislative or regulatory actions that would remove “unnecessary or overly burdensome” requirements.

## What are Least Restrictive Regulations?

Mississippi HB 1442 defines least restrictive regulations on the following continuum, listed from least to most restrictive:

1. Market competition
2. Third-party or consumer-created ratings and reviews
3. Private certification
4. Specific private civil cause of action to remedy consumer harm under a deceptive trade practice act
5. Regulation of the process of providing specific goods or services to consumers
6. Inspection
7. Bonding or insurance
8. Registration
9. Government certifications
10. Specialty occupational license for medical reimbursement
11. Occupational license

## INCREASE LICENSING AND REGULATORY OVERSIGHT

To prevent the potential conflict of interest rising from industry insiders writing the licensing rules that regulate their own industry, lawmakers can extend executive and legislative review powers over industry board actions. Further, the Supreme Court ruling in *North Carolina Board of Dental Examiners v. Federal Trade Commission* has forced a re-examination of the legal structure of licensing boards to maintain compliance with the federal Sherman Anti-Trust Act.

- Mississippi Governor Phil Bryant signed HB 1442, in April 2017. It authorizes the governor, secretary of state and attorney general to approve any new regulation passed by a state licensing board before the rules take effect, and to review all current regulations to ensure they comply with state law. The law aims to avoid liability under federal anti-trust laws through a clearly defined state policy that increases economic opportunities for all citizens and uses the “least restrictive regulation necessary to protect consumers from present, significant and substantiated harms that threaten public health and safety.” The law offers alternative methods for protecting the public (see box).
- Utah U.S. Senator Mike Lee introduced the Alternatives to Licensing that Lower Obstacles to Work (ALLOW) Act to reform occupational licensing laws in Washington, D.C. This legislation would create a dedicated office under the District Attorney General to provide “active supervision” of D.C. licensing boards, aiming to prevent the creation or expansion of licensing requirements that do not serve the public interest.

## ENACT BROAD LICENSING REFORMS

In recent years, some states have considered or enacted broad changes to the state's overall occupational regulatory approach. Despite the overall growth in occupational licensure described above, Kleiner notes that “several proposals have been made to

slow the growth of occupational licensing in favor of certification.”<sup>74</sup> Indiana’s approach, for example, represents a shift in the direction of voluntary certification. As described below, policymakers have enacted executive orders and legislation to examine existing requirements and impacts, consider less-restrictive options and develop recommendations to improve the state’s licensing approach.

- Indiana lawmakers passed Senate Enrolled Act No. 421 in 2013, requiring the Indiana Professional Licensing Agency to establish a process for allowing workers in certain occupations to certify that they met specified qualifications. Pursuant to the law, in 2014 the agency submitted a report to the Legislative Council establishing a voluntary process for self-certification registration, in which individuals who choose to complete a certification process list their names in a state registry. Registered individuals can use the title “state-certified” while others who choose not to register can still work in the occupation without using the state-certified designation. The report concluded that by moving away from licensure and towards certification, “Indiana will realize significant economic benefits including lower unemployment, fewer administrative costs, and greater competition in its labor markets. Residents will realize lower prices, more job opportunities, and the ability to make better choices about the services they buy and professionals they hire.”
- Arizona Governor Doug Ducey issued an executive order to all state licensing boards in March 2017 mandating a full review of all existing licensing requirements. It also requires the licensing boards to provide economic justifications for any standard that is more burdensome than the national average and for any license that is not required by at least 25 other states. The Arizona State Legislature followed suit by passing SB 1437, or the Right to Earn a Living Act, which bars licensing boards from writing regulations that restrict entry into a profession if a public health or safety benefit cannot be proven. The new law also empowers individuals to petition a board for further review of a licensing requirement.

## VI. Conclusion

The last several decades have seen a dramatic growth in the number of licensed occupations and the share of workers who have a license to perform their work. The growth in licensure could influence worker wages, consumer prices, employment in licensed occupations, disadvantaged or populations with challenges who want to work in a licensed occupation, and mobility for workers who want to take their skills across state lines. Moreover, research suggests that licensing policies do not always achieve intended quality, public health or safety outcomes. At the center of these crucial conversations are state policymakers, who establish most occupational licensure requirements and for whom the goals of consumer protection and economic opportunity and growth are paramount concerns. Moving forward, states will continue to learn from one another as they adopt and refine regulatory practices that seek to remove barriers to work and improve portability across state lines.

### Legal Considerations

Research from Yale University into the permeation of occupational licensing laws found that the legal framework historically employed to challenge unduly burdensome licensure has been ineffective. The study finds that constitutional cases—particularly those charging licensure as protectionist, and therefore in violation of the Commerce Clause—fail because when “courts can hypothesize public interest bases to uphold a law, they will often be able to find some non-protectionist policy goal. It need not be particularly convincing... all that is necessary is that legislators who had not taken leave of their senses could come up with some reason to pass it.” Further, calls for statutory interpretation by the judiciary to overrule boards were most often found to fall short because statutes authorizing occupational licensing rarely lack clarity. Finally, state-sanctioned occupational boards historically cannot be restrained by the courts on the grounds that their behavior is anti-competitive because state actions are immune from federal anti-trust scrutiny. The efficacy of these types of challenges may be evolving, as evidenced by the Supreme Court’s decision in *North Carolina State Board of Dental Examiners v. Federal Trade Commission* (2015), which ruled that to provide protection from antitrust liability, states must actively supervise boards and commissions controlled by market participants.<sup>75</sup>

## APPENDIX A.

### Bibliography

#### BOOKS, REPORTS AND STUDIES

American Institutes for Research. *Examination of Cosmetology Licensing Issues*. Washington, D.C.: AIR, 2016, [http://futurebeautyindustrycoalition.com/wp-content/uploads/2016/10/PBA\\_Examination\\_of\\_Cosmetology\\_Licensing\\_Issues\\_Abridged\\_2016\\_0912.pdf](http://futurebeautyindustrycoalition.com/wp-content/uploads/2016/10/PBA_Examination_of_Cosmetology_Licensing_Issues_Abridged_2016_0912.pdf).

Bureau of Labor Statistics. *The De-Licensing of Occupations in the United States*. Washington, D.C.: May 2015, <https://www.bls.gov/opub/mlr/2015/article/the-de-licensing-of-occupations-in-the-united-states-1.htm>.

Batalova, Jeanne; Michael Fix; and James D. Bachmeier. *Untapped Talent: The Cost of Brain Waste Among Highly Skilled Immigrants in the U.S.* Washington, D.C.: Migration Policy Institute, New American Economy, and World Education Services, 2016, <http://www.migrationpolicy.org/research/untapped-talent-costs-brain-waste-among-highly-skilled-immigrants-united-states>.

Bergson-Shilcock, Amanda, and James Witte. *Steps to Success: Integrating Immigrant Professionals in the U.S.* New York, N.Y.: World Education Services, 2015, [https://www.imprintproject.org/wp-content/uploads/2017/03/Summary\\_Steps\\_to\\_Success\\_WES\\_IMPRINT\\_Immigrant\\_Integration\\_Survey\\_United\\_States.pdf](https://www.imprintproject.org/wp-content/uploads/2017/03/Summary_Steps_to_Success_WES_IMPRINT_Immigrant_Integration_Survey_United_States.pdf).

Carpenter, Dick M., et al. *License to Work: A National Study of Burdens from Occupational Licensing*. Arlington, Va.: Institute for Justice, 2012, <http://ij.org/report/license-to-work/>.

Carpenter, D. M., and L. McGrath. "The balance between public protection and the right to earn a living" (resource brief). Lexington, Ky.: Council on Licensure, Enforcement and Regulation, 2014, <http://ij.org/report/the-balance-between-public-protection-and-the-right-to-earn-a-living/>.

Cox, Carolyn, and Susan Foster. *The Costs and Benefits of Occupational Regulation*. Washington, D.C.: Federal Trade Commission. 1990, [https://www.ftc.gov/system/files/documents/reports/costs-benefits-occupational-regulation/cox\\_foster\\_-\\_occupational\\_licensing.pdf](https://www.ftc.gov/system/files/documents/reports/costs-benefits-occupational-regulation/cox_foster_-_occupational_licensing.pdf).

Fetsch, E. "No bars: Unlocking the economic power of the formerly incarcerated." Kansas City, Mo.: Ewing Marion Kauffman Foundation, 2016, [http://www.kauffman.org/~media/kauffman\\_org/microsites/mayors2016/occupational%20licensing%20and%20the%20formerly%20incarcerated\\_final.pdf](http://www.kauffman.org/~media/kauffman_org/microsites/mayors2016/occupational%20licensing%20and%20the%20formerly%20incarcerated_final.pdf).

Flanders, W., and C. Roth. *Fencing out opportunity: The effect of licensing regulations on employment*. Milwaukee, Wis.: Wisconsin Institute for Law & Liberty, <http://www.will-law.org/wp-content/uploads/2017/03/FOO2-FINAL-v3.pdf>.

Fontinelle, A.; D. Mitchell, D.; and T. Snyder. *Unnatural rights in the natural state: Occupational licensing in Arkansas*. Conway, Ark.: Arkansas Center for Research in Economics, University of Central Arkansas, 2016, [http://uca.edu/acre/files/2014/07/ACRE\\_OccupationalLicensing\\_InteractiveWeb.pdf](http://uca.edu/acre/files/2014/07/ACRE_OccupationalLicensing_InteractiveWeb.pdf).

Furth, Salim. *Understanding the Data on Occupational Licensing*. Washington, D.C.: The Heritage Foundation, Sept. 28, 2016, <http://www.heritage.org/jobs-and-labor/report/understanding-the-data-occupational-licensing>.

Gius, M. *Waiting to work: The effects of occupational licensing on wages and employment*. Hartford, Conn.: Yankee Institute for Public Policy, 2016, [http://www.yankeeinstitute.org/wp-content/uploads/2016/11/16-312-YI\\_CCW\\_OccupationalLicensing\\_Study\\_webhh-1.pdf](http://www.yankeeinstitute.org/wp-content/uploads/2016/11/16-312-YI_CCW_OccupationalLicensing_Study_webhh-1.pdf).

Gross, Jeffrey. *Rx for Strengthening Massachusetts' Economy and Healthcare System*. Report prepared for the Commonwealth of Massachusetts' Governor's Advisory Council for Refugees and Immigrants. Boston: Governors' Advisory Council for Refugees and Immigrants, 2014, [https://miracoalition.org/images/stories/pdf/gac\\_task\\_force\\_report-final-12.18.14.pdf](https://miracoalition.org/images/stories/pdf/gac_task_force_report-final-12.18.14.pdf).

Hemphill, T.A., and D.M. Carpenter. "Occupations: A hierarchy of regulatory options." *Regulation* 39, no. 3): 20–24, [https://object.cato.org/sites/cato.org/files/serials/files/regulation/2016/9/regulation-v39n3-5\\_0.pdf](https://object.cato.org/sites/cato.org/files/serials/files/regulation/2016/9/regulation-v39n3-5_0.pdf).

Hall, J.C., and S.B. Pokharel. "Barber licensure and the supply of barber shops: Evidence from U.S. states." *Cato Journal* 36, no. 3: 647–657, <https://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2016/9/cj-v36n3-10.pdf>.

Humphris, Amy; Morris M. Kleiner; and Maria Koumenta. "How Does Government Regulate Occupations in the United Kingdom and United States? Issues and Policy Implications." In *Employment in the Lean Years: Policy and Prospects for the Next Decade*, edited by David Marsden, ADD PAGE NUMBERS. Oxford: Oxford University Press, 2011.

Indiana Professional Licensing Agency. *SEA 421 Report: Establishing a process for self-certification registration: A playbook for future occupational regulation in Indiana*. Indianapolis, Ind.: Indiana Professional Licensing Agency, 2014, [https://www.in.gov/pla/files/IPLA\\_Legislative\\_Report\\_-\\_Self-Certification\\_Registration.pdf](https://www.in.gov/pla/files/IPLA_Legislative_Report_-_Self-Certification_Registration.pdf).

Johnson, E., et al. *Occupational licensing and women entrepreneurs in Missouri: A report to the Women's Foundation (IPP Research Report)*. Columbia: University of Missouri, Institute of Public Policy, 2016, <https://static1.squarespace.com/static/545815dce4b0d75692c341a8/t/582b2125e4fcb54bebfd651e/1479221544420/OL+and+Women+Entrepreneurs+in+MO+-+Final+11.14.16.pdf>

Kleiner, M.M. *Guild-ridden labor markets: The curious case of occupational licensing*. Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 2015a, [http://research.upjohn.org/cgi/viewcontent.cgi?article=1254&context=up\\_press](http://research.upjohn.org/cgi/viewcontent.cgi?article=1254&context=up_press).

\_\_\_\_\_. *Reforming Occupational Licensing Policies*. Washington, D.C.: The Hamilton Project, Brookings Institution, 2015, [https://www.brookings.edu/wp-content/uploads/2016/06/THP\\_KleinerDiscPaper\\_final.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/THP_KleinerDiscPaper_final.pdf).

\_\_\_\_\_. *Stages of Occupational Regulation*. Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 2013.

Kleiner, Morris M., and Alan B. Krueger. *Analyzing the Extent and Influence of Occupational Licensing on the Labor Market*. Bonn, Germany: Institute for Labor Economics, 2011, <http://ftp.iza.org/dp5505.pdf>.

Laird, M.; A. Moore; and S. Staley. *Occupational licensing in Florida: Unnecessary licenses are killing jobs* (Policy Brief No. 131). Los Angeles, Calif.: Reason Foundation, 2016, [http://reason.org/files/occupational\\_licensing\\_florida.pdf](http://reason.org/files/occupational_licensing_florida.pdf).

Legal Action Center. *After Prison: Roadblocks to Reentry*. New York, N.Y.: LAC, 2009, <http://lac.org/roadblocks-to-reentry/>.

\_\_\_\_\_. *National Blueprint for Reentry*. New York, N.Y.: LAC, 2008, [http://lac.org/wp-content/uploads/2014/07/National\\_Blueprint\\_For\\_Reentry\\_08.pdf](http://lac.org/wp-content/uploads/2014/07/National_Blueprint_For_Reentry_08.pdf).

\_\_\_\_\_. *Standards for Hiring People with Criminal Records*. New York, N.Y.: LAC, Accessed April 2017, <https://lac.org/toolkits/standards/standards.htm>.

Levin, Mark. *Testimony before the Senate Business & Commerce Committee Regarding Interim Charge Concerning Occupational Licensing*. Austin, Texas: Texas Public Policy Foundation, April 10, 2012, <https://www.texaspolicy.com/library/doclib/2012-04-10-testimony-occupationallicensing-CEJ.pdf>.

Little Hoover Commission. *Jobs for Californians: Strategies to ease occupational licensing barriers* (Report #234). Sacramento, Calif.: Little Hoover Commission, 2016, <http://www.lhc.ca.gov/studies/234/Report234.pdf>.

Mellor, William, and Dick M. Carpenter. *Bottlenecks: Gaming the Government for Power and Private Profit*. New York, N.Y.: Encounter Books, 2016.

Marshall, Will, ed. *Unleashing Innovation and Growth: A Progressive Alternative to Populism*. Washington, D.C.: Progressive Policy Institute, 2016, [http://www.progressivepolicy.org/wp-content/uploads/2016/03/2016\\_PPI\\_Unleashing-Innovation-and-Growth\\_A-Progressive-Alternative-to-Populism.pdf](http://www.progressivepolicy.org/wp-content/uploads/2016/03/2016_PPI_Unleashing-Innovation-and-Growth_A-Progressive-Alternative-to-Populism.pdf).

Meyers, Roberta; Ray P. McClain; and Lewis Maltby. *Best Practice Standards: The Proper Use of Criminal Records in Hiring*. New York, N.Y.: The Lawyers' Committee for Civil Rights Under the Law, The Legal Action Center, and National Workrights Institute, 2013, <http://hirenetwork.org/sites/default/files/Best-Practices-Standards-The-Proper-Use-of-Criminal-Records-in-Hiring.pdf>.

National Governors Association Center for Best Practices. *Veterans' Licensing and Certification Demonstration: A Summary of State Experiences, Preliminary Findings and Cost Estimates*, a report prepared for the U.S. Department of Labor. Washington, D.C.: NGA, September 2015, [https://www.dol.gov/vets/media/Veterans\\_Demonstration\\_Final%20Report\\_9\\_28\\_v2.pdf](https://www.dol.gov/vets/media/Veterans_Demonstration_Final%20Report_9_28_v2.pdf).

Natividad Rodriguez, Michelle, and Beth Avery. *Unlicensed and Untapped: Removing Barriers to Occupational Licenses for People with Criminal Records*. Washington, D.C.: National Employment Law Project, April 2016, <http://nelp.org/content/uploads/Unlicensed-Untapped-Removing-Barriers-State-Occupational-Licenses.pdf>.

Nunn, Ryan. *Occupational Licensing and American Workers*. Washington, D.C.: The Brookings Institution, 2016, <https://www.brookings.edu/research/occupational-licensing-and-the-american-worker/>.

\_\_\_\_\_. "The Future of Occupational Licensing Reform." *The Regulatory Review* Jan. 30, 2017, <https://www.theregview.org/2017/01/30/nunn-future-occupational-licensing-reform/>.

Panel on the Integration of Immigrants into American Society. *The Integration of Immigrants into American Society*. Washington, D.C.: The National Academies Press, 2015, <http://convening.igeucla.org/wp-content/uploads/2016/10/NatAcSci-Integration-of-Immigrants-in-US-2015-Report.pdf>.

Pham, Nam D., and Anil Sarda. *The Value of Cosmetology Licensing to the Health, Safety and Economy of America*. Washington, D.C.: NDP Analytics, December 2014, [http://futurebeautyindustrycoalition.com/wp-content/uploads/2016/12/PBA-Report-December-19-2014\\_AB.pdf](http://futurebeautyindustrycoalition.com/wp-content/uploads/2016/12/PBA-Report-December-19-2014_AB.pdf).

Sherman, Amy; Becky Klein-Collins; and Iris Palmer. *College Productivity Resource Guide for State Leaders: State Policy Approaches to Support Prior Learning Assessment*. Chicago, Ill., and Washington, D.C.: Council for Adult and Experiential Learning and HCM Strategists, 2012, [http://strategylabs.luminafoundation.org/wp-content/uploads/2013/09/cp\\_resource\\_guide\\_final\\_0-copy.pdf](http://strategylabs.luminafoundation.org/wp-content/uploads/2013/09/cp_resource_guide_final_0-copy.pdf).

Shimberg, Benjamin, and Doug Roederer. *Questions a Legislator Should Ask*. Lexington, Ky.: Council on Licensure, Enforcement and Regulation, 1994.

Skorup, J. *This isn't working: How Michigan's licensing laws hurt workers and consumers*. Midland, Mich.: Mackinac Center for Public Policy, 2017, <https://www.mackinac.org/archives/2017/s2017-02.pdf>.

Slivinski, S. *Bootstraps tangled in red tape: How state occupational licensing hinders low-income entrepreneurship* (Policy Report No. 272). Phoenix, Ariz.: Goldwater Institute, 2015, [https://goldwater-media.s3.amazonaws.com/cms\\_page\\_media/2015/4/15/OccLicensingKauffman.pdf](https://goldwater-media.s3.amazonaws.com/cms_page_media/2015/4/15/OccLicensingKauffman.pdf).

\_\_\_\_\_. *Turning shackles into bootstraps: Why occupational licensing reform is the missing piece of criminal justice reform* (Policy Report No. 2016-01). Tempe, Ariz.: Center for the Study of Economic Liberty, Arizona State University, 2016, <https://research.wpcarey.asu.edu/economic-liberty/wp-content/uploads/2016/11/CSEL-Policy-Report-2016-01-Turning-Shackles-into-Bootstraps.pdf>.

Summers, Adam B. *Occupational Licensing: Ranking the States and Exploring Alternatives*. Los Angeles: Reason Foundation, 2007, <http://reason.org/files/762c8fe96431b6fa5e27ca64eaa1818b.pdf>.

Snyder, T. J. *The effects of Arkansas' occupational licensure regulations*. Conway, Ark.: Arkansas Center for Research in Economics, University of Central Arkansas, 2016, <http://uca.edu/acre/files/2016/06/The-Effects-of-Arkansas-Occupational-Licensure-Regulations-by-Dr-Thomas-Snyder.pdf>.

Thierer, A., et al. *How the internet, the sharing economy, and reputational feedback mechanisms solve the "lemons problem"* (Mercatus Working Paper). Arlington, Va.: Mercatus Center, George Mason University, 2015, <https://www.mercatus.org/system/files/Thierer-Lemons-Problem.pdf>.

U.S. Department of Defense, “Allow Private Sector Employers to Offer Hiring Preference to Veterans.” Arlington, Va.: DOD, 2017, <http://download.militaryonesource.mil/12038/USA4/2017/one-pagers/Vet-Hire-Preference-OPI2.pdf>.

\_\_\_\_\_. “Private Sector Veteran Hiring Protection Best Practices.” Arlington, Va.: DOD, 2016, <http://download.militaryonesource.mil/12038/USA4/2016/best-practices/Veterans-Hire-Preference-BPI4.pdf>.

U.S. Department of Defense and U.S. Department of the Treasury. *Supporting Our Families: Best Practices for Streamlining Occupational Licenses Across State Lines*. Washington, D.C.: DOD, 2012, [http://archive.defense.gov/home/pdf/Occupational\\_Licensing\\_and\\_Military\\_Spouses\\_Report\\_vFINAL.PDF](http://archive.defense.gov/home/pdf/Occupational_Licensing_and_Military_Spouses_Report_vFINAL.PDF)

U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and U.S. Department of Labor. *Occupational Licensing: A Framework for Policymakers*. Washington, D.C.: U.S. Department of Treasury and U.S. Department of Labor, 2015, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).

Wilson, Bryan. *How Many More Skilled Workers Do We Need? Using Supply and Demand Reports for State Workforce Planning*. Washington, D.C.: National Skills Coalition and State Workforce and Education Alignment Project, June 2014, <http://www.nationalskillscoalition.org/resources/publications/file/how-many-more-skilled-workers.pdf>.

## **ARTICLES, BLOGS, FACT SHEETS, TESTIMONY, POSITION STATEMENTS AND PRESENTATIONS**

Appelbaum, Benyamin. “The Jobs Americans Do.” *New York Times Magazine* Feb. 23, 2017.

Boudreaux, Donald. “Occupational Licensing: Reality Differs from Skilled Rhetoric.” Arlington, Va.: George Mason University, March 25, 2014, [https://www.mercatus.org/expert\\_commentary/occupational-licensing-reality-differs-rhetoric](https://www.mercatus.org/expert_commentary/occupational-licensing-reality-differs-rhetoric).

Bowen, Alison, and Alexia Elejalde-Ruiz. “Skilled Immigrants Often Struggle to Put Degrees, Credentials to Use in U.S.” *Chicago Tribune* March 27, 2017, <http://www.chicagotribune.com/business/ct-merit-immigration-brain-waste-20170326-story.html>.

Bryan, Darcy N.; Jared Roads; and Robert Graboyes. “Occupational Regulation.” Arlington, Va.: Mercatus Center and George Mason University, Dec. 1, 2016, <https://www.mercatus.org/hoap/occupational-regulation>.

Council on Licensure, Enforcement and Regulation. “Glossary of General Terminology Used in Professional and Occupational Regulation.” Nicholasville, Ky.: CLEAR, 2010, [http://www.clearhq.org/resources/Glossary\\_General.pdf](http://www.clearhq.org/resources/Glossary_General.pdf).

Furman, Jason. “Occupational Licensing and American Rents.” Presentation for the Brookings Institution, Washington, D.C., Nov. 2, 2015, [https://www.brookings.edu/wp-content/uploads/2015/10/20151102\\_furman\\_licensing\\_presentation.pdf](https://www.brookings.edu/wp-content/uploads/2015/10/20151102_furman_licensing_presentation.pdf).

\_\_\_\_\_. Prepared Testimony before the United States Senate Committee on the Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights. February 2016, <https://www.judiciary.senate.gov/imo/media/doc/02-02-16%20Furman%20Testimony.pdf>.

Graham, Ruth. “The Retraining Paradox.” *The New York Times Magazine* Feb. 23, 2017.

Kearney, Melissa; Brad Hershbein; and David Boddy. “Nearly 30 Percent of Workers in the U.S. Need a License to Perform Their Job: It Is Time to Examine Occupational Licensing Practices.” Washington, D.C.: Brookings Institution, Jan. 27, 2015, <http://www.brookings.edu/blogs/up-front/posts/2015/01/26-time-to-examine-occupational-licensingpractices-kearney-hershbein-boddy>.

Knepper, Lisa. “How Licensing Laws Kill Jobs.” *The Atlantic*, Sept. 13, 2012, <https://www.theatlantic.com/business/archive/2012/09/how-licensing-laws-kill-jobs/262164/>.

New America. “Prior Learning and Competency-Based Education: A Background Primer.” Washington, D.C.: New America, July 1, 2013, <https://www.newamerica.org/post-secondary-national-policy-institute/our-blog/prior-learning-and-competency-based-education/>.

Nunn, Ryan. "An Economic Framework for Licensing Reform." Federation of State Boards of Physical Therapy Spring Forum. Alexandria, Va.: FSBPT, Spring 2016, [https://www.fsbpt.org/Portals/0/documents/free-resources/Forum\\_Spring2016\\_Reform.pdf](https://www.fsbpt.org/Portals/0/documents/free-resources/Forum_Spring2016_Reform.pdf).

Pethokoukis, James. "The Terrible Economic Burden of Occupational Licensing." Washington, D.C.: American Enterprise Institute, April 21, 2014, <https://www.aei.org/publication/the-terrible-economic-burden-of-occupational-licensing/>.

Selinger, Jeffrey J. "Wanted: Factory Workers, Degree Required." *The New York Times*, Jan. 30, 2017, <https://www.nytimes.com/2017/01/30/education/edlife/factory-workers-college-degree-apprenticeships.html>.

Shafer, Mathew. "North Carolina Looks to Ease Occupational Licensure Requirements for Military Families." Washington, D.C.: The Council of State Governments, March 30, 2017, <http://knowledgecenter.csg.org/kc/content/north-carolina-looks-ease-occupational-licensure-requirements-military-families>.

\_\_\_\_\_. "The Grades Are In: How Well Is Your State Licensing People with Criminal Records?" Washington, D.C.: The Council of State Governments, March 20, 2017. <http://knowledgecenter.csg.org/kc/content/grades-are-how-well-your-state-licensing-people-criminal-records>.

Sharpe, Bridget. "Protect Your License: Keep Beauty Professional." Scottsdale, Ariz.: Professional Beauty Association, Nov. 3, 2014, <https://probeauty.org/images/advocacy/news/2014/Progress%20November%203,%202014%20Keep%20Beauty%20Professional.pdf>.

Soltas, Evan. "Occupational Licensing Is Replacing Labor Unions and Exacerbating Inequality." *Vox*, April 18, 2014, <http://www.vox.com/2014/4/18/5627630/occupational-licensing-is-replacing-labor-unions-and-exacerbating>.

Timmons, Edward J. "Medical Licensing Laws Stand in the Way of Affordable Health Care." *U.S. News and World Report*, Jan. 26, 2016, <https://www.usnews.com/opinion/blogs/policy-dose/articles/2016-01-26/medical-licensing-laws-stand-in-the-way-of-affordable-health-care>.

Weiss, Suzanne. "Licensed to Labor." *State Legislatures* (National Conference of State Legislatures) January 2017, <http://www.ncsl.org/bookstore/state-legislatures-magazine/licensed-to-labor636179334.aspx>.

White House Office of the Press Secretary. "Fact Sheet: New Steps to Reduce Unnecessary Occupation Licenses that Are Limiting Worker Mobility and Reducing Wages." Washington, D.C., June 17, 2016, <https://obamawhitehouse.archives.gov/the-press-office/2016/06/17/fact-sheet-new-steps-reduce-unnecessary-occupation-licenses-are-limiting>.

## **ADDITIONAL WEBPAGE TOOLS AND RESOURCES**

Council of State Governments. "Bibliography/Resources: Inventory and Studies of Collateral Consequences." Washington, D.C.: CSG, n.d., <https://niccc.csgjusticecenter.org/resources/>.

Council of State Governments Justice Center. "National Inventory of the Collateral Consequences of Conviction." Washington, D.C.: CSG, n.d., <https://niccc.csgjusticecenter.org/>.

Council on Licensure, Enforcement & Regulation, "Sunrise, Sunset and State Agency Audits." Nicholasville, Ky.: CLEAR, 2017, <http://www.clearhq.org/page-486181>.

Federal Trade Commission. "Economic Liberty." Washington, D.C.: FTC, Feb. 23, 2017, <https://www.ftc.gov/policy/advocacy/economic-liberty>.

Upwardly Global. "Newsroom." Silver Spring, Md.: Upwardly Global, April 2017, <http://www.upwardlyglobal.org/about-upglo/news>.

## APPENDIX B.

# Occupations Examined in the Occupational Licensing Research Consortium

### SUMMARY

Based on two primary criteria (occupation licensed in at least 30 states and occupation requires less than a bachelor’s degree), the list of occupations for inclusion was narrowed to 40. Two additional measures were applied to this list (projected employment growth rate for 2014-2024 at national average or higher and total current employment levels of 10,000 or greater), resulting in a total of 34 occupations. Data are reported for each of the 34 occupations for employment levels, projected growth, entry-level education, wages, on-the-job training, industry representation, geographic representation and compact activity.

### LIST OF INCLUDED OCCUPATIONS:

- Barbers
- Bus Drivers, School or Special Client
- Bus Driver (City/Transit)
- Construction and Building Inspectors
- Construction Managers
- Dental Hygienists
- Electricians
- Emergency Medical Technicians and Paramedics
- Hairdressers, Hairstylists and Cosmetologists
- Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- Heavy and Tractor-Trailer Truck Drivers
- Insurance Sales Agents
- Licensed Practical and Licensed Vocational Nurses
- Manicurists and Pedicurists
- Massage Therapists
- Nursing Assistants
- Occupational Therapy Assistants
- Pharmacy Technicians
- Physical Therapy Assistants
- Pipefitters and Steamfitters
- Plumbers
- Preschool Teachers, Except Special Education
- Private Detectives and Investigators
- Radiologic Technologists
- Real Estate Sales Agents
- Real Estate Appraisers
- Respiratory Therapists
- Security and Fire Alarm Systems Installers
- Security Guards
- Skin Care Specialists
- Teacher Assistants
- Veterinary Technologists and Technicians
- Vocational Education Teachers, Postsecondary
- Water and Wastewater Treatment Plant and System Operators

## Appendix C.

# Policymaker Questions to Ask When Considering Occupational Licensing Proposals

|  |  |
|--|--|
| <b>What is the problem?</b>                                    | <ul style="list-style-type: none"> <li>• Has the public been harmed because the occupation has not been regulated?</li> <li>• Has the public’s health, safety or economic well-being been endangered?</li> <li>• Can proponents’ claims be documented?</li> </ul>  |
| <b>Why should the occupation be regulated?</b>                 | <ul style="list-style-type: none"> <li>• Who uses the services offered by the occupation? Does the public lack knowledge or information to evaluate the providers’ qualifications?</li> <li>• What is the extent of the autonomy of the providers? Do they work independently or under supervision? If supervised, is the supervisor covered under regulatory statute?</li> </ul>  |
| <b>What efforts have been made to address the problems?</b>    | <ul style="list-style-type: none"> <li>• Has the occupation established a code of conduct or complaint-handling procedures for resolving disputes between practitioners and consumers?</li> <li>• Has a non-governmental certification program been established to assist the public in identifying qualified practitioners?</li> <li>• Could use of applicable laws or existing standards (e.g., civil laws or unfair and deceptive trade practice laws) solve problems?</li> <li>• Would strengthening existing laws help to deal with the problem?</li> </ul> |
| <b>Have alternatives to licensure been considered?</b>         | <ul style="list-style-type: none"> <li>• Could an existing agency be used to regulate the occupation?</li> <li>• Would regulation of the employer versus the individual practitioner (e.g., licensing a restaurant instead of its employees) provide the necessary public protection?</li> <li>• Could registration or certification be an acceptable alternative?</li> <li>• Why would use of less stringent alternatives adequately protect the public? Why would licensing be more effective?</li> </ul>  |
| <b>Will the public benefit from regulating the occupation?</b> | <ul style="list-style-type: none"> <li>• How will regulation help the public identify qualified practitioners?</li> <li>• How will regulation assure that practitioners are competent?</li> <li>• Are all standards job-related?</li> <li>• How do the standards, training and experience requirements compare with other states? Can differences be justified?</li> <li>• Are alternative routes of entry recognized—for example, for individuals licensed in another state?</li> </ul>   |
| <b>Will regulation harm the public?</b>                        | <ul style="list-style-type: none"> <li>• Will competition be restricted by the regulated group?</li> <li>• Will the regulated group control the supply of practitioners? Are standards more restrictive than necessary?</li> <li>• Will regulation increase the cost of goods and services to consumers?</li> <li>• Will regulation decrease the availability of practitioners?</li> </ul>   |
| <b>How will the regulatory activity be administered?</b>       | <ul style="list-style-type: none"> <li>• Who will administer the regulation?</li> <li>• What power will the entity have, and will its actions be subject to review?</li> <li>• How would the cost of administering the regulatory entity be financed?</li> </ul>   |
| <b>Who is sponsoring the regulatory program?</b>               | <ul style="list-style-type: none"> <li>• Are members of the public sponsoring the legislation?</li> <li>• What provider associations or organizations are sponsoring the regulatory approach?</li> </ul>   |
| <b>Why is regulation being sought?</b>                         | <ul style="list-style-type: none"> <li>• Is the profession seeking to enhance its status by having its own regulatory law?</li> <li>• Is the occupation seeking licensure to facilitate reimbursement?</li> <li>• Is the public seeking greater accountability of the occupation?</li> </ul>   |

Source: Council on Licensure, Enforcement and Regulation, *Questions Legislators Should Ask*, 1994

## Notes

1. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 7, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
2. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 7, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
3. Ryann Nunn, *Occupational Licensing and American Workers* (Washington, D.C.: The Brookings Institution, 2016), <https://www.brookings.edu/research/occupational-licensing-and-the-american-worker> 2. <https://www.brookings.edu/research/occupational-licensing-and-the-american-worker/>
4. Morris Kleiner, *Reforming Occupational Licensing Policies* (Washington, D.C. The Brookings Institution, 2015), 2. [https://www.brookings.edu/wp-content/uploads/2016/06/THP\\_KleinerDiscPaper\\_final.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/THP_KleinerDiscPaper_final.pdf)
5. Dick M. Carpenter and Lee McGrath, *The Balance Between Public Protection and the Right to Earn a Living* (Lexington, KY: Council on Licensure, Enforcement and Regulation, 2015), [http://ij.org/wp-content/uploads/2015/03/resource\\_brief\\_070214RASTERb.pdf](http://ij.org/wp-content/uploads/2015/03/resource_brief_070214RASTERb.pdf).
6. Ryann Nunn, *Occupational Licensing and American Workers* (Washington, D.C.: The Brookings Institution, 2016), <https://www.brookings.edu/research/occupational-licensing-and-the-american-worker/>
7. Jason Furman and Laura Gialiano, *New Data Show that Roughly One Quarter of U.S. Workers Hold an Occupational Licensure* (Washington, D.C.: Council of Economic Advisers, 2016), <https://obamawhitehouse.archives.gov/blog/2016/06/17/new-data-show-roughly-one-quarter-us-workers-hold-occupational-licensure>.
8. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 5, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf) ,
9. U.S. Department of Labor, Bureau of Labor Statistics, “2016 Data on Certification and Licenses,” 2017, <https://www.bls.gov/cps/certifications-and-licenses.htm>.
10. *Ibid.*
11. *Ibid.*
12. Jason Furman and Laura Gialiano, *New Data Show that Roughly One Quarter of U.S. Workers Hold an Occupational Licensure* (Washington, D.C.: Council of Economic Advisers, 2016), <https://obamawhitehouse.archives.gov/blog/2016/06/17/new-data-show-roughly-one-quarter-us-workers-hold-occupational-licensure>
13. U.S. Department of Labor, Bureau of Labor Statistics, “2016 Data on Certification and Licenses,” 2017, <https://www.bls.gov/cps/certifications-and-licenses.htm>.
14. Morris Kleiner, *Reforming Occupational Licensing Policies* (Washington, D.C. The Brookings Institution, 2015), [https://www.brookings.edu/wp-content/uploads/2016/06/THP\\_KleinerDiscPaper\\_final.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/THP_KleinerDiscPaper_final.pdf).
15. [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf)
16. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 5, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf) ,
17. Dick Carpenter, et al., *License to Work: A National Study of Burdens from Occupational Licensing* (Arlington, VA: Institute for Justice), <http://ij.org/report/license-to-work/>.
18. Marek Zapletal, *The Effects of Occupational Licensing Evidence from Detailed Business-Level Data* (Washington, D.C.: US Census Bureau Center for Economic Studies Paper No. CES-WP-17-20, 2017), <https://ssrn.com/abstract=2925226>.
19. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 5, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
20. Carolyn Cox and Susan Foster, *The Costs and Benefits of Occupational Regulation* (Washington, D.C.: Federal Trade Commission, 1990, [https://www.ftc.gov/system/files/documents/reports/costs-benefits-occupational-regulation/cox\\_foster\\_-\\_occupational\\_licensing.pdf](https://www.ftc.gov/system/files/documents/reports/costs-benefits-occupational-regulation/cox_foster_-_occupational_licensing.pdf).
21. United States Committee on the Judiciary, Hearing on License to Compete: Occupational Licensing and State Action Doctrine,” testimony presented by Jason Furman, February 2016, <https://www.judiciary.senate.gov/imo/media/doc/02-02-16%20Furman%20Testimony.pdf>,
22. Adam Thierer, et al., *How the Internet, the Sharing Economy, and Reputational Feedback Mechanisms Solve the ‘Lemons Problem’* (Washington, D.C.: Mercatus Center, 2015), <https://www.mercatus.org/system/files/Thierer-Lemons-Problem.pdf>.
23. Daniel Carpenter, Justin Grimmer and Eric Lomazoff, “Approval Regulation and Endogenous Consumer Confidence,” *Regulation & Governance* 4 (2010), 383-407, <http://stanford.edu/~jgrimmer/CarpenterGrimmerLomazoff.pdf>.

24. Maureen K. Ohlhausen, "Advancing Economic Liberty" (presentation at the George Mason Law Review's Antitrust Symposium, Washington, D.C., February 23, 2017), [https://www.ftc.gov/system/files/documents/public\\_statements/1098513/ohlhausen\\_-\\_advancing\\_economic\\_liberty\\_2-23-17.pdf](https://www.ftc.gov/system/files/documents/public_statements/1098513/ohlhausen_-_advancing_economic_liberty_2-23-17.pdf).
25. *Ibid.*
26. Dick M. Carpenter and Lee McGrath, *The Balance Between Public Protection and the Right to Earn a Living* (Lexington, KY: Council on Licensure, Enforcement and Regulation, 2015), [http://ij.org/wp-content/uploads/2015/03/resource\\_brief\\_070214RASTERb.pdf](http://ij.org/wp-content/uploads/2015/03/resource_brief_070214RASTERb.pdf).
27. Joshua C. Hall and Shree B. Pokharel, "Barber licensure and the supply of barber shops: Evidence from U.S. states," *Cato Journal* 36 (2016): 647–657, <https://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2016/9/cj-v36n3-10.pdf>.
28. Stephen S. Slivinski, S., *Boostraps tangled in red tape: How state occupational licensing hinders low-income entrepreneurship* (Phoenix, AZ: Goldwater Institute), 2015, [https://goldwater-media.s3.amazonaws.com/cms\\_page\\_media/2015/4/15/OccLicensingKauffman.pdf](https://goldwater-media.s3.amazonaws.com/cms_page_media/2015/4/15/OccLicensingKauffman.pdf)
29. Jason Furman and Laura Galiano, *New Data Show that Roughly One Quarter of U.S. Workers Hold an Occupational Licensure* (Washington, D.C.: Council of Economic Advisers, 2016), <https://obamawhitehouse.archives.gov/blog/2016/06/17/new-data-show-roughly-one-quarter-us-workers-hold-occupational-licensure>.
30. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 5, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
31. Morris M. Kleiner, *Guild-Ridden Labor Markets: The Curious Case of Occupational Licensing* (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2015), <https://doi.org/10.17848/9780880995023>.
32. Aaron Edlin and Rebecca Haw, "Cartels by Another Name: Should Licensed Occupations Face Anti-Trust Scrutiny?" *University of Pennsylvania Law Review* 162 (2014), 1093-1164, [http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=9440&context=penn\\_law\\_review](http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=9440&context=penn_law_review).
33. Brian Meehan, *The Impact of Licensing Requirements on Industrial Organization and Labor: Evidence From the U.S. Private Security Market* (Tallahassee: Florida State University, 2015), <http://myweb.fsu.edu/bmeehan/elsarticle-ImpactOfOccupationalLicensingOnIndustrialOrgLabor.pdf>.
34. Dane Stangler, *Occupational Licensing: How A New Guild Mentality Thwarts Innovation* (Washington, D.C.: Progressive Policy Institute, 2012), [http://progressivepolicy.org/wp-content/uploads/2012/04/03.2012-Stangler\\_Occupational-Licensing\\_How-A-New-Guild-Mentality-Thwarts-Innovation1.pdf](http://progressivepolicy.org/wp-content/uploads/2012/04/03.2012-Stangler_Occupational-Licensing_How-A-New-Guild-Mentality-Thwarts-Innovation1.pdf).
35. Edward J. Timmons and Anna Mills, *Bringing the Effects of Occupational Licensing into Focus Optician Licensing in the United States* (Washington, D.C.: Mercatus, 2015), <https://www.mercatus.org/system/files/Timmons-OpticianLicensing.pdf>.
36. Sidney L. Carroll and Robert Gaston, "Occupational Licensing and the Quality of Service," *Law and Human Behavior* 7, no. 2 (1983): 139-146, <https://link.springer.com/article/10.1007%2FBF01044518>.
37. Morris M. Kleiner and Kyoung Won Park, "Life, Limbs, and Licensing," *BLS Monthly Labor Review*, January 2014, <https://www.bls.gov/opub/mlr/2014/article/pdf/life-limbs-and-licensing.pdf>.
38. Tanya Wanchek, "Dental Hygiene Regulation and Access to Oral Healthcare: Assessing the Variation across the US States," *British Journal of Industrial Relations* 48 (2010), <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8543.2010.00809.x/abstract>.
39. Brian Meehan and Bruce L. Benson, "Does Private Security Affect Crime?: A Test Using State Regulations as Instruments," *Journal of Applied Economics* 49, no. 48 (March 2017), 4911-4924, <http://www.tandfonline.com/doi/full/10.1080/00036846.2017.1296551?scroll=top&needAccess=true>.
40. Jason Furman and Laura Galiano, *New Data Show that Roughly One Quarter of U.S. Workers Hold an Occupational Licensure* (Washington, D.C.: Council of Economic Advisers, 2016), <https://obamawhitehouse.archives.gov/blog/2016/06/17/new-data-show-roughly-one-quarter-us-workers-hold-occupational-licensure>.
41. Steven J. Davis and John Haltiwanger, *Labor Market Fluidity and Economic Performance* (Cambridge, Mass.: National Bureau of Economic Research, Sept. 2014), <http://econweb.umd.edu/~haltiwan/w20479.pdf>.
42. *Ibid.*
43. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 40, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
44. United States Committee on the Judiciary, Hearing on License to Compete: Occupational Licensing and State Action Doctrine," testimony presented by Jason Furman, February 2016, <https://www.judiciary.senate.gov/imo/media/doc/02-02-16%20Furman%20Testimony.pdf>,
45. Task Force on Entrepreneurial Growth, *A License to Grow: Ending State, Local and Some Federal Barriers to Innovation and Growth in Key Sectors of the U.S. Economy* (Kansas City, Mo.: Ewing Marion Kauffman Foundation, Feb. 2012), <http://www.kauffman.org/what-we-do/research/2012/02/a-license-to-grow-ending-state-local-and-some-federal-barriers-to-innovation-and-growth-in-key-sectors-of-the-us-economy>.
46. Nunn, Ryan. "The Future of Occupational Licensing Reform." *The Regulatory Review*, Jan. 30, 2017, <https://www.theregreview.org/2017/01/30/nunn-future-occupational-licensing-reform/>.
47. U.S. Department of Defense, *Allow Private Sector Employers to Offer Hiring Preference to Veterans* (Arlington, VA: DOD, 2017), <http://download.militaryonesource.mil/12038/USA4/2017/one-pagers/Vet-Hire-Preference-OPI2.pdf>.
- 48.

49. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 40, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
50. *Ibid.*
51. *Ibid.*
52. *Ibid.*
53. White House Office of the Press Secretary, *Fact Sheet: New Steps to Reduce Unnecessary Occupation Licenses that are Limiting Worker Mobility and Reducing Wages* (Washington, D.C., June 17, 2016), <https://obamawhitehouse.archives.gov/the-press-office/2016/06/17/fact-sheet-new-steps-reduce-unnecessary-occupation-licenses-are-limiting>.
54. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 40, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
55. <https://www.mercatus.org/publication/occupational-licensing-bad-competition-bad-low-income-workers>
56. Morris Kleiner, *Reforming Occupational Licensing Policies* (Washington, D.C. The Brookings Institution, 2015), 2. [https://www.brookings.edu/wp-content/uploads/2016/06/THP\\_KleinerDiscPaper\\_final.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/THP_KleinerDiscPaper_final.pdf)
57. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), 40, [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
58. Beacon Center of Tennessee, *How to Guide Right to Earn a Living Act* (Nashville, TN.: Beacon Center and National Federation of Independent Business-es, 2016), [http://www.beacontn.org/wp-content/uploads/2016/12/Beacon\\_HowToGuide\\_RightToEarnLiving\\_WEB.pdf](http://www.beacontn.org/wp-content/uploads/2016/12/Beacon_HowToGuide_RightToEarnLiving_WEB.pdf).
59. Morris M. Kleiner, *Stages of Occupational Regulation* (Kalamazoo: W.E. Upjohn Institute for Employment Research, 2013).
60. Ryann Nunn, *Occupational Licensing and American Workers* (Washington, D.C.: The Brookings Institution, 2016), <https://www.brookings.edu/research/occupational-licensing-and-the-american-worker/>
61. *Ibid.*
62. *Ibid.*
63. *Ibid.*
64. Thomas A. Hemphill and Dick M. Carpenter, "Occupations: A Hierarchy of Options," *Regulation* (Fall 2016), [https://object.cato.org/sites/cato.org/files/serials/files/regulation/2016/9/regulation-v39n3-5\\_0.pdf](https://object.cato.org/sites/cato.org/files/serials/files/regulation/2016/9/regulation-v39n3-5_0.pdf).
65. *Ibid.*
66. Maureen K. Ohlhausen, "Advancing Economic Liberty" (presentation at the George Mason Law Review's Antitrust Symposium, Washington, D.C., February 23, 2017), [https://www.ftc.gov/system/files/documents/public\\_statements/1098513/ohlhausen\\_-\\_advancing\\_economic\\_liberty\\_2-23-17.pdf](https://www.ftc.gov/system/files/documents/public_statements/1098513/ohlhausen_-_advancing_economic_liberty_2-23-17.pdf)
67. Institute for Justice, "Model Economic Liberty Law," (Arlington, VA.: Institute for Justice, Accessed on June 7, 2017), <http://ij.org/activism/legislation/model-legislation/model-economic-liberty-law-1/>.
68. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
69. Will Flanders and Collin Roth, *Fencing Out Opportunity: The Effect of Licensing Regulations on Employment* (Milwaukee, WI.: Wisconsin Institute for Law and Policy, 2017), <http://www.will-law.org/wp-content/uploads/2017/03/FOO2-FINAL-v3.pdf>.
70. *Ibid.*
71. [http://research.upjohn.org/cgi/viewcontent.cgi?article=1254&context=up\\_press](http://research.upjohn.org/cgi/viewcontent.cgi?article=1254&context=up_press)
72. U.S. Department of Treasury Office of Economic Policy, Council of Economic Advisers and Department of Labor. *Occupational Licensing: A Framework for Policymakers* (Washington, D.C.: The White House, 2015), [https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing\\_report\\_final\\_nonembargo.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf).
73. Bureau of Labor Statistics. *The De-Licensing of Occupations in the United States* (Washington, D.C.: 2015), <https://www.bls.gov/opub/mlr/2015/article/the-de-licensing-of-occupations-in-the-united-states-1.htm>.
74. Bureau of Labor Statistics. *The De-Licensing of Occupations in the United States* (Washington, D.C.: 2015), <https://www.bls.gov/opub/mlr/2015/article/the-de-licensing-of-occupations-in-the-united-states-1.htm>.
75. Morris M. Kleiner, *Stages of Occupational Regulation* (Kalamazoo: W.E. Upjohn Institute for Employment Research, 2013), 220.
76. Sanderson, Joseph. "Don't Bury the Competition: The Growth of Occupational Licensing and a Toolbox for Reform," 31 *Yale Journal on Regulation*, Issue 2 (2014). p 455-490. <http://digitalcommons.law.yale.edu/yjreg/vol31/iss2/6>

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