

LABOR AND EMPLOYMENT

The Evolving State of Occupational Licensing

Research, State Policies and Trends, 2nd Edition



The Evolving State of Occupational Licensing: Research, State Policies and Trends, 2nd Edition

The National Conference of State Legislatures is the bipartisan organization dedicated to serving the lawmakers and staffs of the nation's 50 states, its commonwealths and territories.

NCSL provides research, technical assistance and opportunities for policymakers to exchange ideas on the most pressing state issues, and is an effective and respected advocate for the interests of the states in the American federal system. Its objectives are:

- Improve the quality and effectiveness of state legislatures.
- Promote policy innovation and communication among state legislatures.
- Ensure state legislatures a strong, cohesive voice in the federal system.

The conference operates from offices in Denver, Colorado and Washington, D.C.

I. Executive Summary

With up to one-quarter of the U.S. workforce now needing a license to work in their occupation—up from about 5% several decades ago—state policymakers have taken an active role in developing sensible and effective regulatory policies that strike the right balance needed to protect consumers and promote economic growth and employment opportunity.

As described in Section V of this report, state policymakers have taken the following actions to develop a smarter occupational licensing framework.

Assess, gather and utilize workforce and economic data to inform policymaking. Policymakers have established legislative subcommittees or working groups to review requirements, engage licensing boards and recommend legislative policies.

Define a blueprint to guide policy decisions. Several states have convened diverse and bipartisan groups of stakeholders to review data and set a course for occupational licensing reform.

Enact broad licensing reforms. In recent years, some states have considered or enacted comprehensive changes to the state’s overall occupational regulatory approach, such as through a policy shift towards certification over licensing (Indiana) or through legislation—such as “Right to Earn a Living Acts” implemented in [Arizona](#) and [Tennessee](#)—that limits entry requirements to those that are necessary to protect the public health or safety.

Increase Oversight of Licensing Boards and Decisions. 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.

Establish a Process for Ongoing Occupational Licensing Review. 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. Some states subject all agencies created by statute to periodic sunset reviews while some require only select agencies and regulatory boards to undergo reviews.

Address Unnecessary Employment Barriers that Affect Specific Populations. Several states are reviewing or easing barriers that impede access to employment for specific populations, which may include active duty military and veterans, military spouses, immigrants with work authorization, individuals with a criminal record and borrowers who have defaulted on their student loans.

Change Licensing Requirements for Specific Occupations. States have adopted new licensing requirements, changed existing ones or eliminated licensing rules altogether for specific occupations. At the same time as some states have increased certain licensing requirements, policymakers have simultaneously 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.

As described in this report, states’ experiences demonstrate the multiple pathways that can help state policymakers strike the right balance by removing barriers to work and improving labor market entry and portability across state lines.

II. 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% of the employed population in the 1950s, up to 25% of workers today have a license to work in their designated occupation.¹ Given the reach across the American workforce, researchers from the Institute for Justice [concluded](#) in a 2018 report that “[o]ccupational licensing is widely recognized as one of the most important labor market issues in the United States.”²

Concerns about public safety, consumer protection or other policy goals have prompted some of the growth in state licensing over time, creating 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.”³

The effects can hinder individuals from making a living in occupations for which they are qualified to work—a problem that disproportionately affects specific populations. “Excessive licensing,” [said](#) former U.S. Secretary of Labor Alexander Acosta in 2018, “can create economic barriers for Americans seeking a job, including veterans and military spouses, and hinder competitiveness for business.”

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. “Because licensing is based on state law, states must take the lead in reforming the licensing system,” Secretary Acosta said. As described in this report, policymakers are enacting a wide range of strategies to design and calibrate their regulations to meet the needs of today’s consumers, workers, employers and job markets.

About this Report

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.

NCSL developed this second edition to the 2017 report, “[The State of Occupational Licensing: Research, State Policies and Trends](#),” to highlight emerging research findings and new state policy developments and trends related to occupational licensing. As was the case for the 2017 report, the second edition also focuses on licensure requirements that affect the types of occupations studied as part of the Occupational Licensing Research Consortium project, described below. The 34 occupations studied in this NCSL-led project, summarized in Appendix A, 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.

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 for a three-year project to: 1) ensure 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.

Since its inception, the occupational licensing project has engaged states in a structured peer learning con-

sortium with technical assistance support from the partner organizations. After launching a competitive application process, the project has engaged the following 16 states:

- **Cohort One:** Arkansas, Colorado, Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Nevada, Utah and Wisconsin
- **Cohort Two:** Idaho, Oklahoma, New Hampshire, North Dakota and Vermont

Participating states formed cross-cutting project teams with representation from state legislators, governors' offices, state workforce agencies, state regulatory or licensing boards and state administrative agencies involved in occupational licensing. Since its launch, the national partners have produced research, convened state policymakers and experts in the field of occupational licensing and delivered technical assistance to states. For more information on the consortium and project timeline, visit http://www.ncsl.org/portals/1/documents/labor/licensing/occupational_licensing.pdf.

III. Occupational Licensing Trends and Policy Issues

Occupational licensure is a regulatory method that requires people to secure a license from government in order to practice a certain trade or profession.⁴ 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.⁵ 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 funeral attendants 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 and modifying licensing requirements for specific occupations.
- Authorizing regulatory boards to license applicants and oversee compliance.
- Reviewing the merits of existing and proposed licensure requirements.
- Convening diverse stakeholders representing legislative, executive branch, consumers, industry representatives and other constituencies to assess regulatory needs and options.
- Proposing strategies or guiding principles to improve the state's overall approach to regulating professions.

"Any cost-benefit analysis of a licensing rule needs to take into account a number of factors: the labor market costs, impacts on consumer prices, and benefits for consumer health and safety, among others."

—Ryan Nunn,
"Improving Health Care Through Occupational Licensing Reform," 2018

Licensing laws are established independently by each state government. In some cases, occupational licensing requirements are established directly by state legislatures in the statute that creates a license. Other states delegate the power to determine licensure requirements to state agencies or state-sponsored independent boards. Often, licensing requirements are set by a combination of statute and regulation, the latter being written by a state government agency or an independent licensing board usually comprised of industry representatives appointed by the state's governor.

According to a 2015 brief published by the Council on Licensure, Enforcement and Regulation (CLEAR), “civic leaders, elected officials, and courts have struggled to balance legitimate interests in protecting public health and safety with the preservation of free practice.”⁶ Policymakers play an important role by assuring that regulatory changes do not remove important consumer health and safety safeguards. “Where there is clear safety and quality rationales for licensure, such as in health care and education, any agenda to relax those licensing restrictions

should research exactly how quality and safety can be maintained without licensure,” say researchers in a [2018 article](#) published in the *Annual Review of Law and Social Science*.

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.

In a 2018 resource for state policymakers, CLEAR encouraged policymakers to analyze the seriousness of the need to license a given occupation and to engage the public in the deliberative process.⁷ “There are many situations in which the public needs to be protected from dangers posed by unqualified practitioners, but not every ser-

vice provided represents a direct threat to the public even if a practitioner is unqualified,” Kara Schmitt wrote in the 2018 “Questions a Legislator Should Ask” report published by CLEAR.⁸

As discussed in Section V, policymakers have taken numerous actions to weigh the costs and benefits of proposed and existing occupational licensing requirements. In a [2018 opinion piece](#), economist Ryan Nunn pointed to new and comprehensive data sources, such as [labor force statistics](#) from the U.S. Department of Labor's Bureau of Labor Statistics, that provide a more complete picture about the licensed workforce and the fields in which they work. Such data resources can help policymakers maintain perspective about the impacts of licensure on different occupations and make data-informed decisions about those fields in which licensing is prevalent and “economically meaningful,” Nunn suggested. For example, one-quarter of all licensees work in the health care field and account for 18% of the U.S. gross domestic product.⁹



Licensure Trends in the United States

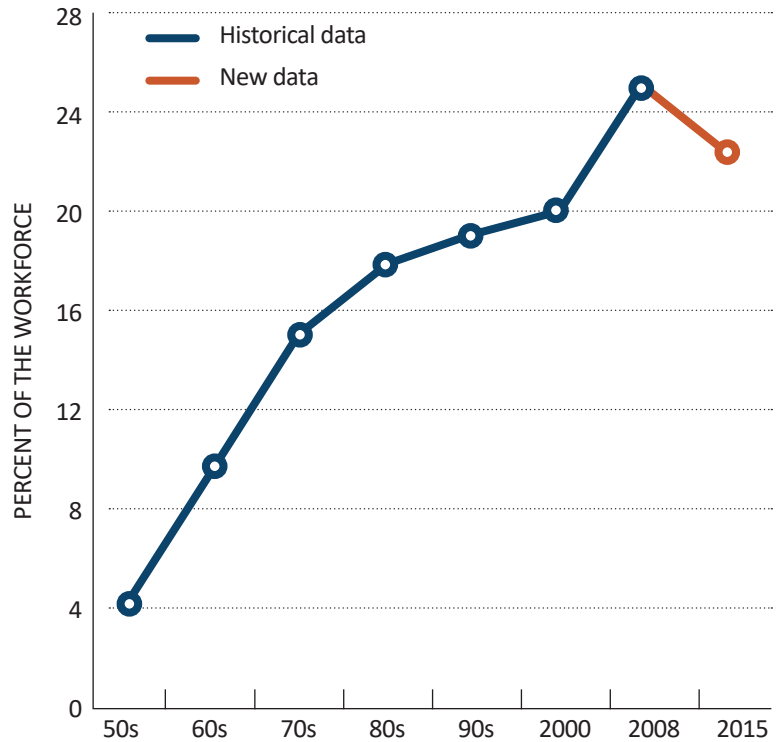
The share of American workers who hold an occupational license has grown significantly over the last several decades, from around 5% of the employed population in the 1950s to up to one-quarter of all employed workers today (Figure 1).¹⁰ Estimates of the share of U.S. workers who have a license vary based on a number of variables, including samples and data collection methods that researchers employ.¹¹ According to the U.S. Bureau of Labor Statistics (BLS), approximately 22% of civilian U.S. workers had a state license to work in their designated occupation in 2018 and about 2% had a certificate.¹²

Licensure varies depending on occupation type, education attainment, gender, race and ethnicity and other variables. In 2018, BLS data show that almost three-quarters (72.6%) of health care and technical workers had a license in 2018, compared with 28% of personal care and service workers and 17% of the transportation and moving workforce.¹³ 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.¹⁴ 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.¹⁵

■ **State-by-State Variation in Licensing.** Across states, the percentage of licensed workers ranged from 14% in Georgia to almost 27% in Nevada, researchers found in a 2018 report published by the Institute for Justice (Figure 1). In addition to identifying the percentage of workers licensed and the state’s ranking, the same researchers also developed profiles of each state to highlight state-level economic costs of licensing and workforce characteristics of licensed and certified workforce (e.g., highlighting gender, education level, earnings, race and age).

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. 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.¹⁶ 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.¹⁷

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); Council of Economic Advisers calculations

Potential Benefits of Licensing

When designed and implemented properly, 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. According to a [2018 report](#) published by the Federal Trade Commission (FTC), licensing for some professions can serve a beneficial role by protecting the public's health and safety. However, the report's authors note that even when it serves this role, it can create "significant and unintended negative effects" which are discussed in greater detail in the following section. Potential benefits from occupational licensing are summarized below.

■ **Protecting Public Health and Safety.** For decades, policymakers have adopted licensure policies to achieve a variety of goals. The FTC'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."¹⁸ 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.¹⁹

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."

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.

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.

■ **Potential Benefits to Licensed Workers.** Licensed workers “enjoy labor market advantages that go beyond higher wages,” according to a [2018 analysis](#) Nunn wrote for the Brookings Institution. These include longer job tenure, lower voluntary and involuntary part-time status, and lower unemployment rates.²⁰ In a 2018 study published in the *Annual Review of Law and Social Science*, authors Sandeep Vaheesan and Frank Pasquale note that occupational rules such as licensing “can help stabilize working- and middle-class wages.”²¹ Similar to other minimum wage laws and unionization, the study’s authors find that licensing rules enhance workers’ bargaining power, which can have the effect of raising wages and promoting stable employment. However, Nunn adds that the advantages conferred to one group (licensees) reflect the “exclusive rights” that licensed workers enjoy, “with corresponding disadvantages imposed on unlicensed workers.”

■ **Increased Consumer Confidence.** 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.²²

Potential Deficiencies and Costs of Licensing

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. While occupational licensing may be necessary to protect public health and safety, the FTC [asserted](#) in a 2018 report that “unnecessary or overbroad restrictions erect significant barriers and impose costs that harm American workers, employers, consumers, and our economy as a whole, with no measurable benefits to consumers or society.” Moreover, FTC found that the burdens associated with occupational licensure, especially for entry- and mid-level jobs “may fall disproportionately on our nation’s most economically disadvantaged citizens.”²³

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. A [2018 report](#) published by researchers at the Institute for Justice, found that:

- Nationwide, licensing costs up to 2 million jobs annually, ranging from a loss of 7,000 in Rhode Island to nearly 196,000 jobs in California.
- Licensing may cost the national economy between \$6.2 and \$7.1 billion each year due to lost output. The losses to states range from \$28 million in Rhode Island to \$840 million in California.
- When accounting for broader misallocated resources stemming from licensure, other estimates tally the cost to the national economy of between \$184 to \$197 billion annually. Measuring resources directed away from the most highly valued uses, this may provide a “truer picture of licensing’s costs to the economy.”

Licensure contributes to such economic losses by restricting competition and delivering economic returns to licensed workers above what they would receive without licensing. According to the 2018 Institute for Justice researchers, “[t]hese economic returns are costs borne by consumers, likely through higher prices, and the wider economy, through fewer jobs and reduced economic activity.”²⁴

“Occupational licensing, which is almost always state-based, inherently restricts entry into a profession and limits the number of workers available to provide certain services. It may also foreclose employment opportunities for otherwise qualified workers. This reduction in the labor supply can restrain competition, potentially resulting in higher prices, reduced quality, and less convenience for consumers.”

—**Federal Trade Commission**, “Policy Perspectives: Options to Enhance Occupational License Portability,” 2018

Effects on Employment and Wages

Research indicates that licensing requirements reduce employment in licensed occupations and reduce wages for unlicensed workers relative to their licensed counterparts. According to Nunn's 2018 analysis for the Hamilton Project, a median licensed worker earned \$25.00 per hour while an unlicensed worker earned an average of \$18.80. The wage premium for licensed workers is due to several variables, including age, human capital and the barrier to entry that licensing represents.²⁵ Nunn concluded that licensing results in wage premiums, restricts labor supply in certain occupations and harms unlicensed workers in those occupations.²⁶

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. Upfront costs associated with training, education and fees, may partially offset later benefits that workers may experience as a result of licensure.²⁷

The burdens to American workers vary by state and occupation, as shown in Figure 2. The Institute for Justice's 2017 [License to Work](#) report ranked states based on the burdens imposed across 102 low- and moderate-income licensed occupations. In terms of the number of occupations a state licenses, Louisiana and Washington licensed 77 of the 102 occupations included in the study while Wyoming licensed just 26 occupations. On average, states license about half (54) of the 102 occupations included in the study. The study also examined education and experience requirements, along with licensure fees and other burdens. While states vary widely along these variables, the study found that 18 states required more than one year of education and experience on average for licensed occupations.²⁸

The state comparisons also 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 more than one year of education or experience while emergency medical technicians on average require about one month.²⁹

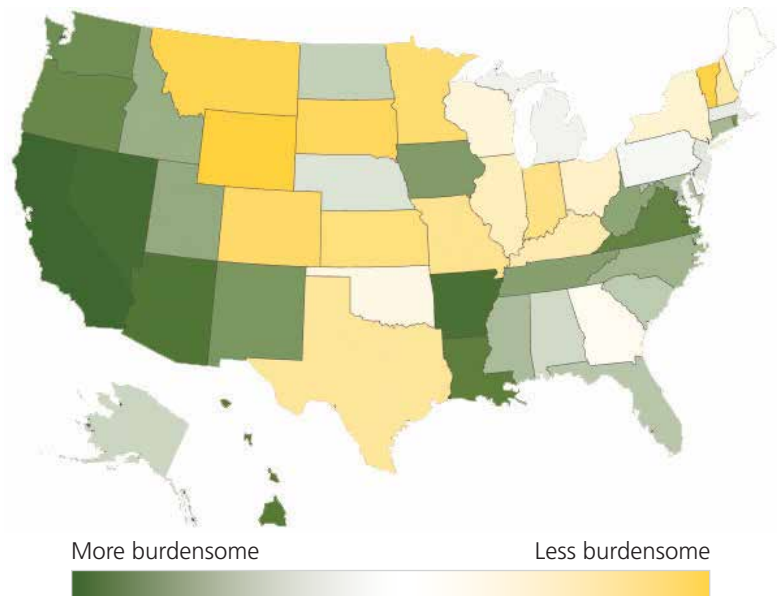
Occupational licensing can result in higher wages for licensed workers, which in turn increases consumer costs. While higher wages benefit licensed workers, wage disparity can lead to “inefficiency and unfairness, including reducing employment opportunities and depressing wages for excluded workers, reducing workers’ mobility across state lines, and increasing costs for consumers.”³⁰

Effects on Costs, Competition and Innovation

Research indicates that licensing increases 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 in the form of additional training and education, fees, paperwork and exams, licensing “reduces employment in the li-

Average Burden of Licensing Requirements

Of 102 lower-income occupations, 2017.



Source: Institute for Justice, “License to Work,” 2017

De-licensing Funeral Services in Colorado: Effects on Wages and Consumer Costs

In 1983, Colorado de-licensed funeral services, creating an opportunity for researchers to study the policy's effects on wages and other variables. A [2017 study](#) published in the *International Review of Law and Science* found that licensing resulted in a wage premium of 11% to 12% or more, higher prices, and a movement among consumers away from cremation and toward higher-priced burial services.

censed occupation and hence competition, driving up the price of goods and services for consumers,” the U.S. Council of Economic Advisers concluded in its 2015 report.³¹

Moreover, 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.³² 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.³³

By imposing costs and barriers to entering different fields, occupational licensing also puts the brakes on innovation and entrepreneurship.³⁴ A 2015 working paper from the Mercatus Center argued that licensing “standards may become both a floor and a ceiling as declining competition leads to less incentive to innovate and improve.”³⁵

Effects on Quality and Public Health and Safety

Researchers find little evidence licensure improves the quality of services or protects consumers from harm. As described earlier, authors of a 2018 report published by the Institute for Justice found licensing burdens “often bear little relationship to public health or safety.”³⁶ In fact, evidence suggests the most onerous licensure laws may lead to lower-quality services and increased public safety risks.³⁷

Licensing reduces the supply of service providers while simultaneously increasing the average operating costs for professionals. Consumers may 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. 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.³⁸

Effects on Geographic Mobility

Licensing rules limit geographic mobility for licensed workers. State-by-state licensing, according to a [2018 FTC report](#), can pose “significant hurdles for individuals who are licensed in one state, but want to market their services across state lines or move to another state.” 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.³⁹ Strict occupational licensing requirements limit the value of interstate relocation as a tool to combat unemployment.⁴⁰

According to Furman from the Council of Economic Advisers, “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.”⁴¹ 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. 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.”⁴²

FTC encourages state legislatures, state licensing boards and other stakeholders to adopt measures to improve license portability. Moreover, “by enhancing the ability of licensees to provide services in multiple states, and to become licensed quickly upon relocation, license portability initiatives can benefit consumers by increasing competition, choice, and access to services, especially with respect to licensed professions where qualified providers are in short supply.”⁴³

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.”⁴⁴ 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 they may be qualified to practice.⁴⁵ Licensing is also a burden for the highly mobile population of military spouses, one-third of whom work in occupations that require licenses or certification.⁴⁶ More than one in five military spouses reported on a recent survey that their inability to transfer their professional license to a new state was among their greatest employment challenges.⁴⁷ 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.⁴⁸ The obstacles may deter military spouses from participating in the labor market altogether.

Policy barriers that hinder veterans from finding work include training and licensing costs, lack of recognition for military service in comparable civilian jobs, and licensing requirements that apply to individuals with an honorable discharge. This leaves many veterans, whose circumstances of discharge may have nothing to do with their ability to safely perform a job, at a serious disadvantage in finding work in a field subject to licensing regulations.

■ **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.⁴⁹ While 30% 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.⁵⁰

■ **People with Criminal Records.** Having a criminal record can make it difficult, or even impossible, for an individual to work in a given field, especially one that requires an occupational license. In 2016, economist Stephen Slivinski found that having a good job reduces the likelihood that a former offender will commit another crime.⁵¹ “Successful entry into the labor force has been shown to greatly increase the chances that a prisoner will not recidivate,” Slivinski wrote in the landmark [“Turning Shackles into Bootstraps”](#) report. However, government-imposed barriers, including occupational licensing requirements, “can be among the most pernicious barriers faced by ex-prisoners seeking to enter the workforce.”

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. Policy barriers facing individuals with a criminal record include:

- **Blanket bans.** Many state licensing laws include some type of blanket disqualification that include automatic prohibitions for people with criminal records—particularly for felony convictions that are deemed “violent” or “serious” offenses. The [National Inventory of Collateral Consequences of Conviction](#), a searchable database of the collateral consequences in all U.S. jurisdictions, catalogs over 6,000 mandatory occupational licensing consequences for people with criminal records.
- **Good Moral Character Clauses.** Licensing laws often contain “good-character” or “good moral character” provisions that grant licensing boards broad discretion to deny applications due to an appli-

Asking Key Questions: Tools and Resources

The 2018 [“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 (see Appendix C). The guide suggests questions that legislators can ask when considering new occupational licensing regulations as well as when considering whether revisions are needed to current ones. For example, CLEAR recommends that legislators ask:

- What is the problem that could be solved by regulation?
- Would the proposed regulation solve the problem?
- Why should the profession be regulated by the jurisdiction?
- Have alternatives been considered?
- What are the opinions of the state regulatory authorities, associations, and interest groups?
- Would it unfairly disadvantage special populations (e.g., veterans or individuals with criminal backgrounds?)
- What is the public benefit of regulation?

Several states have adopted their own tools and questions to facilitate informed decision-making about occupational licensing requirements. For example, Tennessee’s 2016 [How-To Guide](#) provides a step-by-step guide 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. 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 2018 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 ask the following questions when revising regulations:

- Are any restrictions likely to have a significant adverse effect on competition?
- Do those restrictions address demonstrable risks of consumer harm?
- Are the restrictions narrowly-tailored to minimize burdens on competition?
- Are less restrictive alternatives available?

In addition to the above questions, policymakers often gather information about other states’ actions and outcomes related to licensure. Since occupational licensing varies across states, policymakers have the benefit of looking at other states’ experiences and evidence to see how regulatory alternatives work in practice. Resources such as the 2018 [At What Cost: State and National Estimates of the Economic Costs of Occupational Licensing](#) report, published by the Institute for Justice, provide state-by-state comparisons. Partner organizations involved in this project—NCSL, NGA and CSG—also track and analyze state occupational laws and trends and provide research and technical assistance to support state policymakers. Several resources can help policymakers and partners develop a composite of their state’s regulatory landscape. For example:

- The [National Occupational Licensing Database](#), created by NCSL, NGA and CSG catalogs occupational licensing laws for 34 professions.
- The 2017 [License to Work: A National Study of Burdens from Occupational Licensing](#) report, published by the Institute for Justice, ranks states in burden and breadth of licensing requirements.
- CLEAR [provides](#) links to state professional and occupational regulation statutes.
- CLEAR also [tracks and provides links](#) to state sunrise and sunset agency audits.

cant’s criminal history, including convictions for minor offenses and sometimes arrests that never led to a conviction. While public health and safety dictate that some criminal convictions should disqualify applicants for certain kinds of jobs, in many cases, a criminal conviction of any kind may be a bar to licensure. Licensing regulations often refer broadly to “good moral character” as a requirement for holding a license, and in practice this has, in many cases, been interpreted to ban individuals with any criminal record.

The costs associated with licensure can also be a barrier for people with criminal records, particularly those who were formerly incarcerated. The fees related to training, education, acquisition, and maintenance of a license are all challenges for the formerly incarcerated who often have limited income and other court-ordered monetary sanctions that further inhibit their economic standing.

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

The costs of occupational licensing have prompted policymakers across the political spectrum to “rethink the system,” Kleiner observed in a 2015 analysis.⁵² As described below, research suggests various policy considerations and options for policymakers involved in developing or refining their state’s regulatory approach.

A. Establish a Process to Ask Key Questions and Review Evidence

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.”⁵³ 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.”

As described in the Section V, several states have passed laws establishing a review process for existing or proposed occupational licensing. For example, in 2018, Nebraska Governor Pete Ricketts signed into law [LB 299](#), which established a two-step process to review existing regulations. First, there must be “present, significant, and substantiated harms” that require intervention. Second, if such harms are identified, legislators must first consider a regulation that is the “least restrictive” and imposes the lowest burdens and costs while protecting consumers from the identified harm. The law further requires that every standing committee annually review and analyze 20% of the occupational regulations within its jurisdiction and submit an annual report to the legislature.

B. 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. Some states have codified this as a guiding principle in legislation. For example, Nebraska [LB 299](#), enacted in 2018 and described above, spelled out that the state’s policy is to “use the least restrictive regulation which is necessary to protect consumers from undue risk.”

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.

Table 1. Definitions of Occupational Regulation Approaches

Regulatory Approach	Approach Defined
No government intervention	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.
Private civil action	A consumer’s ability to pursue civil action may alone compel providers to deliver high-quality services to avoid litigation or loss of reputation.
Inspections	Random inspections, such as government inspections of restaurants, provide an alternative way to assure cleanliness, safety and necessary skills.
Bonding or insurance	Mandatory bonding or insurance can protect consumers and the public by ensuring that the provider is able to cover the cost of consumer damages.
Registration	States require individuals in certain occupations to register with a governmental agency before practicing and sometimes file a surety bond or fee.
Voluntary Certification	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. ⁵⁹
Licensure	An occupational license is a credential that government requires a worker to hold in certain occupations. ⁶⁰ 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. ⁶¹ 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. ⁶²

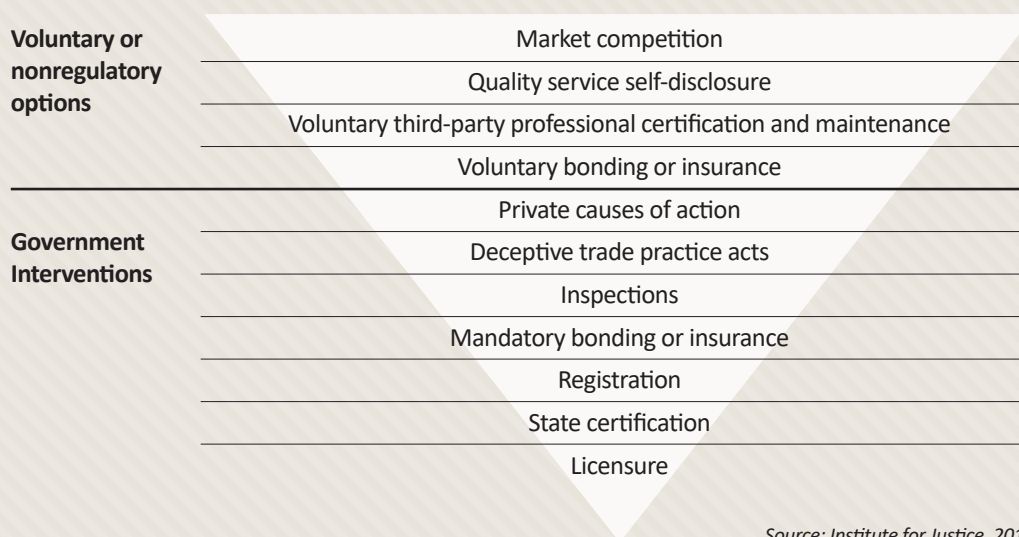
Source: Adapted from CLEAR Resource Brief, “The Balance Between Public Protection and the Right to Earn a Living,” Carpenter and McGrath, 2015.



Tailoring State Responses: Tools and Resources

Legislators’ decisions about occupational licensing are not simply decisions about whether to license an occupation or not, but instead, authors of the 2017 [License to Work](#) report emphasize that legislators may consider a continuum of options for a given occupation. As shown in Figure 2, a hierarchy of regulatory options 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 2. Hierarchy of Alternatives to Licensing



Source: Institute for Justice, 2017

The hierarchy provides a menu of options 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.” Additional information on the hierarchy of options is available at the Institute for Justice’s 2017 report, “The Inverted Pyramid: 10 Less Restrictive Alternatives to Occupational Licensing” at http://ij.org/wp-content/uploads/2017/11/Inverted-Pyramid_FINAL.pdf.

C. 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, FTC Acting Chairman Maureen Ohlhausen stated, “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.”

Several states have taken steps to facilitate mobility across state lines. For example, in 2019 Arizona lawmakers passed [HB 2569](#) which eased occupational licensing laws by recognizing out-of-state licenses. Existing professional compacts, such as the enhanced nurse licensure compact or the physical therapy interstate compact provide examples of interstate arrangements for specific occupations. The Institute for Justice’s model [occupational licensing review law](#) seeks to help states remove barriers, including for people with criminal records, and use the least-restrictive methods to protect public health and safety.⁵⁴

Reducing Barriers to Mobility: Tools and Resources

- A 2018 FTC report describes and links to various model laws and occupational licensure compacts, such as the [nurse licensure compact](#) and the [Recognition of Emergency Medical Services Licensure Interstate Compact](#).
- The same report highlights other multistate portability initiatives, including “mutual recognition,” which means a licensee in one state has privilege to work in other states that allow it, and expedited licensure.
- The U.S. Department of Defense’s [Military State Policy Source](#) offers policy research around issues affecting military families, including [interstate compacts](#) and [licensing board evaluation](#), as well as resources that state policymakers can use to promote interstate mobility for military spouses.
- Licensing Best Practices Featured in “Occupational Licensing: A Framework for Policymakers”

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. State occupational licensing reform approaches and pathways are summarized below.

A. Understand the Occupational Licensing Landscape: Assess, Gather and Utilize Workforce and Economic Data to Inform Policymaking

Several states have called on state agencies or task forces to gather data and develop a composite of the state occupational licensure landscape. Such efforts can help to establish baseline data about the current workforce and inform policy decisions about how they are regulated. For example, Wisconsin lawmakers passed [Act 59](#) in 2017 which charged the Department of Safety and Professional Services (DSPS) to complete a statewide review of occupational licenses and submit findings to the Governor and Legislature. DSPS surveyed 35 state agencies to gather data about educational requirements, fees, public benefits, barriers or burdens associated with regulation, research about how other states regulate a given profession,

Licensing Best Practices Featured in “Occupational Licensing: Framework for Policymakers”

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.

Policy Mechanisms for Enacting Change

Policymakers have exercised vetoes and 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.

- In a May 2019 letter accompanying vetoes of several occupational licensing bills, Colorado Governor Jared Polis explained that his administration would not “categorically rule out allowing any regulation,” but would deem licensing appropriate only “in cases that are compelling for consumer safety and economic reasons.”
- As of April 2019, governors in at least 10 states have issued executive orders related to occupational licensing, according to NCSL, Council of State Governments and National Governors Association tracking. For example:
 - 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.
 - The Red Tape Reduction Act, an executive order issued by Idaho Governor Brad Little in 2019, requires state agencies with authority to issue administrative rules to identify at least two existing rules to be repealed or simplified for every one proposed rule. It also requires agencies to submit an impact statement detailing how the proposed rule would affect individuals and small businesses.

For More Information on Executive Actions, Visit:

- NCSL’s [executive order tracker](#) for links to state executive orders.
- Environmental Systems Research Institute’s [“Governor’s Role in Occupational Licensing”](#) for an interactive map.

and a statement attesting that the current level of governance is appropriate. DSPS also disseminated a survey to credential holders, the public, and other stakeholders.

Policymakers have established legislative subcommittees or working groups to review requirements, engage licensing boards and recommend legislative policies. For example:

- In 2018, lawmakers in Idaho formed a [“Regulatory Reform Joint Subcommittee”](#) to examine current rules of state occupational licensing boards, analyze their impact on business, and recommend legislative policy to ease regulatory or licensing requirements in specific industries. The subcommittee reports findings to the House Business and Senate Commerce committee.⁵⁵
- In 2018, Arkansas Governor Asa Hutchinson appointed a [Red Tape Reduction Working Group](#) to examine and identify regulations that are an unnecessary barrier to entering a trade.⁵⁶

States have noted that obtaining comprehensive data across agencies and occupations can be a challenge. A [2018 report](#) published by the Occupational Licensing Task Force and Oklahoma Department of Labor found that lack of data on occupational licensing was one of the biggest challenges the task force faced. “It has been difficult to assess the impact of regulations because of the lack of centralized or aggregated data available on occupational licensing in the state of Oklahoma,” the Task Force stated. It went on to note that “Data collection is a vital component to understanding the current status of occupational licensing in the state because it allows officials or the public to quickly access data and conduct a comparative analysis to examine the effect of licensing.” A [2016 report](#) issued by the Little Hoover Commission in California similarly recommended collecting demographic information on licensed workers and applicants “so policymakers better understand the impact of regulations on different groups of Californians.”

As part of their data collection and analysis work, stakeholders often ask questions and analyze available data to identify “mismatches” or inconsistencies in regulation as described [here](#).

- Some analyses compare licensing requirements across states, including minimum level of education or experience required for a license, processing fees, examination requirements.
- Others look for fit (or conversely “mismatches”) in regulatory burden relative to public safety. For example, a 2018 [study](#) by the Mercatus Center at George Mason University identified occupational licensing mismatches in Michigan: “Occupations that are less likely to involve risk to the public are often more highly controlled than riskier occupations,” researchers found. The Mercatus study cited another 2017 [report](#) published by the Mackinac Center which identified inconsistencies in the licensing regime, such as requirements that marble installers carry a license, while carpeting does not.⁵⁷
- Still others examine licensing burdens relative to other states in terms of number of licensed occupations, average fees, and required days of training and experience. Resources such as the Institute for Justice’s 2018 “[At What Cost](#)” report can provide state-specific data the about percentage of workers licensed and certified, state-level economic costs of licensing, and characteristics of licensed and certified workers.

B. Set the Course: Define a Blueprint to Guide Policy Decisions

Several states have convened diverse and often bipartisan groups of stakeholders to review data and set a course for occupational licensing reform. For example, members of Oklahoma’s Occupational Licensing Task Force include legislators and officials representing state labor, education and workforce development, and corrections agencies, the Attorney General’s Office, and the state Chamber of Commerce, among other groups.⁵⁸

As part of their participation in the multi-state occupational licensing consortium, for example, every state team has developed an action plan or blueprint that defines broad goals, strategies, and concrete action steps team members would take to achieve their state-defined goals. The process of convening stakeholders, assessing data, and defining goals and guiding principles is a process any state can adopt, regardless of whether they are currently participating in the occupational licensing consortium. For example:

- If the least restrictive method is not currently being used, Oklahoma’s [occupational licensing blueprint](#) directs stakeholders to consider a less-restrictive means, such as market competition, private certification, public inspection or government certification.
- In 2018, Virginia Gov. Northam and House Speaker Kirk Cox announced plans to reduce state regulations by 25% in the next three years.⁵⁹

C. Enact Broad Licensing Reforms

In recent years, some states have considered or enacted comprehensive changes to the state’s overall occupational regulatory approach, such as through a policy shift towards certification over licensing (Indiana) or through legislation—such as “Right to Earn a Living Acts” implemented in [Arizona](#) and [Tennessee](#)—that limits entry requirements to those that are necessary to protect the public health or safety. In contrast to state efforts that develop policy affecting a specific occupation or group, these comprehensive reforms seek to develop guiding principles that inform regulatory approaches across all occupations.

In a 2016 [report](#), California’s Little Hoover Commission, a legislatively-created independent state oversight agency, called for a “holistic, well-reasoned strategy for regulating occupations.” While the specifics of who can work in a given occupation vary, the report argues that “the underlying principles of what level of consumer protection the state hopes to achieve – and how difficult or easy it should be to enter occupations – should be set by state policymakers and implemented across all occupations.” To that end, the Commission developed eight recommendations as guiding principles.

Indiana’s approach represents a shift in the direction of voluntary certification. 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 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 law also allows individuals to petition a board for further review of a licensing requirement.

D. Increase Oversight of Licensing Boards and Decisions

The 2017 [License to Work](#) report by researchers at the Institute for Justice recommended state policymakers establish oversight entities to “actively supervise licensing boards.” 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 the [Occupational Board Compliance Act of 2017](#), authorizing 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.

- The Oklahoma Occupational Licensing Task Force’s 2018 [occupational licensing blueprint](#) suggests policymakers ask questions about licensing boards, such as:
 - If licensing is used, does the board in charge have a controlling number of board members as market participants?
 - Is there active supervision of the board’s actions by the state?

E. Establish a Process for Ongoing Occupational Licensing Review

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 2015 “[Occupational Licensing: A Framework For Policymakers](#)” report, “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.”

Sunrise and sunset review processes vary widely by state. Some states subject all agencies created by statute to periodic sunset reviews while some require only select agencies and regulatory boards to undergo reviews. Still others task legislative committees with determining which entities must be reviewed and when.⁶⁰

According to the Council on Licensure, Enforcement and Regulation, at least 14 states have [adopted](#) a sunrise process for proposed regulations and 36 states have some form of sunset process for existing occupational licensing laws. For example:

- In 2019, Alabama lawmakers considered House Bill 88 which would require the Sunset Committee to review proposals for regulation of new professions or occupations, and the cost-effectiveness of proposed regulations.
- 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.
- After studying occupational licensing policy in the state, Oklahoma’s Occupational Licensing Task Force—created by executive order in 2016—delivered a [list of recommendations](#) to state policymakers in a 2018 report, including a recommendation that the Legislature form a Legislative Sunset Review Committee to integrate occupational license reviews into the state’s existing sunset review process.
- 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.

Sunrise, Sunset: Defining Terms

A sunrise review occurs before legislation is enacted. Proponents who want to regulate an occupation or profession must outline the potential impacts, costs and benefits of that regulation. Lawmakers then can review the information before moving forward with legislation.

A sunset review takes place after legislation is enacted to create a state board, commission or agency, requiring periodic reviews or audits of these entities. This allows legislators to reevaluate government functions to ensure continued relevancy, effectiveness and efficiency. As applied to occupational licensing policy, sunset reviews sometimes result in modifying licensing requirements and boards or, in some cases, eliminating, or “sunsetting,” them entirely.

F. Address Unnecessary Employment Barriers that Affect Specific Populations

Several states are reviewing or easing barriers that impede access to employment for specific populations. This section highlights state approaches to promote mobility and employment opportunity for the following populations:

- Active duty military and veterans.
- Military spouses.
- Immigrants with work authorization.
- Individuals with a criminal record.
- Borrowers who have defaulted on their student loans.

ACTIVE DUTY MILITARY AND VETERANS

Since 2010, all 50 states and Puerto Rico have enacted legislation aimed at helping active-duty service members and veterans transfer and obtain occupational licenses and certifications. As described below, some laws apply to specific professions while others affect licensing across multiple occupations.⁶¹

Task Forces or Commissions. At least 21 states have created a commission, task force or job placement service to help transitioning veterans. These programs facilitate the exchange of information between the state and employers, with the goal of connecting returning veterans with businesses looking to hire.⁶² For example:

- Florida's Veterans Employment and Training Services program offers skills assessments, provides information on other state services and assists veterans in preparing employment applications.
- Oregon requires state agencies to partner with the state Military Department to provide reintegration services for veterans through regional strategies.⁶³

■ **Recognize Training and Experience.** In recent years, many states have enacted laws directing a licensing board(s) to recognize equivalent military training, education and experience toward the requirements for licensure. While some laws apply to all licensing boards, others are specific to a certain profession. For example, Rhode Island [requires](#) each member of a licensing board to “accept education, training or service completed by an individual as a member of the Armed Forces or Reserves of the United States [or] the National Guard of any state...toward the qualifications to receive the license or certification (R.I. Gen. Laws §5-87-1).⁶⁴

■ **Alternative Pathways to Licensure.** Many states have enacted legislation to ease licensing burdens for veterans in specific occupations, often those regarded as most applicable to a military skill set or where critical needs exist. These occupations include truck drivers, emergency medical technicians, law enforcement officers and others. Alternative paths to licensure are designed to offer veterans an opportunity to demonstrate their proficiency in a certain trade in order to bypass the normal licensing process. For example:

- Ohio offers an expedited veterans paramedic certification program for certain applicants who received military training (Ohio Rev. Code Ann. §4765.161). Others who are not deemed immediately eligible for the program receive credit for their past military training and are required to complete only what is necessary for certification.
- Another 12 states—Alabama, Colorado, Delaware, Georgia, Idaho, Kansas, Mississippi, Tennessee, Texas, Utah, Virginia and Wyoming—have joined a multi-state compact for the Emergency Medical Services profession, known by the acronym [REPLICA](#). The compact covers licensing for veterans, service members and their spouses.

NCSL Online

For more information on state policy options for active duty military, veterans and military spouses, visit NCSL's [2018 Barriers to Work resource](#).

■ **Licensure by Exam.** Veterans can also be licensed by exam to help minimize the degree to which they are required to duplicate coursework that is repetitive of their military instruction. In many cases, states require completion of an approved civilian training program in order to sit for a licensure exam, so states can choose to waive the training requirement for veterans to sit for the exam. For example, the Wisconsin Law Enforcement Accelerated Development Program allows veterans separated from the military within the last three years and with at least one year of experience as a military police officer to take a certification exam with [no additional civilian training](#).

■ **Expedited Review.** Some states have established an expedited review process for applications. This can be done by prioritizing veterans' applications within the normal process, reducing the number of administrative documents they must submit to complete their application, or waiving certain requirements that take time to review. For example, in Kansas (Kan. Stat. Ann. §48-3406) and Kentucky (2018 Ky. Acts, Chap. 58) boards must process applications within 60 and 30 days, respectively, for veterans who hold an equivalent license in another state, the District of Columbia, or any territory. Maryland law requires each health occupations board to issue a license to a qualified veteran within 15 days of receiving the application (Md. Health Occupations Code Ann. §1-704).

■ **Reduced Limitations Based on Military Discharge Status.** Licensing laws often disallow veterans who received less than honorable discharges from being eligible for licensure, even if all other requirements are met and the circumstances surrounding the discharge are unlikely to influence the veteran's ability to safely perform their job. Policymakers have adopted policies that grant licensing authorities more discretion to make determinations on a case-by-case basis or allowing denials only when the discharge is relevant to the occupation. For example, per Kansas law (Kan. Stat. Ann. §48-3406), Kansas boards may grant licensure to a veteran who meets statutory requirements, but received a discharge of less than honorable. The Virginia Medic and Corpsman Program accepts veterans who were discharged under "conditions other than dishonorable (Va. Code § 2.2-2001.4)."

MILITARY SPOUSES

State policymakers have adopted numerous policies to facilitate employment for military spouses, including licensure by endorsement, temporary licensure and expedited review of licensing requests. Licensure by endorsement is commonly arranged between states and is also used for licenses that have national standards or licensing bodies. At least 32 states offer licensure by endorsement for military spouses who relocate based on a military transfer.⁶⁵

Several states offer temporary or provisional licensure to allow a military spouse to work while fulfilling the necessary requirements to qualify for permanent licensure in a new state. For example:

- In Arkansas, policymakers in 2017 passed [HB 1184](#), which required state boards and commissions to promulgate rules for temporary licensure and certification.
- Also in 2017, lawmakers in Texas passed [HB 1934](#) which allowed for temporary certification of military spouses with teaching credentials in another state to work as an educator in Texas while attaining licensure.

At least 35 states require licensing boards expedite review for military spouses; however, most state laws do not set a specific time frame. For example:

- In South Dakota, if a board cannot make a final determination within 30 days, it must issue a temporary license (S.D. Codified Laws Ann. §36-1B-1).
- Montana's licensing boards are authorized to approve an application for an endorsement or temporary license based on an affidavit stating the information is accurate and the necessary documentation is forthcoming (Mont. Code Ann. §§37-1-304 *et seq.*).

Some states are going a step further and enacting legislation to exempt military spouses from licensure, under certain conditions.

- In 2019, Arizona lawmakers passed [HB 2569](#) which allows individuals licensed and in good standing in



another state to freely practice in Arizona, provided they pay the required fees. The legislation applies to individuals who establish residence in the state or are married to an active duty service member.

- In 2018, [Utah passed SB 227](#), which allows active duty service members and spouses to practice a number of professions or occupations in the state without requiring a distinct license in Utah, as long as they hold a current license in good standing in another state and pay all applicable fees.

IMMIGRANTS WITH WORK AUTHORIZATION

Occupational shortages across the country have prompted states to develop policies, laws and partnerships to remove barriers that hinder employment for qualified immigrants with work authorization. As described in NCSL's 2018 "[Barriers to Work](#)" brief, some common state approaches include creating taskforces and offices to develop research and policy recommendations; modifying licensing requirements; and addressing skills deficits and improving English language proficiency.

■ **Task Forces and Offices to Develop Research and Policy Recommendations.** Some states have created programs or task forces to identify key areas for reform and craft individualized policy recommendations.

[The Maryland Skilled Immigrants Task Force](#), a coalition of representatives from the Maryland Department of Human Resources, Department of Labor Licensing and Regulation, community colleges, refugee resettlement agencies, American Job Centers, the Governor's Office of Community Initiatives and many non-profit organizations, helps to integrate immigrants.

NCSL Online

For more information, read [NCSL's report](#) on state actions to promote employment opportunities for immigrants with work authorization.

Governors in Illinois, Michigan and North Carolina have created programs such as welcoming centers for employment, training and education, and career reentry services for foreign-trained professionals to expand and improve their local workforce and economy.

■ **Modifying Licensure Requirements.** States have passed legislation and created offices to modify the requirements for licensure. Their goal is to facilitate licensing of foreign-trained professions and improve transparency of the licensing process through online guides. For example, the Michigan Department of Licensing and Regulatory Affairs and the Office of New Americans partnered with Upwardly Global to provide [online licensing guides for 44 professions](#). The guides are designed to help skilled immigrants and refugees meet Michigan’s licensing requirements and promote Michigan as a destination for skilled immigrants.

■ **Addressing Skill Gaps and English Language Proficiency.** Federal, state and private resources are available to assist foreign professionals in improving English proficiency and upgrading technical skills to meet state licensing requirements. These programs focus on vocational or workplace English language training, or advanced English as a Second Language (ESL), which is distinct from ESL for beginners or low literacy levels. For example:

- [The California Workforce Development Board](#) developed a guide on the federal Workforce Innovation and Opportunity Act (WIOA), funding opportunities, best practices and partnerships to better serve English language learners and create career pathways for them. WIOA’s reauthorization in 2014 allowed, for the first time, adult education and language services to be provided to immigrant professionals with foreign-earned degrees and credentials.
- The Michigan Office for New Americans created the [Michigan International Talent Solutions Program \(MITS\) program](#) in 2015 to support skilled immigrants with permanent work authorization to re-enter their professional careers. MITS partnered with Upwardly Global to train international job seekers and connect them with employers, particularly in STEM-related fields. Services include customized individual and online job search training, networking and marketing skills and interview skills and preparation.

INDIVIDUALS WITH A CRIMINAL RECORD

As described earlier in this report, occupational licensing requirements can be among the most difficult barriers facing people with criminal records trying to enter the workforce. Policy barriers, such as blanket bans, good moral character clauses and licensure costs, can impede access to employment for individuals with a criminal history.⁶⁶ Researchers encourage states to review their licensing requirements and ease unnecessary penalties. The 2017 [License to Work](#) report by researchers at the Institute for Justice recommended state policymakers “curtail license denials based on irrelevant or long-past criminal records.”

States have adopted several policy options to address these barriers, including relevancy limitations, modification of morality clauses, certificate of rehabilitation and pre-qualification standards. Moreover, state lawmakers, corrections agencies and the business community are collaborating to provide in-prison and post-release educational and vocational training so offenders can attain job skills.⁶⁷

Certificate of employability laws in at least 20 states authorize courts or parole boards to issue certificates that serve as proof of rehabilitation for employment purposes or allow some occupational disqualifications to be lifted. Some laws carry employer liability protection for hiring ex-offenders who have been granted certificates. At least 12 states have laws that protect employers who hire people with criminal records.

At least 20 states and the District of Columbia, along with many localities and some governors, regulate at what point in the hiring process an employer can ask about an applicant’s criminal history. Most of these laws apply only to public employers and licensing boards.⁶⁸ For example, a [2017 Kentucky law](#) prohibits licensing boards from disqualifying applicants only because of a criminal conviction and requires boards to offer applicants a hearing before disqualifying an individual. The law also requires boards to show a direct relationship between the prior conviction and the specific occupational license.

At least 31 states limit or bar use of criminal records in employment for licensing eligibility.⁶⁹

STUDENT LOAN BORROWERS

As of 2017, at least 19 states had laws in place that would revoke state-issued occupational licenses from residents who defaulted on their student loans.⁷⁰ A 2018 [NCSL analysis](#) found several of those—including Alaska, Georgia, Hawaii, Iowa, Kentucky, Massachusetts and Tennessee—have laws requiring all occupational boards to revoke licenses for defaulting on any type of federal or state education loan. License suspension for default (LSD) laws vary in scope, and states often have different enforcement policies making it difficult to quantify the number of individuals who have lost a license due to their state’s LSD law. A 2018 [analysis](#) published by the Brookings Institution estimated that 40% of students who entered college in the fall of 2003 might default on their student loans by 2023, suggesting widespread effects on the labor market.

NCSL Online

To learn more, read the NCSL [LegisBrief](#), “License Suspension for Student Loan Defaulters.”

A significant increase in the proportion of Americans working in licensed occupations, combined with [rising student loan default rates](#) has prompted many policymakers to re-evaluate the purpose and effectiveness of such laws. In 2018 and again in 2019, U.S. Senators Elizabeth Warren and Marco Rubio [introduced legislation](#) that would prevent states from suspending, revoking, or denying state-issued professional licenses due to student default. In a bipartisan effort, many states are repealing laws or reducing enforcement policies in order to remove employment obstacles for individuals who have defaulted on student loans.⁷¹ For example:

- Four states—California, Mississippi, Minnesota and Florida—revoke only the licenses of health care professionals for defaulting on education loans.
- From 2015 to 2017, Montana, New Jersey, North Dakota and Oklahoma repealed their LSD laws. During the 2017-2018 sessions, seven states—Alaska, Georgia, Iowa, Louisiana, Massachusetts, South Dakota and Tennessee—introduced legislation repealing LSD laws. In addition, Alaska ([SB 4](#)), Illinois ([IL SB 2439](#)) and Washington ([WA HB 1169](#)) successfully adopted legislation repealing LSD laws.
- In 2019, Arkansas’ lawmakers enacted the [Keep Arkansans Working Act](#) which prohibits a state authority from suspending or revoking a license because of default or delinquency on payments. Also in 2019, [Texas](#) and [Mississippi](#) passed legislation repealing provisions that allow for license revocation, suspension or denial on the basis of defaulting on student loans.

G. Change Licensing Requirements for Specific Occupations

States have adopted new licensing requirements, changed existing ones or eliminated licensing rules altogether. Despite the significant number of policy actions documented in this section, studies continue to suggest states are enacting requirements more often than removing them. For example, a 2018 [analysis](#) conducted by the Mercatus Center studied changes in occupational breadth and burden between 2012 and 2017. (Breadth accounts for the number of occupations the state licenses and burden refers to the stringency of occupational licensing requirements in each state.) The study’s authors found that of the 50 states and District of Columbia, only 10 states decreased the breadth and burden of licensure among these occupations over this time period. The study found that the average state increased the breadth and burden of licensure of these occupations by 4% over this time period. For example, the study’s researchers found Maryland’s “breadth and burden” of licensure increased 29% over the past five years. The state now regulates five more occupations than it did in 2012. Fees for existing licenses rose by an average of 6%, and days lost to education or experience requirements increased by 3%.

At the same time as some states have increased certain licensing requirements, policymakers have simultaneously 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. Since 2012, many states have passed legislation to promote licensing reciprocity for spouses of active military service members or lessen occupational requirements that were believed to stifle employment growth. In recent years, through efforts described above, such as through a sunset review

process, states have taken steps to change licensing requirements for specific professions. For example, in 2018, Nebraska Governor Pete Ricketts signed [Legislative Bill 345](#) to eliminate a requirement that abstracters have one year of title-related experience.

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. According to the Institute for Justice, [27 states](#) have exempted braiders from licensure, with several states enacting a version of the organization's [model braiding legislation](#).

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 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. State policymakers have taken an increasingly active role in the last several years by questioning why existing requirements and new proposals are needed, weighing data about the potential benefits and costs, and making decisions about the most appropriate—and often least restrictive—regulatory fit for a given occupation. States' experiences demonstrate the multiple pathways that can help state policymakers strike the right balance. 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.

APPENDIX A.

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:

- | | |
|---|--|
| <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• 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 B.

Policymaker Questions to Ask When Considering Occupational Licensing Proposals

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

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

Endnotes

1. Dick M. Carpenter et al., *License to Work: A National Study of Burdens from Occupational Licensing*, 2nd edition (Arlington, VA.: Institute for Justice, 2017), https://ij.org/wp-content/themes/ijorg/images/ltw2/License_to_Work_2nd_Edition.pdf.
2. Morris M. Kleiner and Evgeny S. Vorochnikov, *At What Cost: State and National Estimates of the Economic Costs of Occupational Licensing* (Arlington, VA.: Institute for Justice, 2018), <https://ij.org/report/at-what-cost>.
3. 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.
4. Iris Hentze, “Improving Occupational Licensing with Sunrise and Sunset Reviews,” (Denver: NCSL, July 2018), <http://www.ncsl.org/research/labor-and-employment/improving-occupational-licensing-with-sunrise-and-sunset-reviews.aspx>.
5. 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
6. 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.
7. Kara Schmitt, Questions a Legislator Should Ask, 3d edition (Nicholasville, KY: Council on Licensure, Enforcement, & Regulation, 2018), <https://www.clearhq.org/page-1721424>.
8. Ibid.
9. Ryan Nunn, “Improving Health Care Through Occupational Licensing Reform,” Brookings Op-Ed, August 28, 2018), <https://www.brookings.edu/opinions/improving-health-care-through-occupational-licensing-reform/>.
10. 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/>
11. https://ij.org/wp-content/uploads/2018/11/Licensure_Report_WEB.pdf
12. U.S. Department of Labor, Bureau of Labor Statistics, “2018 Data on Certification and Licenses,” 2019, <https://www.bls.gov/cps/certifications-and-licenses.htm>.
13. U.S. Department of Labor, Bureau of Labor Statistics, “Household Data Annual Averages,” 2018, <https://www.bls.gov/cps/cpsaat53.pdf>.
14. 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>.
15. 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
16. 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/>.
17. 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>].
18. 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.
19. 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>.
20. Ryan Nunn, *How Occupational Licensing Matters for Wages and Careers* (Washington, D.C.: The Brookings Institution, March 15, 2018), <https://www.brookings.edu/research/how-occupational-licensing-matters-for-wages-and-careers/>.
21. Sandeep Vaheesan and Frank Pasquale, “The Politics of Professionalism: Reappraising Occupational Licensure and Competition Policy,” Annual Review of Law and Social Science Vol. 14 (October 2018): 309-327, <https://www.annualreviews.org/doi/pdf/10.1146/annurev-lawsocsci-112116-014728>.
22. Daniel Carpenter, Justin Grimmer and Eric Lomazoff, “Approval Regulation and Endogenous Consumer Confidence,” Regulation & Governance 4 (2010), 383-407, <http://stanford.edu/~jgrimmer/CarpenterGrimmer-Lomazoff.pdf>.
23. Karen A. Goldman, *Policy Perspectives: Options to Enhance Occupational License Portability*, a report prepared for the Economic Liberty Task Force, September 2018), https://www.ftc.gov/system/files/documents/reports/options-enhance-occupational-license-portability/license_portability_policy_paper.pdf.
24. Kleiner and Vorochnikov, *At What Cost*.
25. Nunn, *How Occupational Licensing Matters for Wages and Careers*.
26. Ibid.
27. Ibid.
28. Carpenter et al., *License to Work*.
29. Ibid.
30. 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>.
31. 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.
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.

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.
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. Kleiner and Vorotnikov, *At What Cost*.
37. 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>.
38. 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>.
39. 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-license>.
40. 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>.
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. 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>.
43. Goldman, *Options to Enhance Occupational Licensure Portability*.
44. 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/>.
45. 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>.
46. Deborah Bradbard, Rosalinda Maury, and Nicholas Armstrong, *Employing Military Spouses* (Syracuse, N.Y.: Syracuse University Institute for Veterans and Military Families, July 2016), https://ivmf.syracuse.edu/wp-content/uploads/2016/12/ForceBehindtheForce.BusinessCaseforLeveragingMilitarySpouseTalentACC_02.21.18.pdf.
47. U.S. Chamber of Commerce Foundation, *Hiring Our Heroes* (Washington, D.C.: U.S. Chamber of Commerce Foundation, June 2017), <https://www.uschamberfoundation.org/sites/default/files/Military%20Spouses%20in%20the%20Workplace.pdf>.
48. 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.
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.
50. Ibid.
51. Steven Slivinski, Turning Shackles into Bootstraps: Why Occupational Licensing Reform is the Missing Piece of Criminal Justice Reform (Tempe, AZ.: Center for the Study of Economic Liberty, November 2016), <https://research.wpcarey.asu.edu/economic-liberty/wp-content/uploads/2016/11/CSEL-Policy-Report-2016-01-Turning-Shackles-into-Bootstraps.pdf>.
52. Veronique De Rugy, "Occupational Licensing: Bad for Competition, Bad for Low-Income Workers," Chart/Data Visualization (Arlington, VA.: Mercatus Center at George Mason University, March 2014), <https://www.mercatus.org/publication/occupational-licensing-bad-competition-bad-low-income-workers>.

53. 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.
54. 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/>.
55. Idaho Legislature, “Regulatory Reform Subcommittee of the House Business Committee and the Senate Commerce Committee,” (Boise: Idaho Legislature, 2018), https://legislature.idaho.gov/wp-content/uploads/sessioninfo/2018/interim/180622_olcl_Regulatory%20Reform%20Occupational%20Licensing%20Joint%20Subcommittee%202.0.pdf.
56. Arkansas Governor’s Office, “Governor Hutchinson Names Working Group to Study State’s Occupational Licensing Regulations,” press release (Little Rock, AR: Governor’s Office, February 2018), <https://governor.arkansas.gov/news-media/press-releases/governor-hutchinson-names-working-group-to-study-states-occupational-licens>.
57. Patrick McLaughlin et al., The State of Occupational Licensure in Michigan (Arlington, VA.: Mercatus Center at George Mason University, February 2018), <https://www.mercatus.org/publications/state-occupational-licensure-michigan>.
58. Occupational Licensing Task Force and Oklahoma Department of Labor, Occupational Licensing Task Force Report: A Study of Occupational Licensing in Oklahoma (Oklahoma City, OK, January 2018), <https://bloximages.newyork1.vip.townnews.com/tulsaworld.com/content/tncms/assets/v3/editorial/8/ce/8ce-0cb37-ea90-58e9-81dc-fbc3f7613a08/5a557f33a5dd8.pdf.pdf>.
59. Fredericksburg.com, “Editorial: Virginia’s Excellent, Bipartisan Regulatory Reform Plan” (Fredericksburg, VA.: Fredericksburg.com, February 2018), https://www.fredericksburg.com/opinion/editorials/editorial-virginia-s-excellent-bipartisan-regulatory-reform-plan/article_821e8f54-56cc-55ea-be31-0aca2fd8a9ce.html.
60. Hentze, “Improving Occupational Licensing.”
61. Christopher Bagley and James Reed, “Assisting Veterans with Employment,” *LegisBrief* (National Conference of State Legislatures), no. 37 (October 2016): 24, <http://www.ncsl.org/research/military-and-veterans-affairs/assisting-veterans-with-employment.aspx>
62. Ibid.
63. Ibid.
64. Rhode Island General Laws, Title 5, “Service Member Licensure,” <https://codes.findlaw.com/ri/title-5-businesses-and-professions/ri-gen-laws-sect-5-87-1.html>.
65. NCSL, *Barriers to Work: Veterans and Military Spouses* (Denver: NCSL, July 2018), <http://www.ncsl.org/research/labor-and-employment/barriers-to-work-veterans-and-military-spouses.aspx>.
66. NCSL, *Barriers to Work: Individuals with Criminal Records* (Denver: NCSL, July 2018), <http://www.ncsl.org/research/labor-and-employment/barriers-to-work-individuals-with-criminal-records.aspx>.
67. Alison Lawrence, “From Jails to Jobs,” *State Legislatures* (National Conference of State Legislatures) 43, no. 3 (March 2017), http://www.ncsl.org/Portals/1/Documents/magazine/articles/2017/SL_0317-Trends.pdf.
68. Ibid.
69. Restoration of Rights Center, “Consideration of Criminal Records in Licensing and Employment,” <http://ccresourcecenter.org/state-restoration-profiles/50-state-comparisoncomparison-of-criminal-records-in-licensing-and-employment/>.
70. Jessica Silver-Greenberg, Stacy Cowley, and Natalie Kitroeff, “When Unpaid Student Loan Bills Mean You Can No Longer Work,” *New York Times*, November 18, 2017, https://www.nytimes.com/2017/11/18/business/student-loans-licenses.html?_r=0.
71. Andrew Wagner, “License Suspension for Student Loan Defaulters,” (National Conference of State Legislatures), no. 40 (October 2018): 26, (Denver: NCSL, July 2018), <http://www.ncsl.org/research/labor-and-employment/license-suspension-for-student-loan-defaulters.aspx>.

The workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it.

NCSL would like to acknowledge Kristine Goodwin with Symplexity Research and Consulting for researching and writing this publication.

NCSL Contact:

Suzanne Hultin

Program Director

303-856-1531

Suzanne.Hultin@ncsl.org



Tim Storey, Executive Director

7700 East First Place, Denver, Colorado 80230, 303-364-7700 | 444 North Capitol Street, N.W., Suite 515, Washington, D.C. 20001, 202-624-5400

www.ncsl.org

© 2019 by the National Conference of State Legislatures. All rights reserved.