WHEN A STATE IMPOSES LICENSING RULES ON an occupation, workers cannot legally practice that trade without fulfilling a set of requirements. Occupational licensing is presumably intended to protect the public from unsafe and low-quality service. But a broad and growing consensus among economists suggests that these rules primarily serve to protect incumbent providers from competition at the cost of higher consumer prices and excessive barriers for new entrants in the field. Despite the common perception, licensing rules are not shown to improve service quality or safety. In this policy brief, we focus on occupational licensing in the state of Arkansas. This state has some of the most burdensome license requirements in the United States. We discuss the economic effects of licensure, and we draw a roadmap for reform.

A SNAPSHOT OF ARKANSAS’S OCCUPATIONAL LICENSURE REGIME

Nationally, occupational licensing has expanded dramatically over the past 50 years. As of the year 2000, at least 20 percent of US workers were in occupations that required state licenses. When federal and local licenses are included, the percentage of the workforce required to obtain an occupational license reached 29 percent in 2006.¹ This represents a significant increase from the 1950s when just 5 percent of the workforce was licensed through state laws.² This growth in the prevalence of licensure arises primarily from growth in the number of occupations for which a license is required by the state, rather than from a redistribution of the workforce from jobs that do not require occupational licenses to jobs that do.³ While there is a great deal of variation across states in the number of occupations for which a license is required as well as in the requirements to obtain a
license, this overall increase is evident nearly everywhere. Arkansas is no exception.

Arkansas’s government has developed extensive licensing requirements, with 20.2 percent of the workforce licensed and another 5.3 percent certified in 2015.\footnote{4} According to a 2017 report by the Arkansas Department of Workforce Services, the state government subjects over 300 occupations to license, certification, or registration regulations.\footnote{5} The 2017 operating budget for Arkansas’s professional boards and commissions that establish licensing requirements and ensure compliance with them is nearly $62 million.\footnote{6}

A 2007 study by the Reason Foundation ranked the states according to the number of licensed occupations. Arkansas ranked fifth with 128, which was three times as many licensed occupations as its northern neighbor Missouri (41).\footnote{7} A 2012 study by the Institute for Justice (IJ) examined occupational licensure laws for 102 low- to moderate-income occupations and found that Arkansas requires a license for 52 of these occupations.\footnote{8} In assessing the burdens the state imposes on licensees—including fees, exams, age requirements, grade requirements, and training and experience requirements—the report ranked Arkansas’s licensing regime the second most burdensome in the nation. When accounting for the burden of its requirements as well as the sheer number of licensed low- to moderate-income occupations, the state comes in as the fifth “most broadly and onerously licensed state” in the nation.\footnote{9} On average, the Natural State requires 689 days of experience and training, $200 in fees, and one exam for each of the 52 occupations it licenses.\footnote{10} Athletic trainers, barbers, pharmacy technicians, security guards, cosmetologists, animal trainers, and many others face steep fines for operating in Arkansas without a license.

While proponents of occupational licensure claim that these rules protect public safety, the pattern of requirements across occupations belies this notion. Occupations that are less likely to involve risk to the public are often more highly controlled than riskier occupations. In Arkansas, for example, emergency medical technicians (EMTs) must complete 28 days of training and pass 2 exams before being licensed to work on an ambulance team. By contrast, painting contractors undergo 65 times as much training before they reach their licensure minimum of 1,825 days. Similarly, cosmetologists must spend 350 days in school—a full 11 months more than EMTs.\footnote{11} Additional regulatory mismatches are shown in table 1.

Arkansas licenses several rarely licensed occupations like plant nursery worker, funeral attendant, psychiatric technician, drywall installer, and landscape contractor. Yet instead of producing higher-quality drywall work or safer landscaping operations, licensing requirements typically keep out those who cannot afford to clear the hurdles, thereby shielding existing industry members from competition.\footnote{12} This disproportionately impacts poorer and less-educated Arkansans who could have otherwise expanded availability of services. Low-income consumers lose in particular. In the absence of licensure, a barber, for example, might offer lower-quality yet steeply discounted haircuts to those who would otherwise not be able to afford to go to expensive or luxurious shops.\footnote{13}

There is significant variation in licensing requirements for the same jobs across states. Boards can

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EDUCATION/EXPERIENCE (DAYS)</th>
<th>EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency medical technician</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>Massage therapist</td>
<td>117</td>
<td>2</td>
</tr>
<tr>
<td>Makeup artist</td>
<td>140</td>
<td>2</td>
</tr>
<tr>
<td>Psychiatric technician</td>
<td>210</td>
<td>1</td>
</tr>
<tr>
<td>Cosmetologist</td>
<td>350</td>
<td>2</td>
</tr>
<tr>
<td>Teacher assistant</td>
<td>730</td>
<td>0</td>
</tr>
<tr>
<td>Fire alarm installer</td>
<td>1,095</td>
<td>1</td>
</tr>
<tr>
<td>Painting contractor</td>
<td>1,825</td>
<td>3</td>
</tr>
<tr>
<td>Preschool teacher</td>
<td>1,825</td>
<td>3</td>
</tr>
</tbody>
</table>

While proponents of occupational licensure claim that these rules protect public safety, the pattern of requirements across occupations belies this notion.

require a minimum level of education or experience, a steep processing fee, or a passing score on an examination. In Arkansas, 32 of the 52 licenses identified by IJ require all three.\(^\text{14}\) Arkansas is home to some of the most restrictive commercial and residential contractor licensing laws. To work in a commercial construction trade like painting, paving, or carpentry, an Arkansan must accrue five years of experience, pay $180 in fees, and pass an exam\(^\text{15}\)—just to do a job for which 20 states require no license at all.\(^\text{16}\) Fire alarm installers in Arkansas must complete 1,095 days of education and experience prior to being licensed, while the rest of the country averages just 486 days, though 18 states have no experience or education minimums.\(^\text{17}\) In other words, an aspiring fire alarm contractor in Tulsa can get to work three years sooner than his counterpart in Little Rock. Likewise, Arkansas requires three years of training for opticians before they may be licensed, though the national average is one year.\(^\text{18}\)

Figure 1 compares the state’s fee and experience requirements in these surveyed occupations to the national average. Though fees are on par with the rest of the country, days lost to education and experience requirements are more than double the national average.

Recent reform efforts aim to combat heavy-handed occupational licensing regulation, but dozens of needlessly burdensome rules remain on the books. Earlier this year, Arkansas State Representative Richard Womack introduced a bill challenging the “public health and safety” catchall for justifying licensing in relatively low-risk industries. The bill faced steep opposition from trade organizations and never made it out of committee.\(^\text{19}\) This is not the first time Womack’s efforts to reduce unnecessary occupational licensing have failed. In 2015, he put forth a bill “to stimulate job creation and economic development while preserving health and safety standards.”\(^\text{20}\) While the bill did not target specific occupational licenses, it placed the burden of proof on the state. The legislation read, in part,

A person has a right to engage in lawful occupation free from an occupational regulation that creates a substantial burden unless the government demonstrates that: 1) It has an important interest in protecting against present and recognizable harm to the public health or safety; and 2) The occupational regulation is the least

| Figure 1. Number of Licensed Occupations, Fees, and Required Training and Experience |
|---------------------------------|----------------|----------------|
| Arkansas                        | National Average |
| number of licensed occupations  | 52              | 102            |
| fees                            | $212            | $203           |
| training and experience         | 689 days        | 307 days       |


<table>
<thead>
<tr>
<th>number of licensed occupations (out of 102 studied)</th>
<th>average licensing fees</th>
<th>required days of training and experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>$212</td>
<td>689 days</td>
</tr>
<tr>
<td>National Average</td>
<td>$203</td>
<td>307 days</td>
</tr>
</tbody>
</table>

| Arkansas                                            | 52                       | 689 days                               |
| National Average                                    | 102                      | 307 days                               |

restrictive means of furthering the important governmental interest. In furtherance of these goals, the bill created a pathway for contesting burdensome occupational licensing rules in court. This legislation also failed.

Targeted reform proved successful through a 2015 bill protecting natural hair braiders from excessive regulation by instituting a certification program to replace unnecessary cosmetology requirements. The bill came as a response to an IJ lawsuit on behalf of entrepreneurs in the hair braiding industry. Compared to the cosmetology standards of 350 days of training, $115 in fees, and two exams, earning a hair braiding certificate takes significantly less time and effort: 120 hours of training, a $30 fee, and one exam. Most importantly, certification is entirely voluntary.

Other states have also reformed their licensing practices. The Kentucky legislature passed a bill in 2016 eliminating the licensing requirement for hair braiders. Missouri and Nebraska are also taking steps to lower barriers in a variety of occupations. An effort in Missouri called “No MO Red Tape” aims to gather feedback on how regulations impact people. Governor Greitens recently signed an executive order suspending all new rulemaking and requiring agencies to review existing regulations to ensure they are “essential to the health, safety, or welfare of Missouri residents.” In Nebraska, pending legislation has the potential to reform licensing requirements for estheticians, potato shippers, car salespeople, barbers, and many other workers.

Substantive economic evidence clearly points to the need for reform. In the following section, we examine the economics of occupational licensure. Next, we outline a path for reform in Arkansas.

THE ECONOMICS OF OCCUPATIONAL LICENSURE

Licensure and Quality

Licensure is justified by legislators and advocates as necessary to protect the public from subpar products or potential health risks. It is theoretically possible that a well-designed quality screening system will ensure that only high-quality professionals join an occupation. However, limiting the supply of professionals undermines competition. Less competition means lower quality and higher prices. As Kleiner put it, licensure ensures that “prices and wages will rise as a result of restricting the number of practitioners, which should tend to reduce quality received by consumers.” Consumers often receive lower-quality service when they resort to do-it-yourself instead of purchasing the high-priced service from the barber, interior designer, etc. For example, one study found that more restrictive electrician licensing regimes are associated with fewer electricians per capita and that this, in turn, is associated with more accidental electrocutions.

The true effect of licensure on quality is an empirical question, since economic theory suggests that licensure can improve or worsen quality. The licensing requirements can increase quality by restricting entry to credentialed professionals, or it can decrease quality by causing less competition, higher prices, and do-it-yourself activities. A number of studies have assessed the effect of licensure on quality, and the weight of evidence suggests that the two effects roughly cancel each other out. As Kleiner summarized in his review of the literature,

> From this evidence there is little to show that occupational licensure has a major effect on the quality of services received by consumers or on the demand for the services other than through potential price effects.

Researchers in President Barack Obama’s administration conducted their own review of the literature and reached the same conclusion:

> With the caveats that the literature focuses on specific examples and that quality is difficult to measure, most research does not find that licensing improves quality or public health and safety.

McLaughlin, Ellig, and Shamoun recently surveyed 19 studies assessing the effect of occupational licensure on quality. Figure 2 presents the results of...
their survey. Consistent with the surveys by Kleiner and the Obama White House, they found that the most common finding was neutral, mixed, or unclear. Three studies found that occupational licensure positively affects quality while four found that it negatively affects quality.

If it were true that licenses are necessary to protect the public, one would expect the same professions to be regulated across all or most states, while other professions would seldom be regulated. In reality, there is wide variation across states in terms of occupations regulated and the stringency with which they are regulated. For example, four states heavily regulate interior designers, requiring them to have on average nearly 2,200 days of education and experience to practice their trade. Interior designers are able to offer their services in other states free from regulation with no apparent risk to the public.24

Licensure is not the only or the most effective way to ensure quality.25 Tort law and civil and criminal laws against deceptive trade practices protect consumers from fraud and negligence. Firms already scrupulously guard their reputations and brands and seek the approval of third-party evaluators such as the Better Business Bureau and Angie’s List. The internet and smartphone applications have radically empowered consumers and balanced the information asymmetry that long persisted in some highly technical fields.26 If policymakers think private measures are insufficient to protect consumers, a number of public regulatory options are more effective than and less likely to be as counterproductive as licensing. For example, the government can require that firms post bonds or simply register their businesses with the state so that consumers can be assured that they are not “fly-by-night” operations.27

Licensure and Prices
Economic theory predicts that a restriction in supply will result in higher prices. And indeed, the empirical research consistently finds this to be the case. According to the Obama administration review,

### Figure 2. Studies Assessing the Effect of Occupational Licensure on Quality

<table>
<thead>
<tr>
<th>Effect</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>21%</td>
</tr>
<tr>
<td>Negative</td>
<td>16%</td>
</tr>
<tr>
<td>Unclear, mixed, or neutral</td>
<td>63%</td>
</tr>
</tbody>
</table>

**Sources:**

...
The evidence on licensing’s effects on prices is unequivocal: many studies find that more restrictive licensing laws lead to higher prices for consumers. In 9 of the 11 studies we reviewed . . . significantly higher prices accompanied stricter licensing.\(^{38}\)

Similarly, McLaughlin, Ellig, and Shamoun found that licensure increased prices in all 19 of the studies they surveyed, ranging from optometry and law to dentistry and cosmetology.\(^{39}\)

The effects of these increased prices are not trivial. For example, state nurse practitioner licensing is estimated to increase the price of a well-child checkup by 3 to 16 percent,\(^{40}\) dental hygienist and dental assistant licensing is estimated to increase the price of a dental visit by 7 to 11 percent,\(^ {41}\) and optometry licensing is estimated to increase the price of eye care by 5 to 13 percent.\(^ {42}\) As is consistent with the literature, none of these studies found that licensing increased quality.

Licensure and Regulatory Privilege
Writing in the *Harvard Journal of Law and Public Policy*, Paul Larkin Jr. notes a “curious and stubborn fact: Private individuals rarely urge governments to adopt licensing regimes, but private firms often do.”\(^ {43}\) This fact conforms with the economic theory of regulation, which suggests that the primary purpose of licensure is to protect incumbent providers from competition.\(^ {44}\) By limiting supply and raising prices, these rules allow incumbent providers to earn artificially high profits. Indeed, the latest research suggests that licensure raises the wages of licensees by about 14 percent.\(^ {45}\) Occupational licensing is a regulatory privilege to incumbent providers.\(^ {46}\)

This privilege is paid for by consumers in the form of higher prices and by potential providers in the form of market alienation. Any wage gain by incumbent professionals from licensing requirements comes from excluding would-be competitors. When you include the loss to consumers and these would-be competitors, society achieves a net loss from occupational licensing (economists call this a deadweight loss). What’s more, incumbent professionals are willing to expend scarce resources convincing policy makers to contrive and maintain these privileges, a socially wasteful endeavor known as rent-seeking.\(^ {47}\) Being fewer in number and established in their fields, these license holders generally find it easier to get politically organized than the large number of consumers and would-be competitors who are harmed by licensure.\(^ {48}\)

The Disparate Impact of Licensure
Those who fail to obtain licenses pay a price in the form of lost income. Research suggests that these burdens often fall on particular communities. As shown in figure 3, McLaughlin, Ellig, and Shamoun’s survey of the literature shows that licensing was found to disparately affect ethnic minorities in four of five studies.\(^ {49}\)

![Figure 3. Studies Assessing the Effect of Occupational Licensure on Minorities](image-url)

Military spouses are also more likely to be in licensed professions and more likely to relocate from one licensing regime to another.⁵⁰

Licensure presents a higher barrier to immigrants as well, since many states require domestic work experience. For ex-offenders, occupational licensing is particularly burdensome because most states make it impossible for those with a past conviction to obtain an occupational license.

**REFORM**

While occupational licensure is presumably intended to protect consumers from harm, there are many other less burdensome mechanisms to ensure public safety. These include liability law and civil and criminal laws against fraud.⁵¹ But they also include several private mechanisms, including private certification, insurance, bond posting, brand reputation, publicly posted customer feedback such as Yelp and Google reviews, and third-party validation from organizations such as Angie’s List, Consumer Reports, and Underwriters Laboratories.⁵²

Competition itself may be the most efficacious alternative to licensure. As the late economist and regulator Alfred Kahn once put it, “Whenever competition is feasible, it is, for all its imperfections, superior to regulation as a means of serving the public interest.”⁵³

Policymakers looking to reduce their state’s occupational licensing burden would be wise to follow these steps:

1. Pass legislation that sets an ambitious goal for the elimination of licenses and the reduction in licensing burdens.

2. Establish an independent commission charged with examining the state’s licensing laws. Its first task should be to identify each license the state requires as well as the burdens associated with each license (fees, exams, required training, education, experience, and other limitations). The commission should be charged with evaluating all licenses, should not be dominated by members of the licensed professions, should include consumer representatives, and should include third-party experts such as academics who have no financial stake in licensure. Furthermore, the commission should be guided by a set of criteria for evaluating regulations as listed in Table 2.

3. The commission should be charged with setting a comprehensive path for licensure elimination and reform. The authorizing legislation should commit elected officials to accepting the commission’s recommendation in their entirety or not at all.

The last provision is designed to overcome the public choice problems that plague licensure reform. In particular, whenever any individual license is evaluated, concentrated members of the industry are typically able to organize in defense of the license, while diffuse consumers and would-be competitors are unable to organize in opposition. The institutional structure that we recommend borrows elements from other reforms that have succeeded in eliminating favoritism.⁵⁴ In particular, it allows elected officials to cast conspicuous votes in the public interest while giving them some degree of “cover” from the special interests that will inevitably be harmed by the elimination of their regulatory privilege.
Table 2. Guiding Principles for Occupational Licensing Reform

| BEGIN WITH A BLANK SLATE | Consumer tastes, technology, and prices change, so analysts should not be beholden to past practices and should approach their task as if they were starting anew. |
| DEFINE THE NATURE OF THE PROBLEM | Is there a systematic market failure that needs to be addressed? If not, occupational regulation is probably not the answer. Keep in mind that entrepreneurs have an incentive to come up with their own solutions to market failures. |
| IDENTIFY ALTERNATIVE SOLUTIONS TO OCCUPATIONAL REGULATION | This should include the alternative of deregulation. It should also include reliance on both private governance (competition, bond posting, reputation feedback mechanisms, third-party evaluation, etc.) and public governance (deceptive trade practice law, registration, certification, etc.). |
| IDENTIFY THE POTENTIAL COSTS OF REGULATION | These include higher consumer prices; inconveniences such as diminished access to products and services; higher entrance fees, exam costs, education costs, etc.; rent-seeking waste; productive inefficiencies that arise when firms and providers are protected from competition; and dynamic losses that accrue over time as protected firms and providers are less likely to adapt and innovate. |
| IDENTIFY THE POTENTIAL BENEFITS OF REGULATION | What systematic market failure is the regulation intended to address? Remember that the profits of incumbent firms and their employees are not legitimate benefits of regulation since these gains come at the expense of consumers and would-be competitors. |
| MEASURE COSTS AND BENEFITS | Whenever possible, an objective measure of costs and benefits should be produced. When that is impossible, analysts should acknowledge that certain judgements are subjective. |

9. Carpenter II et al., License to Work.
10. Carpenter II et al., License to Work, 18.
11. Carpenter II et al., License to Work, 42.
15. Arkansas Department of Workforce Services, Directory of Licensed, Certified, and Registered Occupations, 19.
17. Carpenter II et al., License to Work, 153.


34. Carpenter II et al., License to Work, 12.


36. For more on reputation feedback mechanisms, see Adam Thierer, Christopher Koopman, Anne Hobson, and Chris Kuiper, “How the Internet, the Sharing Economy, and Reputational Feedback Mechanisms Solve the ‘Lemons Problem’” (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, June 2015).


49. For the benefits of ex post sanctions as opposed to ex ante sanctions, see Adam Thierer, Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom, 2nd ed. (Arlington, VA: Mercatus Center at George Mason University, 2016).

50. Thierer et al., “How the Internet, the Sharing Economy, and Reputational Feedback Mechanisms Solve the ‘Lemons Problem.’”


52. For more on reputation feedback mechanisms, see Adam Thierer, Christopher Koopman, Anne Hobson, and Chris Kuiper, “How the Internet, the Sharing Economy, and Reputational Feedback Mechanisms Solve the ‘Lemons Problem’” (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, June 2015).
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