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## The State of Occupational Licensure in Wisconsin

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**IN MANY LINES OF WORK, THOSE WHO ENTER** the field must first obtain a government-issued license. In order to obtain a license, prospective licensees may be required to take tests, pay fees, undergo certain training, or fulfill other requirements such as residency, age, or education. Occupational licensing is ostensibly intended to protect the public from unsafe and low-quality service. But a broad and growing consensus among economists suggests that these rules mostly serve to protect incumbent providers from competition, raising consumer prices without improving quality and limiting opportunities for new entrants in the field. In this policy brief, we focus on occupational licensing in the state of Wisconsin and put that state's practices into the broader context of existing economic research.

### **A SNAPSHOT OF WISCONSIN'S OCCUPATIONAL LICENSURE REGIME**

Nationally, the share of the workforce required to have an occupational license has increased more than fourfold in the past 50 years.<sup>1</sup> While states vary greatly in the number of occupations for which they require a license and in the requirements to obtain an occupational license, this increase is evident nearly everywhere.

Wisconsin is no exception, as 18.4 percent of the state's workforce is now required to be licensed, and an additional 1.9 percent is certified.<sup>2</sup> The total number of regulated occupations in Wisconsin has also grown from 90 to 166—an 84 percent increase in the last 20 years.<sup>3</sup> This increase in licensed occupations has outpaced Wisconsin's growth in population, labor force, and employment.

A 2012 study by the Institute for Justice (IJ) examined occupational licensing laws for 102 low- and moderate-income occupations and found that Wisconsin requires a license for 47 of them.<sup>4</sup> Accounting for the number of licensed jobs as well as the burdens the state imposes on licensees—including fees, exams, age requirements, grade requirements, and training and experience requirements—the report ranked Wisconsin the 28th “most broadly and onerously licensed state” in the nation.<sup>5</sup>

On average, the Badger State requires those seeking to enter the 47 low- and moderate-income occupations identified by IJ to complete 145 days of education and experience, pass one exam, and pay \$209 in fees.<sup>6</sup> Veterinary technologists, massage therapists, pipelayers, barbers, security guards, cosmetologists, and many others face steep fines for operating in Wisconsin without a license.<sup>7</sup>

While proponents of occupational licensure claim that these rules protect public safety, inconsistencies across states in the types of professions that are licensed and in the requirements imposed on licensees belie this notion. For example, Wisconsin licenses occupations for which most states require no license at all. Fire sprinkler system testers, pipelayers, and bill collectors must complete expensive and time-consuming mandates before they can begin work that could be begun elsewhere with significantly less hassle.<sup>8</sup> As we will note below, there is little evidence that requirements such as these increase the quality of the product or service rendered.

In addition, occupations that are less likely to involve risk to the public are often more highly controlled than riskier occupations. For example, Wisconsin emergency medical technicians (EMTs) must complete 28 days of training and pass two exams before being licensed to work on an ambulance team.<sup>9</sup> By contrast, cosmetologists and barbers must undergo 15 times as much training before they reach their licensure minimum of 420 days. Wisconsin charges manicurists \$174 in fees and requires 70 days of education and experience—2.5 times that required of an EMT—while athletic trainers must complete 1,460

days of training—52 times that of an EMT.<sup>10</sup> Additional regulatory mismatches are shown in table 1.

Licensing requirements for the same jobs vary significantly across states. Licensing boards can require a minimum level of education or experience, a steep processing fee, or a passing score on one or more examinations. In Wisconsin, 14 of the 47 licenses identified by IJ require all three.<sup>11</sup> All but one require the applicant to pay a fee, the highest of which is \$1,570 for a cathodic protection testing license.<sup>12</sup>

Veterinary technologists, licensed in 37 states (including Wisconsin), are among the most heavily regulated workers nationally. These workers spend an average of 710 days in training, take two exams, and pay about \$200 before gaining their license. In Wisconsin, however, the barriers are even higher—a prospective licensee must undergo an extra month of training, take one more exam, and pay an additional \$152 in fees.<sup>13</sup>

Midwives in Wisconsin spend \$753 to file an application and sit for the exam.<sup>14</sup> Meanwhile, their counterparts across the border in Illinois may invest

| OCCUPATION                           | EDUCATION/<br>EXPERIENCE (DAYS) | EXAMS |
|--------------------------------------|---------------------------------|-------|
| Emergency medical technician         | 28                              | 2     |
| Manicurist                           | 70                              | 2     |
| Makeup artist or skincare specialist | 105                             | 2     |
| Massage therapist                    | 140                             | 2     |
| Cosmetologist or barber              | 420                             | 2     |
| Earth driller                        | 730                             | 1     |
| Midwife                              | 730                             | 1     |
| Veterinary technologist              | 730                             | 3     |
| Athletic trainer                     | 1,460                           | 1     |
| Preschool teacher                    | 1,825                           | 2     |

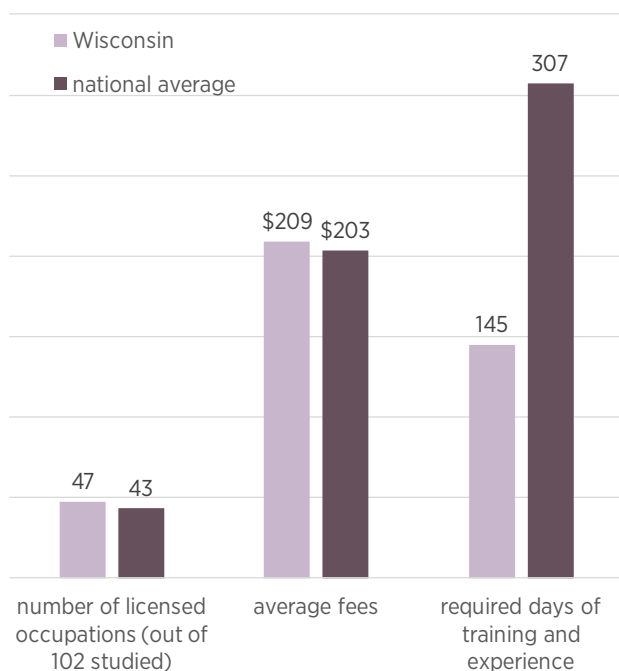
Source: Dick M. Carpenter II et al., “License to Work: A National Study of Burdens from Occupational Licensing” (Arlington, VA: Institute for Justice, May 2012).

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that amount in marketing for their practices and get to work almost *three years* sooner.<sup>15</sup> If an applicant wants to save money and begin working with an experienced midwife in Illinois, what incentive does that applicant have to stay in Wisconsin?

Figure 1 compares the state's fee and experience requirements in these surveyed occupations to the national average. Although training and experience requirements are significantly lower than the national average, Wisconsin's fees and number of licensed occupations are slightly higher.

**Figure 1. Number of Licensed Occupations, Fees, and Required Training and Experience (Wisconsin vs. National Average)**



Source: Dick M. Carpenter II et al., "License to Work: A National Study of Burdens from Occupational Licensing" (Arlington, VA: Institute for Justice, May 2012).

The membership of licensing boards poses an additional problem.<sup>16</sup> As seen in table 2, most boards are required by statute to consist primarily of license holders, plus a few nonindustry members of the public. Eleven of Wisconsin's 29 licensing boards currently have nonindustry seat vacancies, creating disproportionate representation of license-holding professionals. For example, because of public vacancies, the Athletic Trainers Affiliated Credentialing Board is now composed entirely of industry members.

The licensing requirements for several professions—midwives, home inspectors, behavior analysts, and others—are determined by national boards and associations rather than by Wisconsinites.<sup>17</sup> Outsourcing rulemaking to national associations does more than just remove public oversight; it makes it more likely that licensing rules will limit competition rather than ensure public safety.

Industry domination is problematic because industry insiders have an incentive to prevent new competitors from entering the profession, thereby raising prices and allowing incumbents a larger market share. This industry domination of boards and associations also presents a legal concern in light of the Supreme Court's decision in *North Carolina Dental*, which held that states cannot claim immunity from antitrust laws if active participants in the industry constitute a "controlling number" of board members and if elected officials fail to "actively supervise" the board.<sup>18</sup> To ensure licensing boards don't become "captured" by professional interests, boards should be composed of a balance of members who are interested in both public safety and accessibility of work.

In the following section, we discuss the economics of occupational licensure. We then outline a path for reform in Wisconsin.

**Table 2. Composition of Select Wisconsin Boards**

| BOARD OR COUNCIL                                       | STATUTORY BOARD COMPOSITION |               |                     | ACTUAL BOARD COMPOSITION |               |                     |
|--|-----------------------------|---------------|---------------------|--------------------------|---------------|---------------------|
|  | INDUSTRY MEMBERS            | TOTAL MEMBERS | PERCENTAGE INDUSTRY | INDUSTRY MEMBERS         | TOTAL MEMBERS | PERCENTAGE INDUSTRY |
| Respiratory Care Practitioners Examining Council       | 3                           | 5             | 60                  | 3                        | 3             | 100                 |
| Athletic Trainers Affiliated Credentialing Board       | 4                           | 6             | 67                  | 4                        | 4             | 100                 |
| Occupational Therapists Affiliated Credentialing Board | 5                           | 7             | 71                  | 4                        | 4             | 100                 |
| Hearing and Speech Examining Board                     | 8                           | 10            | 80                  | 7                        | 7             | 100                 |
| Dentistry Examining Board                              | 9                           | 11            | 82                  | 9                        | 9             | 100                 |

Source: Wisconsin Department of Safety and Professional Services, "License/Permit/Registrations," accessed August 16, 2017.

### THE ECONOMICS OF OCCUPATIONAL LICENSURE

Nationally, occupational licensure has expanded dramatically over the last 50 years, and as of 2000, at least 20 percent of US workers had 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.<sup>19</sup> This percentage represents a significant increase from the 1950s, when just 5 percent of the workforce was licensed through state laws.<sup>20</sup> This growth in the prevalence of licensure arises primarily from the number of occupations that require a license rather than from a redistribution of the workforce out of jobs that do not require occupational licenses and into jobs that do require licenses.<sup>21</sup>

#### Licensure and Quality

Licensure is typically justified by legislators and advocates as being necessary to protect the public from subpar products or potential health risks.<sup>22</sup> It is theoretically possible that a well-constructed quality gate will ensure that only high-quality professionals join an occupation. It is also possible, however, that by limiting the supply of professionals, licensure may undermine competition, thereby depressing quality

while driving prices higher. As Morris M. Kleiner has 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.”<sup>23</sup>

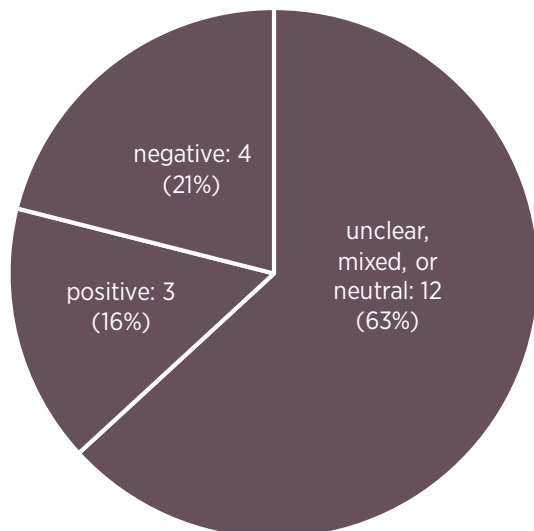
This means that the true effect of licensure on quality is an empirical question, the answer to which depends on which of these two forces dominates. A number of studies have assessed the effect of licensure on quality, and the weight of evidence suggests that the two effects roughly cancel each other out. As Kleiner put it 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.<sup>24</sup>

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.<sup>25</sup>

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



**Sources: Positive:** Arlene Holen, *The Economics of Dental Licensing* (Washington, DC: Public Research Institute, Center for Naval Analysis, 1978); Samuel Claude Martin, "An Examination of the Economic Side Effects of the State Licensing of Pharmacists" (doctoral dissertation, University of Tennessee, 1982); Roger Feldman and James W. Begun, "The Effects of Advertising: Lessons from Optometry," *Journal of Human Resources* 13 supplement (1978): 247-62. **Unclear, mixed, or neutral:** Kathryn Healey, "The Effect of Licensure on Clinical Laboratory Effectiveness" (doctoral dissertation, University of California, Los Angeles, 1973); John J. Phelan, Regulation of the Television Repair Industry in Louisiana and California: A Case Study, *Federal Trade Commission*, 1974; John F. Cady, *Restricted Advertising and Competition: The Case of Retail Drugs* (Washington, DC: American Enterprise Institute, 1976); Robert J. Thornton and Andrew R. Weintraub, "Licensing in the Barbering Profession," *Industrial and Labor Relations Review* 32, no. 2 (1979): 242-49; Ronald Bond et al., Effects of Restrictions of Advertising and Commercial Practice in the Professions: The Case of Optometry, *Federal Trade Commission*, 1980; Chris Paul, "Physician Licensure Legislation and the Quality of Medical Care," *Atlantic Economic Journal* 12, no. 4 (1984): 18-30; David S. Young, *The Rule of Experts: Occupational Licensing in America* (Washington, DC: Cato Institute, 1987); Morris Kleiner and Daniel L. Petree, "Unionizing and Licensing of Public School Teachers: Impact on Wages and Educational Output," in *When Public Sector Workers Unionize*, ed. R. B. Freeman and C. Ichniowski (Chicago: University of Chicago Press, 1988), 305-19; D. D. Goldhaber and D. J. Brewer, "Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement," *Educational Evaluation and Policy Analysis* 22, no. 2 (2000): 129-45; Morris Kleiner and Robert T. Kudrle, "Does Regulation Affect Economic Outcomes? The Case of Dentistry," *Journal of Law and Economics* 43, no. 2 (2000): 547-82; David Blau, "Unintended Consequences of Child Care Regulations," *Labour Economics* 14, no. 3 (2007): 513-38; Joshua Angrist and Jonathan Guryan, "Does Teacher Testing Raise Teacher Quality? Evidence from State Certification Requirements," *Economics of Education Review* 27, no. 5 (2008): 483-503. **Negative:** Timothy Muris and Fred McChesney, "Advertising, Consumer Welfare, and the Quality of Legal Services: The Case of Legal Clinics" (Working Paper 78-5, Law and Economics Center, University of Miami, Miami, FL, 1978); Sidney Carroll and Robert Gaston, "Occupational Restrictions and the Quality of Service Received: Some Evidence," *Southern Economic Journal* 47, no. 4 (1981): 959-76; John E. Kwoka, "Advertising and the Price and Quality of Optometric Services," *American Economic Review* 74, no. 1 (1984): 211-16; Mark C. Berger and Eugenia F. Toma, "Variation in State Education Policies and Effects on Student Performance," *Journal of Policy Analysis and Management* 13, no. 3 (1994): 477.

Patrick A. McLaughlin, Jerry Ellig, and Dima Yazji Shamoun recently surveyed 19 studies assessing the effect of occupational licensure on quality.<sup>26</sup> Figure 2 presents the results of their survey. Consistent with the surveys by Kleiner and the Obama administration, they found that the most common result of the 19 studies 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 states to more or less uniformly regulate certain professions but not others. In reality, however, states vary widely in terms of occupations regulated and the stringency with which they are regulated. For example, in four states, interior designers are heavily regulated—required, on average, to have nearly 2,200 days of education and experience to practice their trade—while in the rest of the country, these professionals are able to offer their services free of regulation with no apparent risk to the public.<sup>27</sup>

Finally, it should be noted that licensure is hardly the only or even the most effective way to ensure quality.<sup>28</sup> Tort law as well as civil and criminal statutes against deceptive trade practices protect consumers from fraud and negligence. Firms post bonds that will be forfeited in the case of negligence, scrupulously guard their reputations and brands, and seek the approval of third-party evaluators such as the Better Business Bureau and Angie's List. More recently, a new generation of consumer-driven technologies has radically empowered consumers and balanced the information asymmetry that long persisted in some highly technical fields.<sup>29</sup> And if policymakers think private measures are insufficient to protect consumers, there are a number of public regulatory options that are more effective and less likely to be counterproductive. For example, firms might be required to post bonds, or they might simply be required to register their businesses with the state so that consumers can be assured that they are not "fly-by-night" operations.<sup>30</sup>



### 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,

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.<sup>31</sup>

Similarly, McLaughlin, Ellig, and Shamoun found that licensure increased prices in all 19 of the studies they surveyed, including studies covering optometry, law, dentistry, and cosmetology.<sup>32</sup>

The effects of these increased prices are not trivial. For example, state nurse practitioner licensing is estimated to raise the price of a well-child checkup by 3 to 16 percent,<sup>33</sup> dental hygienist and dental assistant licensing is estimated to increase the price of a dental visit by 7 to 11 percent,<sup>34</sup> and optometry licensing is estimated to increase the price of eye care by 5 to 13 percent.<sup>35</sup> 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.”<sup>36</sup> This inconsistency is one reason why the economic theory of regulation suggests that the primary purpose of licensure is to protect incumbent providers from competition.<sup>37</sup> By limiting supply and thus raising prices, these rules allow incumbent providers to earn above-normal profits. Indeed, the latest research suggests that licensure raises the wages of licensees by about 14 percent.<sup>38</sup> In other words, occupational licensing is a regulatory privilege to incumbent providers.<sup>39</sup>

This privilege is paid for by consumers in the form of higher prices and by providers unable or unwilling to obtain licenses. The loss to consumers, including some who do not buy because of the higher prices, and the loss to would-be competitors exceed the gains to the license holders (economists call this excess a deadweight loss). What's more, because licensure confers a privilege on license holders, these professionals are willing to expend scarce resources convincing policymakers to contrive and maintain these privileges—a socially wasteful endeavor known as rent-seeking.<sup>40</sup> Being fewer in number and more established in their fields, these license holders generally find it easier to organize politically than the large number of consumers and would-be competitors who are harmed by licensure.<sup>41</sup>

### The Disparate Impact of Licensure

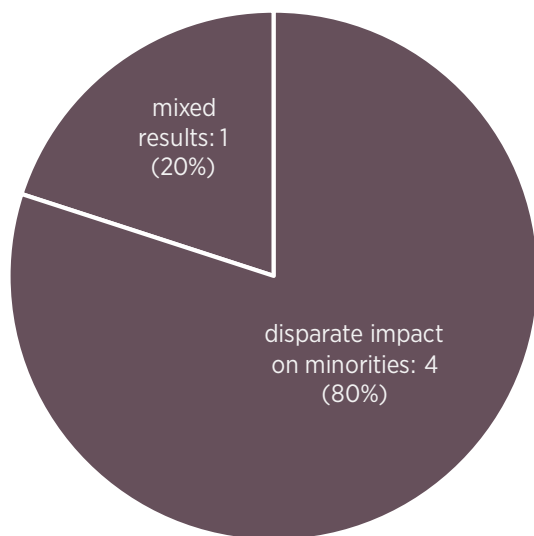
We have mentioned that those who fail to obtain licenses pay a price in the form of lost income. Research suggests that these burdens often fall on particular communities. For example, military spouses are more likely to be in licensed professions and more likely to relocate from one licensing regime to another, so licensure presents a particularly high barrier for them.<sup>42</sup>

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

According to McLaughlin, Ellig, and Shamoun's survey of the literature, four out of five studies found that licensing disparately affects ethnic minorities, as shown in figure 3.<sup>43</sup>

Licensure may also be associated with greater income inequality. In a recent study of 175 countries, McLaughlin and Stanley find that nations with more legal barriers to starting a business experience greater levels of income inequality.<sup>44</sup>

**Figure 3. Studies Assessing the Effect of Occupational Licensure on Minorities**



**Sources: Disparate impact:** Stuart Dorsey, “The Occupational Licensing Queue,” *Journal of Human Resources* 15, no. 3 (1980): 424–34; Maya Federman, David Harrington, and Kathy Krynski, “The Impact of State Licensing Regulations on Low-Skilled Immigrants: The Case of Vietnamese Manicurists,” *American Economic Review* 96, no. 2 (2006): 237–41; Joshua Angrist and Jonathan Guryan, “Does Teacher Testing Raise Teacher Quality? Evidence from State Certification Requirements,” *Economics of Education Review* 27, no. 5 (2008): 483–503; David E. Harrington and Jaret Treber, “Designed to Exclude” (Arlington, VA: Institute for Justice, February 2009). **Mixed results:** Marc Law and Mindy Marks, “Effects of Occupational Licensing Laws on Minorities: Evidence from the Progressive Era,” *Journal of Law and Economics* 52, no. 2 (2009): 351–66.

## REFORM

Reform efforts are under way in several states. The Kentucky legislature passed a bill in 2016 eliminating the licensing requirement for hair braiders.<sup>45</sup> 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.<sup>46</sup> 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.”<sup>47</sup> In Nebraska, the governor

has ordered a review of all existing regulations and has instructed agencies to stop issuing new rules unless they are deemed critical to the health, safety, and welfare of state residents.<sup>48</sup> Pending legislation in that state has the potential to reform licensing requirements for estheticians, potato shippers, car salespeople, barbers, and many other workers.<sup>49</sup>

While occupational licensure is ostensibly intended to protect consumers from harm, there are many other less burdensome mechanisms to ensure public safety. These include tort liability for harms and civil and criminal penalties against fraud.<sup>50</sup> 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.<sup>51</sup>

Competition itself may be the most effective alternative to licensure. As the late economist and chair of the Civil Aeronautics Board 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.”<sup>52</sup>

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 of 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

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|--|--|
| <b>BEGIN WITH A BLANK SLATE</b>                                  | 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.   |
| <b>DEFINE THE NATURE OF THE PROBLEM</b>                          | 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.   |
| <b>IDENTIFY ALTERNATIVE SOLUTIONS TO OCCUPATIONAL REGULATION</b> | These should include the alternative of deregulation. They should also include reliance on both private governance (competition, bond-posting, reputational feedback mechanisms, third-party evaluation, etc.) and public governance (deceptive trade practice law, registration, certification, etc.).  |
| <b>IDENTIFY THE POTENTIAL COSTS OF REGULATION</b>                | 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; production 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. |
| <b>IDENTIFY THE POTENTIAL BENEFITS OF REGULATION</b>             | 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.  |
| <b>MEASURE COSTS AND BENEFITS</b>                                | Whenever possible, an objective measure of costs and benefits should be produced. When that is impossible, analysts should acknowledge that certain judgements are subjective.   |

in licensure. Furthermore, the commission should be guided by a set of criteria for evaluating regulations as listed in table 3.

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 recommendations in their entirety or not at all.

The last provision is designed to overcome the political economy 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.<sup>53</sup> 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. We believe that this proposal offers the best chance for meaningful and reasonable reform of Wisconsin’s antiquated and counterproductive licensing regime.

**NOTES**

1. Morris M. Kleiner and Alan B. Krueger, “The Prevalence and Effects of Occupational Licensing,” *British Journal of Industrial Relations* 48, no. 4 (2010): 676–87; Morris M. Kleiner, “Reforming Occupational Licensing Policies” (Washington, DC: Brookings Institution, March 2015).
2. Kleiner, “Reforming Occupational Licensing Policies.”
3. Colin Roth and Elena Ramlow, “Fencing Out Opportunity: Occupational Licensure in the Badger State” (Milwaukee: Wisconsin Institute for Law & Liberty, November 2016).
4. Dick M. Carpenter II et al., “License to Work: A National Study of Burdens from Occupational Licensing” (Arlington, VA: Institute for Justice, May 2012).
5. Ibid.
6. Ibid., 134.



7. Ibid. In addition, these recent Department of Safety and Professional Services actions have been taken against Wisconsin workers: Cosmetologist Shiloh K. Allred was fined \$1,000 for providing services outside of a licensed establishment. Similarly, Anh Trieu was issued a fine of \$1,000 for performing two manicure services after the expiration of her license. Other professionals have paid hefty fines for working with expired licenses: a funeral service (fined \$4,395), a hearing instrument specialist (fined \$1,250), and a midwife who was threatened with a fine of \$10,000 per day if she continued to practice. See disciplinary proceedings and citations of administrative forfeiture at Wisconsin Department of Safety and Professional Services, "Reports of Decisions," accessed August 9, 2017.
8. Carpenter et al., "License to Work."
9. Ibid.
10. Ibid., 42.
11. Ibid., 134.
12. Cathodic protection testers use electrodes to measure the potential corrosion of a metal in contact with soil, freshwater, or saltwater. Typically, the surface is then covered with a protective coating to prevent the metal from deteriorating. See NACE International, "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems," 2012.
13. Carpenter et al., "License to Work," 134.
14. Ibid.
15. Illinois does not require licenses for midwives. Instead, practitioners can opt for a nurse-midwifery certificate (CNM) through the American Midwifery Certification Board, or they can become direct-entry midwives, who typically enter the profession "through a combination of apprenticeship and formal study." (Illinois Midwifery, "Frequently Asked Questions: Home Birth Safety Act," accessed August 16, 2017.)
16. Rebecca Haw Allensworth, "Foxes at the Henhouse: Occupational Licensing Boards Up Close," *California Law Review*, forthcoming.
17. For midwife credentialing, see Wisconsin Department of Safety and Professional Services, "Licensed Midwives: License Information," accessed August 9, 2017. For home inspector information, see Wisconsin Department of Safety and Professional Services, "Home Inspector License Information," accessed August 9, 2017. For behavior analyst certification information, see Wisconsin Department of Safety and Professional Services, "Behavior Analyst License Information," accessed August 9, 2017.
18. NC State Bd. of Dental Exam'rs v. FTC, 135 S. Ct. 1101 (2015).
19. Kleiner and Krueger, "Prevalence and Effects of Occupational Licensing," 2.
20. Kleiner, "Reforming Occupational Licensing Policies," 3.
21. US Department of the Treasury Office of Economic Policy, the Council of Economic Advisers, and the Department of Labor, *Occupational Licensing: A Framework for Policymakers*, July 2015, 3.
22. Kleiner, "Reforming Occupational Licensing Policies," 4.
23. Morris M. Kleiner, "Occupational Licensing," *Journal of Economic Perspectives* 14, no. 4 (2000): 189–202.
24. Morris M. Kleiner, *Licensing Occupations: Ensuring Quality or Restricting Competition?* (Kalamazoo, MI: Upjohn Press, 2006), 56.
25. Department of the Treasury Office of Economic Policy, the Council of Economic Advisers, and the Department of Labor, *Occupational Licensing*, 13.
26. Patrick A. McLaughlin, Jerry Ellig, and Dima Yazji Shamoun, "Regulatory Reform in Florida: An Opportunity for Greater Competitiveness and Economic Efficiency," *Florida State University Business Review* 13, no. 1 (2014): 95–130.
27. Carpenter et al., "License to Work," 12.
28. For a hierarchy of alternatives to occupational licensure, see Thomas A. Hemphill and Dick M. Carpenter II, "Occupations: A Hierarchy of Regulatory Options," *Regulation* 39, no. 3 (2016): 20–24.
29. For more on reputational feedback mechanisms, see Adam Thierer et al., "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, 2015).
30. Hemphill and Carpenter, "Occupations."
31. Department of the Treasury Office of Economic Policy, the Council of Economic Advisers, and the Department of Labor, *Occupational Licensing*, 14.
32. McLaughlin, Ellig, and Shamoun, "Regulatory Reform in Florida," 14–15.
33. Morris M. Kleiner et al., "Relaxing Occupational Licensing Requirements: Analyzing Wages and Prices for a Medical Service" (NBER Working Paper No. 19906, National Bureau of Economic Research, Cambridge, MA, February 2014).
34. Nellie J. Liang and Jonathan D. Ogur, *Restrictions on Dental Auxiliaries: An Economic Policy Analysis*, Federal Trade Commission, 1987.
35. Deborah Haas-Wilson, "The Effect of Commercial Practice Restrictions: The Case of Optometry," *Journal of Law & Economics* 29, no. 1 (1986): 165–86.
36. Paul J. Larkin Jr., "Public Choice Theory and Occupational Licensing," *Harvard Journal of Law & Public Policy* 39, no. 1 (n.d.): 209–331, 226.
37. George J. Stigler, "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 2, no. 1 (April 1, 1971): 3–21; Sam Peltzman, "Toward a More General Theory of Regulation," *Journal of Law and Economics* 19, no. 2 (1976): 211–40.
38. Kleiner and Krueger, "Prevalence and Effects of Occupational Licensing."
39. Matthew D. Mitchell, *The Pathology of Privilege: The Economic Consequences of Government Favoritism* (Arlington, VA: Mercatus Center at George Mason University, 2014); Patrick A. McLaughlin, Matthew D. Mitchell, and Ethan Roberts, "Regulatory Subsidies: How Regulations Can Become Privileges for Firms and Burdens for Consumers" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, forthcoming).

40. Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft," *Western Economic Journal [Economic Inquiry]* 5, no. 3 (1967): 224–32; Anne O. Krueger, "The Political Economy of the Rent-Seeking Society," *American Economic Review* 64, no. 3 (1974): 291–303; Mitchell, *Pathology of Privilege*.
41. Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups, Second Printing with New Preface and Appendix* (Cambridge, MA: Harvard University Press, 1965).
42. Department of the Treasury Office of Economic Policy, the Council of Economic Advisers, and the Department of Labor, *Occupational Licensing*, 4–5.
43. The fifth study, which only found a disparate effect of licensure in one profession, barbering, has been criticized. See Daniel Klein, Benjamin Powell, and Evgeny Vorotnikov, "Was Occupational Licensing Good for Minorities? A Critique of Marc Law and Mindy Marks," *Econ Journal Watch* 9, no. 3 (2012): 210–33.
44. Patrick A. McLaughlin and Laura Stanley, "Regulation and Income Inequality: The Regressive Effects of Entry Regulations" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, 2016).
45. Institute for Justice, "Kentucky Deregulated Hair Braiding—And Cosmetologists Are Threatening to Sue," April 19, 2016.
46. No MO Red Tape, "FAQ," accessed August 16, 2017.
47. Executive Order 17-03, Missouri Secretary of State, Commissions Division, January 10, 2017.
48. Grant Schulte, "Ricketts Orders Review of All Nebraska State Regulations," *US News & World Report*, July 6, 2017.
49. "Occupational Licensing Reform: Removing Barriers to Jobs," Platte Institute, accessed August 16, 2017.
50. 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).
51. Thierer et al., "How the Internet."
52. Richard Adams, "Alfred Kahn Obituary," *Guardian*, January 12, 2011.
53. Jerry Brito, "Running for Cover: The BRAC Commission as a Model for Federal Spending Reform," *Georgetown Journal of Law & Public Policy* 9 (2010): 131–56; Patrick A. McLaughlin and Richard Williams, "The Consequences of Regulatory Accumulation and a Proposed Solution" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, 2014).

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