

The Inverted Pyramid:

10 Less Restrictive Alternatives to Occupational Licensing

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Every legislative session, industry insiders arrive in state capitols seeking to enact, renew or strengthen occupational licensing laws. We call them “bottleneckers” because they seek economic advantages by securing bottlenecks limiting the entry of new practitioners into their occupations. To do that, they must persuade legislators that licensing protects the public from dishonest or incompetent practitioners.¹

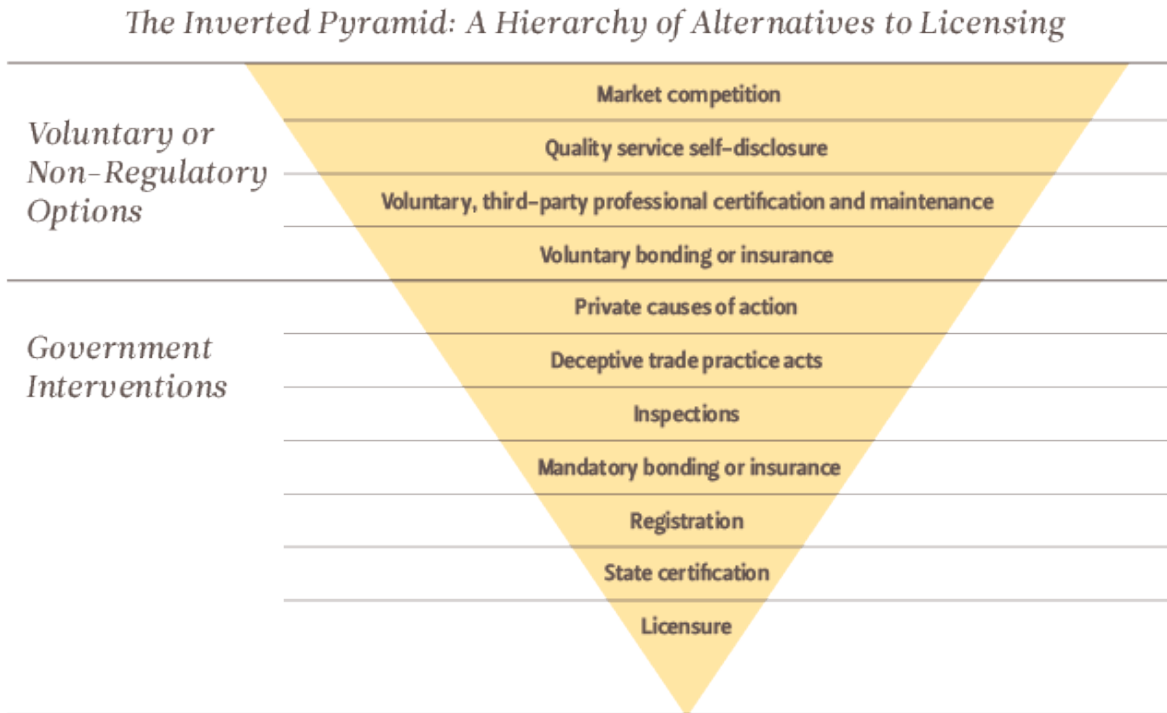
But empirical evidence is scarce for the proposition that licensing protects the public.² By contrast, it is widely recognized that licensing raises prices for consumers, restricts job opportunities and hinders innovation.³ By one estimate, licensing means 2.85 million fewer jobs and costs consumers an additional \$203 billion each year.⁴ And because people with criminal records are frequently barred from working in licensed occupations, licensing laws may also contribute to recidivism by impeding people’s ability to find honest work.⁵

And yet policymakers are in a difficult position—they rarely hear from those who pay the costs of licensing but consistently hear from the bottleneckers who demand it. Consumers and aspiring workers (who may not yet know what occupations they aspire to) are not likely to know about licensing proposals, much less contact their legislators about them. Trade groups, on the other hand, commonly pack legislative hearings, blitz legislators with phone calls and emails, testify at hearings, drum up sympathetic media coverage, and hire lobbyists to urge for regulation.⁶

It is not surprising that when legislators hear a consistent message they feel compelled to act. The result: an explosion of licensing laws.⁷ In the 1950s, one in 20 workers needed a license to do their jobs. Today, one in four do.⁸

One rhetorical tactic bottleneckers employ is to present regulation as a binary choice: An occupation can either be licensed or it can be left entirely unregulated. But, in fact, there are many voluntary and regulatory options short of licensing that protect consumers without putting up roadblocks to honest work.⁹ The purpose of this paper is to illustrate 10 alternatives to licensure, organized from least to most restrictive (see Figure 1).

Figure 1:



Before imposing (or continuing to impose) any occupational regulation, policymakers should demand systematic, empirical evidence of harm—and then select the least restrictive and most appropriate option on the pyramid necessary to provide the desired consumer protections. As the Institute for Justice’s 2017 report *License to Work* (2nd ed.) shows, many occupations are not licensed everywhere.¹⁰ This means that state policymakers can usually look to other states for evidence of harm (or lack thereof), as well as to see how licensing alternatives, both voluntary and regulatory, work in practice.

Voluntary Options

Market Competition

Open markets with no or limited government-imposed entry restrictions provide the widest range of consumer choices, allocate resources more efficiently and give businesses strong incentives to keep their reputations as providers of high-quality services.¹¹ For this reason, market competition takes the primary position in the inverted pyramid’s hierarchy. When service providers are free to compete, consumers weed out providers who fail to deliver safe and quality service. They do this by 1) denying repeat business to such providers (and subsequently choosing other providers) and 2) telling others about their experience. A barbershop, for instance, is unlikely to stay in business

unless more people leave happy with their haircut than not—irrespective of whether the barbers meet licensing requirements.

Licensing proponents often claim that licensing is necessary to combat “asymmetrical information.” Asymmetrical information is when providers have more or better information than consumers, which they could potentially use to take advantage of consumers.¹² Licensing is thought to solve this problem by providing a “seal of approval” signaling to consumers that practitioners possess the skills and knowledge necessary to provide safe and quality service. But governments often have no better information than consumers, and it is arguable that they have less.

Moreover, market innovations are always working to reduce information asymmetries more quickly and effectively than licensing. For example, consumer review websites provide a wealth of information about the reputations of providers in a wide range of occupations—everyone from doctors to home contractors. Yelp, Google reviews, Angie’s List, Healthgrades, OpenTable and many other platforms give consumers a chance to praise or to criticize. In many industries, online reviews are extremely important to a business’s bottom line.¹³

While consulting a review site does not guarantee that a consumer will have a good experience, reviews are often more useful and detailed than the kind of information licensing authorities can offer to consumers. A license signals only that a service provider met certain government-mandated requirements before entering the occupation. It says nothing about the quality or particularities of a service provider. But consumer reviews, by definition, are more attuned than any license to what consumers actually care about. They are also more timely, providing real-time feedback that consumers can act on; regulators meanwhile are nearly always playing catch-up.¹⁴

And though the reliability of individual reviews may vary, taken together, reviews are likely to give consumers an accurate picture, especially when a business has dozens of them.¹⁵ It often takes just a few clicks and a few minutes of reading to locate a local provider with a good reputation.

The reviews for Hinga’s Automotive Company, an auto repair garage in Dallas owned by an Institute for Justice client, provide a concrete example. Scores of reviewers praise the shop’s honesty, competence, timeliness and prices; negative reviews are few.¹⁶ The overwhelming consistency of the reviews gives good reason to believe that Hinga’s Automotive is more likely to provide a positive customer service experience than not.

Importantly, review websites yield information without licensing’s downsides.¹⁷ Licensing boards are susceptible to “capture” by the industries they are meant to regulate and thus liable to

exclude otherwise capable providers from entering an occupation. Review sites do not limit consumer choice. If they yield unreliable information, consumers will cease to rely on them—an outcome review sites have every incentive to avoid.¹⁸

Apart from consumers, review websites are also a valuable source of information to other parties. They provide critical feedback to the businesses being reviewed, for instance.¹⁹ Separately, they represent a trove of information that can be used to address empirical questions. Relevant to this paper, they can be used to measure the effect of occupational licensing on quality.

For instance, an examination of nearly 15,000 online reviews from before and after the District of Columbia eliminated its license for tour guides showed no statistically significant change in tour quality.²⁰ Quality was good while the license was in force, and it continued to be good after the license was eliminated. What this means is that something else—market competition—has been keeping quality high all along.

Quality Service Self-Disclosure

The open market also incentivizes service providers, themselves, to help solve the problem of asymmetrical information by proactively sharing information about previous customers' experiences. Such "self-disclosure" signals that providers take customer satisfaction seriously. Perhaps the most common way for providers to engage in self-disclosure is to solicit online reviews from customers and link their websites to consumer review websites. A bed-and-breakfast might include a link to its Google review page on its website, for example. Or a lawn service might include a reference to its Yelp reviews on printed fliers.

In some industries, service providers also ask past customers to write letters of recommendation. This practice is common in child care, for instance.²¹ Or, as is common in the home improvement industry, providers put potential customers in direct contact with past customers or provide a portfolio of past projects.²² Consumers often spur such disclosures by demanding them as a condition of doing business.

Voluntary, Third-Party Professional Certification and Maintenance

Another way service providers, themselves, address information asymmetries is by voluntarily obtaining and maintaining certification from a non-governmental organization. Like licensing, voluntary certification sends a signal to consumers that a provider has a certain amount of training and experience. To maintain one's certification, providers must also adhere to industry best practices, like carrying liability insurance or satisfying continuing education requirements.²³ Additionally, employers in many industries require private certification as a condition of employment.

Unlike licensing, however, voluntary certification does not create barriers to entry or stymie consumer choice because it allows for freedom of occupational practice. Anyone can work without certification, and, in choosing a service provider, consumers are free to decide whether certification matters to them. Voluntary certification therefore provides the purported benefits of occupational licensing without the costs.

Non-government organizations offer certifications in hundreds of industries, including auto mechanics,²⁴ tour guides²⁵ and home improvement contractors.²⁶ Indeed, voluntary certification rather than licensure is the standard for many industries, including travel agents²⁷ and financial planners.²⁸

For auto repair, an industry where voluntary certification rather than licensing prevails, *Consumer Reports* recommends that consumers look for a mechanic certified by the National Institute for Automotive Service Excellence (ASE).²⁹ Finding one is not hard: Over 270,000 (out of an estimated 740,000 total mechanics in the U.S.—or approximately 36 percent) have voluntarily obtained an ASE certification.³⁰ Another popular choice for certification is so-called factory training where mechanics get training either directly from or designed by automakers.³¹

Of course, voluntary certification does not guarantee that auto repair shops and mechanics uniformly provide excellent service. Rather, auto repair demonstrates that licensing is not necessary even in industries where public safety is clearly implicated or where consumers typically know markedly less about a good or service than a provider.

If mechanics routinely did a poor job fixing cars, we would regularly hear about auto accidents caused by faulty repairs. But we do not. Indeed, the federal government, through the National Highway Traffic Safety Administration, tracks an enormous array of variables and outcomes related to road safety—but it does not track negligent auto repair or compare states' differing regulatory regimes.

There is simply no reason to think that quality of auto repair is a grave threat to public safety. Nor is there evidence that the quality of repairs is higher in the few states—California,³² Hawaii³³ and Michigan,³⁴ for instance—that require auto mechanics to obtain licenses.³⁵ If voluntary certification can, by all appearances, ensure safety in an occupation like auto repair, surely it can do the same for a host of other currently licensed occupations.

Voluntary Bonding and Insurance

Voluntary bonding and insurance is another way in which service providers voluntarily signal their competence and concern for quality to consumers. Both bonding and insurance allow

providers to outsource their risk management to a third party company that has a direct financial stake in preventing consumers from suffering harm or loss.

With bonding, a surety company, after investigating a business's or a practitioner's integrity and financial soundness, issues a bond.³⁶ In doing so, the surety company agrees to compensate a consumer if something goes wrong (or pay for someone else to complete the job). Typically, surety companies will not issue a bond if they think it will be claimed.³⁷

Insurance is structured a little differently. Unlike a surety company, an insurance company charges monthly premiums because the insurer anticipates some losses as part of the normal course of business.³⁸

Providers commonly acquire liability insurance voluntarily, often as part of a bundle that protects their business from a variety of harms (wind, fire and flood, copyright infringement, slip-and-fall accidents, and more). In the event of a lawsuit, insurers also cover the cost of a provider's legal defense.

Like bonding, insurance can also protect and benefit consumers directly; insurers will pay damages for harm that a firm inflicts on a customer. To reduce the likelihood of payouts, insurance companies require or incentivize providers to implement industry-specific loss control and risk management programs. (One factor insurers consider when pricing their policies is whether a provider has obtained a voluntary certification.)³⁹

Insurance is often preferable to licensing because insurers have access to huge databases of proprietary information about what business characteristics and practices are likely to result in accidents and other types of harm. Moreover, they have every incentive to discover what rules will reduce the likelihood of losses—fewer payouts allow them to charge lower fees and attract more business. Government regulators, by comparison, do not have access to this kind of information or the same incentives to discover good rules, so licensing rules are more likely to be inefficient.⁴⁰

As with the other voluntary options discussed above, whether a provider is bonded or insured sends a signal to consumers that the provider cares about safety and quality; they will lose the collateral on the bond or see their premiums raised in the event of an accident.

Residential cleaning is an industry where voluntary bonding and insurance are common.⁴¹ There are over 115,000 maids and house cleaners in the country,⁴² few, if any, of whom are required to obtain occupational licenses by state authorities.⁴³ What assurance do residents have that the strangers cleaning their home are trustworthy and competent?

A company's reputation—discernable from online reviews or personal recommendations—is a good start. And many companies will do what they can to make things right in the event of a theft. Moreover, like auto mechanics, voluntary certifications exist for house cleaners that attest to their competence with strong cleaning chemicals or, more recently, with “green” cleaning products.⁴⁴ Bonding and insurance provide the additional assurance that a third party has investigated the cleaner's bona fides and has a financial stake in preventing theft or other harms—as well as a legal obligation to reimburse the consumer in the event of a loss.⁴⁵

Regulatory Options

The next six options are government interventions that, while more restrictive than the above voluntary options, are nevertheless less restrictive than licensure and offer some of the same purported benefits.

Private Causes of Action

In the event of an injury or loss, private causes of action give consumers the right to bring lawsuits against the service providers at fault. Where they do not already exist, legislatures can create them. The threat of lawsuits will compel many providers to adopt standards of quality to avoid litigation and an accompanying loss of reputation. The cost to consumers of pursuing this remedy could be reduced by allowing them to sue in small claims court or, if suing in district court, to collect court and attorneys' fees when their claims are successful.

Earlier this year, for instance, a Virginia court awarded over \$1 million to a consumer who developed a serious bacterial infection after getting a pedicure at a (licensed) Richmond nail salon.⁴⁶ Lawsuits are not uncommon in the industry (though injuries usually are not nearly so severe), even though almost every state licenses both salons and manicurists.⁴⁷

Deceptive Trade Practice Acts

One specific private cause of action available to consumers comes from deceptive trade practice acts. Every state allows consumers to sue businesses for certain practices deemed deceptive, unfair or unconscionable. The statutes also authorize state attorneys general to investigate consumer complaints against businesses and pursue enforcement measures, including injunctions and civil penalties.⁴⁸

Such consumer protection acts, often called Unfair and Deceptive Acts and Practices (UDAP) statutes, have their critics. Some assert they are too difficult to enforce or apply to too narrow a range of misconduct,⁴⁹ while others worry they can be used to shake down businesses over trivial harms.⁵⁰

Still, consumer protection acts can and do provide redress to consumers. Before considering licensure, policymakers should examine their state's consumer protection laws, and adjust them if necessary to ensure consumers can pursue claims seeking the return of payments, damages, injunctions and attorneys' fees. Alternatively, if policymakers are concerned about a harmful practice in a specific occupation, they can direct the attorney general to investigate.

In the home improvement industry, for instance, it is common practice to pay contractors a sizable deposit before work has begun. Occasionally, a contractor—whether licensed or not—will abscond with the deposit without doing the agreed-upon work.⁵¹

Consumers can guard against this by consulting consumer reviews and verifying whether a contractor is insured, bonded or certified by a reputable third party. Additionally, there are laws on the books—deceptive trade practice acts—that attorneys general regularly use to investigate and punish this kind of fraud and to see to it that consumers get their money back.⁵² (In some jurisdictions the police will investigate as well.⁵³)

Deceptive trade practice acts are often preferable to licensing because they allow consumers and attorneys general to target bad actors rather than creating unnecessary hurdles to honest work and competition.

Inspections

In industries where policymakers are concerned about health and sanitation and where a practiced eye can spot potential hazards, inspections can be a suitable, less burdensome alternative to licensure.

Take the food-service industry: To ensure hygiene, many municipalities rely on inspections of restaurants and other vendors rather than onerous licensing of food preparers, wait staff and dishwashers.⁵⁴ (Consumer reviews and voluntary certifications from culinary schools are also very important in the industry.)

Inspections are hardly a new regulatory tool, but innovations online hold the potential to make them much more useful for consumers. For instance, some 20 municipalities have partnered with Yelp to post restaurant inspection results online so consumers can look at customer reviews and health department scores side by side.⁵⁵ This model (which could be applied to other industries as well) can make the dissemination of regulators' findings more useful and efficient, encouraging restaurants and consumers alike to take more interest in inspection results.⁵⁶

Inspections data have proven especially useful in the context of mobile food vendors. Food trucks and food carts have not always enjoyed a sterling reputation for cleanliness, but that appears to be changing. A recent study that compared 260,000 inspection reports from seven

cities found that mobile vendors are just as safe as restaurants, if not more so.⁵⁷ That result should encourage consumers, who are flocking to food trucks and carts in ever-increasing numbers,⁵⁸ as well as policymakers, who in many municipalities have not yet welcomed mobile vendors.⁵⁹

Inspections are also commonly required in construction. Municipalities require home and business owners to acquire permits to build or improve their properties, and inspectors must give the go-ahead before a project is concluded. As with restaurant scores, regulators could work with consumer review websites to post inspection results, which form a massive trove of data that the public cannot efficiently access today.

Indeed, because the application of building contractor skills is repeated and detectable to an inspector's experienced eye, inspections could replace licensing entirely for various trades such as mobile home installation, plumbing, carpentry and others.⁶⁰

In some occupations, like barbers, cosmetologists and manicurists, inspections are part of existing licensing regimes. There, licensing could be eliminated and—like in the food-service industry—the responsibility for conducting inspections could shift from occupational boards to health departments.⁶¹ That was the recommendation from regulators in South Carolina, who found that inspections resulting in citations related to health and safety for salons are vanishingly rare.⁶²

Other occupations where licensing could be pared back to inspections include opticians (licensed by 22 states), family child care home operators (licensed by 44 states), makeup artists (licensed by 41 states), taxidermists (licensed by 28 states) and funeral directors (licensed by every state but Colorado).⁶³ Inspections may also be preferable to licensing for body-art professionals, such as tattoo artists and body piercers, who are increasingly being subjected to licensure (primarily at the behest of industry groups).⁶⁴

Like with licensing, inspections can be funded through fees paid by providers (on either an annual or a per-inspection basis). The benefit of this approach is that lawmakers do not need to regularly make appropriations to pay for inspections. Virginia, for instance, charges food sellers and preparers (including grocery stores, convenience stores and home bakers) an annual inspection fee not to exceed \$40.⁶⁵

While inspections represent a far less burdensome alternative to licensing, policymakers should be sure to impose them only where they are truly necessary. Policymakers should demand substantial evidence that existing voluntary market mechanisms and less restrictive regulations are not preventing harm before establishing new inspection regimes.

Mandatory Bonding or Insurance

Requiring providers to obtain liability coverage or a surety bond can be a better alternative to licensure, especially for occupations where the risks associated with transactions extend beyond just the immediate consumer.

For example, the state interest in regulating tree trimmers is in ensuring that the service provider can pay for repairs in the event of damage to power lines or to the home or other property of a neighbor who is not involved in the contract between the trimmer and customer. Because tree trimming presents few other threats, states can more efficiently protect the public through insurance or bonding requirements.

Denver, for instance, requires tree trimmers to obtain liability coverage.⁶⁶ Such a requirement is preferable to mandated exams and experience requirements because it offers protection to the public while allowing workers to practice freely. Indeed, few cities and only seven states license tree trimmers.⁶⁷ If licensing were really necessary to protect the public, one would expect more consistency.

Similarly, though many states license a variety of construction contracting trades, Minnesota requires only bonding for HVAC contractors.⁶⁸ If that trade can be practiced freely and safely in Minnesota with only bonding as a requirement, the same is likely true of other construction trades both in Minnesota and in other states.

Likewise, California imposes only a bonding requirement on auctioneers. In the event a customer obtains a court judgment against an auctioneer, the customer can take the judgment to the surety company and be reimbursed up to \$20,000—and the auctioneer cannot go back to work unless a surety company is willing to issue another bond.⁶⁹

By contrast, 29 states and D.C. impose licensing requirements on auctioneers. On average, auctioneers must complete 94 days of education or experience, pass an examination, and pay \$278 in fees.⁷⁰ Policymakers in those states should consider eliminating these licenses, which were typically imposed in the 1970s and 1980s at the behest of auctioneers' associations.⁷¹

Other occupations for which states require bonding, but not licenses, include title examiners⁷² and bill collection agencies.⁷³

Another occupation in which bonding can be an alternative to licensing is security alarm installer. Here again, the push for licensure typically comes from the industry itself, as opposed to consumers. And whenever policymakers have demanded real evidence of harm that could be remedied, none has been produced.⁷⁴ Despite that lack of evidence, 36 states and D.C. license security alarm installers.⁷⁵

Though bonding and insurance requirements are preferable to licensing, they do raise the cost of doing business.⁷⁶ Policymakers should examine whether voluntary market mechanisms or less restrictive government regulations provide public protection at lower cost—and demand substantial evidence that harm is going unaddressed before regulating an occupation.

Registration

Registration may be appropriate where policymakers are concerned about fly-by-night providers. With registration, the government does not mandate any personal credentials or qualifications, but providers must notify officials of their name, address and the services they provide—and perhaps pay a nominal fee—before they can work.⁷⁷ The simple requirement to register with the state may be sufficient in and of itself to deter bad actors.

Registration gives consumers access to a roster of providers and can be used in combination with private civil actions, as it often includes a requirement that a provider indicate where and how they take service of process used to initiate legal action.⁷⁸

Registration can also be used in conjunction with other less restrictive alternatives like inspections, mandatory insurance or bonding, or deceptive trade practice acts. Kansas, for instance, requires roofers to register, and the attorney general recently enforced the state's deceptive trade practice act against door-to-door salesmen who collected money but did not fix any roofs.⁷⁹

Such scams are of particular concern after natural disasters when demand for service peaks and consumers with pressing need for repairs face difficulty getting reliable information on roofers' reputations. But some evidence suggests that registration is preferable to licensing even in times of crisis.

For instance, to increase the supply of roofers after Hurricanes Frances and Katrina, Florida temporarily relaxed its licensing restrictions on roofers. This allowed general contractors from Florida and roofers licensed in other states to register with the state and fix roofs.⁸⁰

Tellingly, consumer complaints with probable cause against the construction industry remained very rare after the hurricanes—one complaint for every \$16 million worth of work.⁸¹ If licensing were necessary to protect the public from unscrupulous or incompetent providers, one would expect far more complaints.

Requiring providers to register with the state is simple and inexpensive compared to licensing, but policymakers should be wary of bottlenecking nonetheless. Importantly, policymakers should insist that registration be managed by an attorney general or department of consumer protection

rather than an occupational board since such boards are typically composed of industry insiders and easily captured.⁸²

A textbook example of the phenomenon comes from bottlenecks in the interior design industry. After largely failing to convince legislators to adopt licensing laws, the American Society of Interior Designers (ASID) and its state affiliates managed to shepherd a wave of less restrictive legislation into law. This legislation established state boards dominated by ASID-affiliated designers. From there, industry insiders lobbied for more restrictions—and often succeeded.⁸³ Today, in states⁸⁴ that license interior design, the entry barriers are unusually high given the low risk of harm interior designers pose to the public.⁸⁵

Accordingly, policymakers should consider whether the call for registration comes from industry insiders campaigning for anticompetitive regulation—and insist on systematic, empirical evidence of public harm.

State Certification

Like voluntary certification, state certification overcomes the problem of asymmetrical information by sending a signal to potential customers and employers that a practitioner meets certain standards.⁸⁶ However, state certification differs from third-party certification in two major respects.

First, the certifying body is the government rather than a private group. And second, state certification restricts the use of an occupational title—though not, as licensing does, the practice of an occupation. Under state certification, anyone can work in an occupation, but only those who meet the state’s criteria can use a designated title,⁸⁷ such as “certified interior designer” or “certified athletic trainer.”⁸⁸

Voluntary certification is generally preferable to government certification because the latter requires new or expanded bureaucracy. Further, third-party organizations are likely to be more responsive to industry and consumer trends. Nevertheless, state certification is less restrictive than occupational licensing and presents few costs in terms of increased unemployment and consumer prices.

California, for instance, restricts use of the title “Certified Interior Designer” to designers who have completed several years of schooling and apprenticeship and passed an exam, and who take continuing education classes.⁸⁹ As with an occupational board, consumers can file formal complaints to the California Council for Interior Design, which can investigate and revoke a designer’s certification. (Since 1999, only six certifications have been permanently revoked.⁹⁰)

Like with registration, policymakers should take steps to ensure the certifying board is not captured by the industry it is meant to regulate.⁹¹ Moreover, policymakers should refrain from getting involved without clear evidence of a problem. Many industries have developed reputable, well-recognized accrediting agencies on a voluntary basis⁹²—and policymakers should demand evidence that a particular occupation is unable to do so before enacting state certification.

Licensure

Licensing is the most restrictive form of occupational licensure and the regulation of last resort. Only where there is proof of demonstrated, substantial harm from an occupation that cannot be mitigated by one of the less restrictive options should policymakers consider it. Figure 2 shows how voluntary and regulatory responses short of licensure can respond to several common consumer concerns.

Figure 2: Voluntary and Regulatory Responses to Common Consumer Concerns

Consumer Concern	Voluntary/Regulatory Response
Asymmetrical information	Consumer reviews, self-disclosure, voluntary certification, voluntary bonding or insurance, government certification
Fraud	Consumer reviews, self-disclosure, voluntary bonding or insurance, deceptive trade practice acts
Injuries, third-party injuries	Voluntary bonding or insurance, private causes of action
Hygiene, sanitation	Consumer reviews, inspections
Fly-by-night providers	Consumer reviews, self-disclosure, voluntary/mandatory bonding or insurance, voluntary certification, registration

And when licensure is deemed necessary, policymakers should ensure that the licensing board created to govern the occupation focuses on consumer protection, not economic protectionism. They can do this by adopting the policy recommendations outlined in *License to Work*, which include creating a legal right to challenge unnecessary licensing rules and establishing an independent office to supervise licensing boards.⁹³

Occupational regulation is too often the product of bottlenecking rather than the result of a targeted, evidence-based inquiry that imposes regulation only when necessary and then only the least restrictive option needed to address real, demonstrated harms. Imposing regulatory burdens that are heavier than necessary unconscionably restricts the fundamental American right to earn an honest living. It also contributes to a host of ills, from fewer jobs to higher prices. But the problem is not beyond repair. Policymakers across the political spectrum can use this paper to

evaluate alternatives to licensing that can protect the public while imposing fewer costs on workers, consumers and society at large.

¹ Mellor, W., & Carpenter, D. M. (2016). *Bottlenecks: Gaming the government for power and private profit*. New York, NY: Encounter Books.

² Kleiner, M. M. (2015). *Reforming occupational licensing policies* (Discussion Paper 2015-01). Washington, DC: The Hamilton Project, Brookings Institution. https://www.brookings.edu/wp-content/uploads/2016/06/THP_KleinerDiscPaper_final.pdf; Carpenter, D. M. (2011). Blooming nonsense: Do claims about consumer benefit of licensure withstand empirical scrutiny? *Regulation*, 34(1), 44–47; Berliner, D., Greenberg, D., Larkin, P. J., Jr., Neily, C., Nunn, R., Riches, J., & Wake, L. A. (2017). *Occupational licensing run wild*. Washington, DC: Regulatory Transparency Project, The Federalist Society. <https://regproject.org/paper/occupational-licensing-run-wild/>

³ Kleiner, M. M., & Park, K. W. (2010). *Battles among licensed occupations: Analyzing government regulations on labor market outcomes for dentists and hygienists*. Cambridge, MA: National Bureau of Economic Research; Wing, C., & Marier, A. (2014). Effects of occupational regulations on the cost of dental services: Evidence from dental insurance claims. *Journal of Health Economics*, 34, 131–143; Kleiner, M. M., & Todd, R. M. (2007). *Mortgage broker regulations that matter: Analyzing earnings, employment, and outcomes for consumers*. Cambridge, MA: National Bureau of Economic Research; Federman, M. N., Harrington, D. E., & Krynski, K. J. (2006). The impact of state licensing regulations on low-skilled immigrants: The case of Vietnamese manicurists. *American Economic Review*, 96(2), 237–241; Harrington, D. E., & Treber, J. (2009). *Designed to exclude: How interior design insiders use government power to exclude minorities and burden consumers*. Arlington, VA: Institute for Justice; Harrington, D. E. (2007). Markets: Preserving funeral markets with ready-to-embalm laws. *Journal of Economic Perspectives*, 21(4), 201–216; Kleiner, M. M. (2011). *Occupational licensing: Protecting the public interest or protectionism?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

⁴ Kleiner, 2015; Kleiner, M. M., Krueger, A. B., & Mas, A. (2011). *A proposal to encourage states to rationalize occupational licensing practices*. Washington, DC: The Hamilton Project, Brookings Institution. <https://www.hhh.umn.edu/file/9441/download>

⁵ Slivinski, S. (2016). *Turning shackles into bootstraps: Why occupational licensing reform is the missing piece of criminal justice reform* (Policy Report No. 2016-01). Tempe, AZ: Center for the Study of Economic Liberty, Arizona State University.

⁶ Mellor and Carpenter, 2016.

⁷ Licensing is a one-way ratchet. Licensing laws are almost never repealed absent a court order. See Thornton, R. J., & Timmons, E. J. (2015). The de-licensing of occupations in the United States. *Monthly Labor Review*. <https://www.bls.gov/opub/mlr/2015/article/the-de-licensing-of-occupations-in-the-united-states.htm>

⁸ Department of the Treasury Office of Economic Policy, Council of Economic Advisers, & Department of Labor. (2015). *Occupational licensing: A framework for policymakers*. Washington, DC: White House. https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf

⁹ Hemphill, T. A., & Carpenter, D. M. (2016). Occupations: A hierarchy of regulatory options. *Regulation*. 39(3), 20–24.

¹⁰ Carpenter, D. M., Knepper, L., Sweetland, K., & McDonald, J. (2017). *License to work: A national study of burdens from occupational licensing* (2nd ed.). Arlington, VA: Institute for Justice.

¹¹ Friedman, M., & Friedman, R. (1980). *Free to choose*. New York, NY: Harcourt Brace Jovanovich.

¹² Akerlof, G. A. (1970). The market for lemons: Qualitative uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488–500; Tabarrok, A., & Cowen T. (2015). The end of asymmetric information. *Cato Unbound*. <https://www.cato-unbound.org/2015/04/06/alex-tabarrok-tyler-cowen/end-asymmetric-information>

¹³ Blanding, M. (2011). The Yelp factor: Are consumer reviews good for business? *Harvard Business School Working Knowledge*. <http://hbswk.hbs.edu/item/the-yelp-factor-are-consumer-reviews-good-for-business>. In selecting primary care physicians, for instance, 60 percent of respondents to a *Journal of the American Medical Association* survey said review websites are very to somewhat important in their decision making: Marbury, D. (2014, February 9). Doctor review websites are a growing factor for patients choosing providers. *Medical Economics*. <http://medicaleconomics.modernmedicine.com/medical-economics/content/tags/jama/doctor-review-websites-are-growing-factor-patients-choosing-prov>

¹⁴ According to a Pew Research survey, American consumers find consumer reviews more useful than government regulation for ensuring the safety of products and services and making businesses accountable to customers. Smith, A., & Anderson, M. (2016). *Online shopping and e-commerce*. Washington, DC: Pew Research Center.

<http://www.pewinternet.org/2016/12/19/online-reviews/>

¹⁵ Blanding, 2011. Users can also often easily detect biased or false reviews. Empirical work on RateMyProfessor.com, for instance, suggests that while many individual student reviews of professors may be biased or focus on poor indicators (such as whether a class is an easy “A”), overall the reviews give valuable insight into professor quality. Otto, J., Sanford, D. A., & Ross, D. N. (2008). Does ratemyprofessor.com really rate my professor? *Assessment and Evaluation in Higher Education*, 33(4), 355–368.

<http://www.tandfonline.com/doi/full/10.1080/02602930701293405>

¹⁶ Hinga’s Automotive Company. (n.d.). <https://www.yelp.com/biz/hingas-automotive-company-dallas>

¹⁷ Very occasionally, a businessperson will sue over a bad review (which should serve as a warning to potential customers to stay away). Often such suits result in the businessperson paying the reviewer’s legal fees. But if policymakers are concerned about reviewers facing retaliatory suits, they can pass legislation to protect the flow of information. Goldman, E. (2011, February 3). CA anti-SLAPP cases involving consumer reviews as matters of public concern. *Technology & Marketing Law Blog*.

http://blog.ericgoldman.org/archives/2011/02/ca_antislapp_ca.htm

¹⁸ How review sites can best ensure accurate reviews is the subject of lively debate. Different sites employ different methods. See The truth about online ratings services. (2013). <https://www.consumerreports.org/cro/2013/09/online-ratings-services/index.htm>; HBS Working Knowledge. (2013, January 28). How Yelp could create more accurate reviews. *Forbes.com*. <https://www.forbes.com/sites/hbsworkingknowledge/2013/01/28/how-yelp-could-create-more-accurate-reviews/#345ea44b2e43>

¹⁹ Further, reviews can be a two-way street, where feasible, allowing providers to rate customers as well. For instance, just as Uber passengers review drivers (incentivizing safe driving), drivers review passengers (incentivizing good customer behavior). Airbnb (accommodations) and Feastly (cooks) also use two-way ratings systems. Tabarrok and Cowen, 2015.

²⁰ Erickson, A. C. (2016). *Putting licensing to the test: How licenses for tour guides fail consumers—and guides*. Arlington, VA: Institute for Justice. <http://ij.org/report/putting-licensing-test/>. Guides had to pass a background check and show that an employer was ready to hire them before they could sit for a multiple-choice test filled with arcane (and often irrelevant) trivia—a process made even more arduous by the months it took the government to process the multiple rounds of paperwork. See Mellor and Carpenter, 2016, pp. 124–126.

²¹ Scully, M. (2016, August 23). What every nanny should know about the reference letter. *Sitter.com*.

<https://sitter.com/reference-letter-advice-for-nannies/>

²² Palmer, J. (2012, April 26). 9 questions to ask a contractor’s references. *Angie’s List*.

<https://www.angieslist.com/articles/9-questions-ask-contractors-references.htm>

²³ Licensing agencies also require licensees to adhere to “best practices,” of course, but third-party organizations have stronger incentives to develop effective requirements. If their requirements are unduly burdensome or lack real-world application, they will lose members. Third-party certifiers are also more able to flexibly respond to industry changes.

²⁴ The National Institute for Automotive Service Excellence provides such a certification.

<http://www.ase.com/Tests/ASE-Certification-Tests.aspx>

²⁵ Non-governmental associations offer certification for guides in the history of Chicago, Dallas, Houston, Las Vegas, Philadelphia, San Diego, San Francisco and elsewhere. Certified tour guide test. (n.d.).

<http://www.tourguidesofchicago.com/test.html>; Certification. (n.d.).

<http://www.dfwtourguides.com/certification.htm>; Certification. (n.d.).

<http://ptgah.org/web/membership/certification/>; Certified tour guides. (n.d.).

<http://www.lvtgg.com/members/certified-tour-guides/>; The APT tour guide certification programs. (n.d.).

<http://phillyguides.org/training-certification.aspx>; Certification. (n.d.). <http://www.sdtourguides.com/certification/>;

Certified member. (n.d.). <http://www.sftgg.org/membership/>

²⁶ The National Association of the Remodeling Industry provides such a certification.

<https://www.nari.org/industry/development/certification/>

²⁷ Elliott, C. (2017, October 19). How to tell if you have a qualified travel agent. *The Washington Post*.

<https://www.washingtonpost.com/lifestyle/travel/how-to-tell-if-you-have-a-qualified-travel->

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- [agent/2017/10/19/6688c9ac-b2b3-11e7-a908-a3470754bbb9_story.html?utm_term=.9b4650cf0d43](#); Monaghan, K. (n.d.). Do I need a travel agent license? *HomeTravelAgency.com*. <http://hometravelagency.com/travel-agent-license/>;
Kindred, H. (n.d.). Do you need to be a certified travel agent? *Travel Leaders of Tomorrow*.
<https://www.travelleadertomorrow.com/do-you-need-to-be-a-certified-travel-agent/>
- ²⁸ Regulation of financial planners. (n.d.). <https://www.cfp.net/public-policy/public-policy-issues/regulation-of-financial-planners>. Over the last 30 years, the National Commission for Certifying Agencies has accredited about 300 occupational certification programs. Hemphill and Carpenter, 2016.
- ²⁹ Car repair shop buying guide. (2016). <http://www.consumerreports.org/cro/car-repair-shops/buying-guide.htm>
- ³⁰ Statistics. (2017). <http://www.ase.com/About-ASE/Statistics.aspx>; Bureau of Labor Statistics. (2016). *Automotive service technicians and mechanics*. <https://www.bls.gov/ooh/installation-maintenance-and-repair/automotive-service-technicians-and-mechanics.htm>
- ³¹ Other voluntary market mechanisms to ensure quality in the auto industry include AAA, the Automobile Association of America, which for a yearly fee gives consumers free towing to AAA-accredited repair shops and service guarantees at those shops. Insurers also play a role in collision repair, requiring mechanics to meet certain criteria before paying for repairs at their shops. Consumers are also protected from negligent repair jobs by the threat of lawsuits. But before they even drop off their vehicle, consumers can consult consumer review websites to gauge the reputation of a mechanic or repair shop.
- ³² Not all mechanics must be licensed in California—just those who work on brakes, lights or emissions. Bureau of Automotive Repair. (2013). *Sunset review report 2013*. Rancho Cordova, CA.
https://www.bar.ca.gov/pdf/BAR_Sunset_Report_R2_full_document.pdf
- ³³ Requirements for license – mechanic. (n.d.). https://cca.hawaii.gov/pvl/files/2013/06/Require-App-for-Mechanic_10.16R.pdf
- ³⁴ State of Michigan Secretary of State. (n.d.). *Information for mechanics*. Lansing, MI.
http://www.michigan.gov/sos/0,4670,7-127-49534_50302---,00.html
- ³⁵ Many states do require mechanics who check vehicles for emissions compliance to obtain some kind of license or permit. Other states require auto repair shops to have a certified mechanic overseeing all work.
- ³⁶ Suretyship is an ancient practice, first recorded in a cuneiform tablet from the 28th century B.C. in present-day Iraq, wherein a merchant guaranteed that a farmer would tend to his neighbor’s fields while the neighbor was away on military service. Morgan, W. D. (1927). History and economics of suretyship. *Cornell Law Review*, 12(2), 153–171. <http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1251&context=clr>
- ³⁷ Vaughan, E. J., & Vaughan, T. M. (2014). *Fundamentals of risk and insurance* (11th ed.). Hoboken, NJ: John Wiley & Sons.
- ³⁸ Vaughan and Vaughan, 2014.
- ³⁹ Payne, S. (2017, November 6). Re: Work question. [Email to John Ross]; Stevens, M. (2017, November 2). Re: Insurance pricing – certifications. [Email to John Ross].
- ⁴⁰ Ben-Shahar, O., & Logue, K. D. (2012). Outsourcing regulation: How insurance reduces moral hazard. *Michigan Law Review*, 111, 197–248. http://home.uchicago.edu/omri/pdf/articles/Outsourcing_Regulation.pdf; Logue, K. D. (2015). Encouraging insurers to regulate: The role (if any) for tort law. *UC Irvine Law Review*, 5(6), 1355–1389. <http://scholarship.law.uci.edu/ucilr/vol5/iss6/5>; Baker, T., & Swedloff, R. (2013). Regulation by liability insurance: From auto to lawyers professional liability. *UCLA Law Review*, 60, 1412–1450. http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1441&context=faculty_scholarship
- ⁴¹ How much is business insurance for maids and home cleaning businesses? (n.d.). <https://buildingservices.insureon.com/resources/cost/maids>
- ⁴² Bureau of Labor Statistics. (2017). *Occupational employment and wages, May 2017: 37-2012 maids and housekeeping cleaners*. <https://www.bls.gov/oes/current/oes372012.htm>
- ⁴³ A cleaning business, itself, is generally required to obtain a general business license.
- ⁴⁴ The Association of Residential Cleaning Services International and the International Janitorial Cleaning Services Association offer such certifications. What is a house cleaning technician? (n.d.). <http://arcsi.org/about-us/hct-certification/>; The IJCSA Green Cleaning Certification. (n.d.). <http://www.ijcsa.org/green-cleaning-certification>
- ⁴⁵ What is a surety bond? (n.d.). <https://www.jwsuretybonds.com/edu/what-are-surety-bonds>; Ziemianski, J. A., & Zubizarreta, A. (2007). *The meaning of “legally obligated to pay as damages.”* Houston, TX: Cozen O’Connor. https://www.cozen.com/admin/files/publications/As_Damages_Paper.pdf?embed
- ⁴⁶ Sullivan, H. (2017, February 3). Victim wins \$1m verdict against Henrico nail salon. *NBC12.com*.

- <http://www.nbc12.com/story/34422271/victim-wins-1m-verdict-against-henrico-nail-salon>; Sullivan, H. (2016, July 11). Woman files \$1 million lawsuit against Henrico nail salon." *NBC12.com*.
- <http://www.nbc12.com/story/32415870/woman-files-1-million-lawsuit-against-henrico-nail-salon>
- ⁴⁷ Bondurant, J. (2017, February 27). Pedicure leads to infection, the \$1m verdict in Henrico. *Virginia Lawyers Weekly*; Carpenter et al., 2017.
- ⁴⁸ Butler, H. N., & Wright, J. D. (2011). Are state consumer protection acts really little-FTC acts? *Florida Law Review*, 63(1), 163–192. <http://scholarship.law.ufl.edu/flr/vol63/iss1/5>; Gilleran, M. C. (2011). *The rise of unfair and deceptive trade practice act claims*. <http://apps.americanbar.org/litigation/committees/businesstorts/articles/fall2011-unfair-deceptive-trade-practice-act-claims.html>; Sovern, J. (1991). Private actions under the deceptive trade practices acts: Reconsidering the FTC Act as rule model. *Ohio State Law Journal*, 52(2), 437–467.
- ⁴⁹ Carter, C. L. (2009). *Consumer protection in the states: A 50-state report on unfair and deceptive acts and practices statutes*. Boston, MA: National Consumer Law Center. https://www.nclc.org/images/pdf/udap/report_50_states.pdf; Morris, K. S. (2013). Expanding local enforcement of state and federal consumer protection laws. *Fordham Urban Law Journal*, 40(5), 1903–1949. <http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2523&context=ulj>
- ⁵⁰ Schwartz V. E., & Silverman, C. (2005). Common-sense construction of consumer protection acts. *Kansas Law Review*, 54(1), 1–72.
- ⁵¹ Spencer, B. (2016, December 6). Contractor accused of taking money from families, not completing the work. *Click2Houston.com*. <http://www.click2houston.com/news/contractor-accused-of-taking-money-from-families-not-completing-the-work>; Vincent, M. (2017, May 20). East Texas contractor arrested after alleged fraud forces elderly BR man to sell home. *WAFB.com*. <http://www.wafb.com/story/35477971/east-texas-contractor-arrested-after-alleged-fraud-forces-elderly-br-man-to-sell-home>; *Lang v. Maryland*, No. 1218, Sept. Term 2015, 2017 WL 1549963 (Md. Ct. Spec. App. May 1, 2017). https://scholar.google.com/scholar_case?case=9180113693423028113
- ⁵² Office of the Missouri Attorney General. (2017, July 19). *AG Hawley announces St. Louis contractor pleads guilty to home repair fraud* [Press release]. <https://www.ago.mo.gov/home/breaking-news/ag-hawley-announces-st-louis-contractor-pleads-guilty-to-home-repair-fraud>; New York State Office of the Attorney General. (2014, July 17). *A.G. Schneiderman announces jail sentence for fraudulent western New York home contractor* [Press release]. <https://ag.ny.gov/press-release/ag-schneiderman-announces-jail-sentence-fraudulent-western-new-york-home-contractor>; Office of the Attorney General. (2014, April 4). *Attorney General Conway announces guilty plea by fraudulent roofing contractor* [Press release]. <http://migration.kentucky.gov/Newsroom/ag/twaddlescottcoplea.htm>; Attorney General Derek Schmidt. (2014, April 3). *Pavers ordered to repay Leavenworth County consumer, banned from doing business in Kansas* [News release]. <http://www.ag.ks.gov/media-center/news-releases/2014/04/03/pavers-ordered-to-repay-leavenworth-county-consumer-banned-from-doing-business-in-kansas>
- ⁵³ *Lang v. Maryland*, No. 1218, Sept. Term 2015, 2017 WL 1549963 (Md. Ct. Spec. App. May 1, 2017). https://scholar.google.com/scholar_case?case=9180113693423028113
- ⁵⁴ Many municipalities do require restaurant managers and sometimes staffers to take a food safety course and bartenders to take an alcohol awareness course, but these requirements can be satisfied in a few hours, often online, at very low cost. Get certified in food safety management & get your Northern Virginia Certified Food Manager (NVCFM) card in one day. (n.d.). <http://orsinteractive.com/>; TIPS certification online. (n.d.). <https://www.tipsalcohol.com/>
- ⁵⁵ Douglas, A. (2017, May 30). What did restaurant inspectors find in Charlotte kitchens? Yelp has the answer. *The Charlotte Observer*. <http://www.charlotteobserver.com/news/business/article153401854.html>; Local inspector value-entry specification (LIVES): Current municipality feeds. (n.d.). <https://www.yelp.com/healthscores/feeds>
- ⁵⁶ Luca, M. (2016). Restaurant hygiene and social media: How to improve regulatory disclosures in the digital age. In *Retooling Metropolis: How Social Media, Markets, and Regulatory Innovation Can Make America's Cities More Livable*. New York, NY: Manhattan Institute. https://www.manhattan-institute.org/sites/default/files/Retooling_Metropolis_2016.pdf
- ⁵⁷ Erickson, A. C. (2014). *Street eats, safe eats: How food trucks and food carts stack up to restaurants on sanitation*. Arlington, VA: Institute for Justice. <http://ij.org/report/street-eats-safe-eats/>
- ⁵⁸ America's food-truck industry is growing rapidly despite roadblocks. (2017, May 4). *The Economist*. <https://www.economist.com/blogs/graphicdetail/2017/05/daily-chart-3>
- ⁵⁹ National Street Vending Initiative: The Institute for Justice's fight to legalize street vending. (n.d.).

<http://ij.org/issues/economic-liberty/vending/>

⁶⁰ Licensing regimes vary greatly among states for the building trades. See Slowey, K. (2017, May 25). Inside the nation's varying contractor licensing rules—and how they impact business. *Construction Dive*.

<http://www.constructiondive.com/news/inside-the-nations-varying-contractor-licensing-rules-and-how-they-impac/443487/>. If licensing were necessary to protect the public, one would expect more consistency.

⁶¹ Voluntary market mechanisms and less restrictive regulations like voluntary certification, insurance, consumer ratings and the threat of lawsuits would also protect consumers and incentivize high-quality service.

⁶² South Carolina Department of Labor, Licensing and Regulation. (2012). *2012 regulatory report*. Columbia, SC. <http://www.scstatehouse.gov/Archives/CommitteeInfo/SenateLCI/2011-12-19%202012%20REGULATORY%20REPORT.pdf>

⁶³ Carpenter et al., 2017; Thornton and Timmons, 2015. Interestingly, in Colorado, which has not licensed funeral directors since 1982, the sky has not fallen. According to the Colorado Funeral Directors Association, which “[f]or many years[] . . . has actively promoted legislation that would restore licensing,” “[t]he state legislature has repeatedly voted down these measures because there are relatively few complaints by Colorado consumers about funeral service providers in the state.” Colorado Funeral Service Laws. (n.d.). <http://www.cofda.org/laws>

⁶⁴ Mercer, M. (2017, June 14). Explosion in tattooing, piercing tests state regulators. *Stateline*. <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/06/14/explosion-in-tattooing-piercing-tests-state-regulators>; Colorado Department of Regulatory Agencies, Office of Policy Research. (1999). *Body art: 1999 sunrise review*. Denver, CO. <https://drive.google.com/file/d/0B8bNvcf083ydYXQycmNlYkVuRTO/view>

⁶⁵ Inspection fees—frequently asked questions. (2013). <http://www.vdacs.virginia.gov/pdf/faq.pdf>

⁶⁶ Denver refers to its tree trimmer regulations as licensure, but, save for a \$25 fee, the only requirement is to obtain a minimum amount of insurance coverage. See Parks and Recreation, Office of the City Forester. (n.d.). *Tree service license information*. Denver, CO.

<https://www.denvergov.org/content/dam/denvergov/Portals/747/documents/forestry/tree-license-info-packet.pdf>.

Other jurisdictions, like Minnesota, require tree trimmers simply to register with the government. Minnesota Department of Agriculture. (n.d.). *Tree care registry*. Saint Paul, MN.

<https://www.mda.state.mn.us/licensing/licensetypes/treecareregistry.aspx>

⁶⁷ California's, Hawaii's and Maryland's licenses are particularly burdensome, requiring three or more years of experience to obtain. Carpenter et al., 2017. Minneapolis' license was recently the subject of a constitutional challenge because it required tree trimmers to hire arborists (who have more specialized training on diseased trees), which was prohibitively expensive for small operations. Rather than provide evidence that the arborist requirement was justifiable on public safety grounds, the city relaxed the requirement to settle the case. The license also requires trimmers to obtain liability insurance, a requirement the plaintiff did not challenge. City of Minneapolis, Licenses and Consumer Services. (2014). *License application: Guidelines and checklist* [for tree servicing]. Minneapolis, MN.

http://www.ci.minneapolis.mn.us/www/groups/public/@regservices/documents/webcontent/convert_256540.pdf;

Sanders, A. (2013, January 8). In lawsuits, facts ought to matter. *Minnesota Public Radio News*.

<https://www.mprnews.org/story/2013/01/08/sanders>; *Dolphy v. City of Minneapolis*, No. A12-0927, 2012 WL 6734464 (Minn. Ct. App. Dec. 31, 2012).

⁶⁸ Minn. Stat. § 326B.197 (bond required); Minn. Stat. § 326B.33, subd. 21(d) (no license required); Minnesota Department of Labor and Industry. (n.d.). *Heating, ventilating and air conditioning – Minnesota Mechanical Code*. <http://www.dli.mn.gov/ccld/hvac.asp>

⁶⁹ Cal Civ. Code § 1812.600.

⁷⁰ Carpenter et al., 2017.

⁷¹ Prior to state regulation of auctioneers, buyers and sellers had already developed voluntary mechanisms to combat fraud, many of which are still employed today. See Armijo, E. (2013). “Going once, going twice . . .”: The dubious legality and necessity of North Carolina's auctioneer license statute. *North Carolina Law Review*, 91(6), 1887–1950. <http://scholarship.law.unc.edu/nclr/vol91/iss6/3>

⁷² See, e.g., Wyo. Stat. § 33-2-101.

⁷³ See, e.g., State of New Jersey, Department of the Treasury, Division of Revenue and Enterprise Services. (2014). File collection agency bonds. Trenton, NJ. <http://www.state.nj.us/treasury/revenue/filecollagbond.shtml>

⁷⁴ State of Vermont, Office of the Secretary of State Professional Regulation. (2010). *Preliminary assessment on request for licensure: Summary of testimony and evidence related to the electronic life safety & security industry*.

Montpelier, VT. <https://www.sec.state.vt.us/media/411954/Security-Services-Sunrise-Report-January-2010.pdf>;
Colorado Department of Regulatory Agencies, Office of Policy Research. (2005). *Fire and burglar alarm systems: 2005 sunrise review*. Denver, CO. <https://drive.google.com/file/d/0B8bNvcf083ydcV1vTIR1UGUxRUE/view>

⁷⁵ Carpenter et al., 2017.

⁷⁶ Kleiner, M. M. (2013). *Stages of occupational regulation: Analysis of case studies*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

⁷⁷ *License to compete: Occupational licensing and the state action doctrine: Hearing before the Subcommittee on Antitrust, Competition Policy and Consumer Rights of the Committee on the Judiciary, Senate*, 114th Cong. (2016) (testimony of Morris Kleiner). <https://www.judiciary.senate.gov/imo/media/doc/02-02-16%20Kleiner%20Testimony.pdf>

⁷⁸ *License to compete: Occupational licensing and the state action doctrine*, 2016; Hemphill and Carpenter, 2016.

⁷⁹ Attorney General Derek Schmidt. (2014, April 15). *Minnesota roofer to pay \$80,000 penalty, remains banned from doing business in Kansas* [News release]. <http://www.ag.ks.gov/media-center/news-releases/2014/04/15/minnesota-roofer-to-pay-80000-penalty-remains-banned-from-doing-business-in-kansas>

⁸⁰ Skarbek, D. (2008). Occupational licensing and asymmetric information: Post-hurricane evidence from Florida. *Cato Journal*, 28(1), 73–82. <https://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2008/1/cj28n1-5.pdf>. Texas, which experienced a devastating hurricane in 2017, does not license or register roofers. But consumers are not on their own: The Roofing Contractors Association of Texas maintains a list of voluntarily certified roofers who meet the group’s experience and insurance requirements. Licensing. (n.d.). <http://roofingcontractors-texas.com/licensing/>

⁸¹ Complaint data specific to roofers was not available, but roofing as a percentage of the state’s construction industry GDP rose over the time period. Skarbek, 2008.

⁸² Carpenter et al., 2017; Johnson, R. E. (2015). *Boards behaving badly: How states can prevent licensing boards from restraining competition, harming consumers, and generating legal liability under North Carolina State Board of Dental Examiners v. FTC*. Arlington, VA: Institute for Justice. <http://ij.org/report/boards-behaving-badly/>

⁸³ Mellor and Carpenter, 2016; Carpenter, D. M., & Ross, J. K. (2008). Designing cartels through censorship. *Regulation*, 31(2), 14–18; Kleiner, 2013.

⁸⁴ These states are Florida, Louisiana, Nevada and the District of Columbia, which is treated as a state in Carpenter et al., 2017.

⁸⁵ Without exception, every state sunrise committee that has examined interior design has found no harm from its unlicensed practice. Carpenter, D. M. (2007). *Designing cartels: How industry insiders cut out competition*. Arlington, VA: Institute for Justice. <http://ij.org/wp-content/uploads/2015/03/Interior-Design-Study.pdf>. Nonetheless, of the 102 occupations studied in *License to Work*, interior design has the most burdensome entry requirements: an average of six years of education and experience. Carpenter et al., 2017.

⁸⁶ *License to compete: Occupational licensing and the state action doctrine*, 2016.

⁸⁷ Some providers, often niche medical service providers like dietitians, claim that licensing is necessary to obtain reimbursement from health insurers. Tuma, P. A. (2011). *Market place relevance: Regulatory and competitive environment of dietetic services* (HOD Backgrounder). Chicago, IL: American Dietetic Association. <http://www.eatrightwashington.org/docs/Delegate%20Info/Spring%202011%20-%20HOD%20Market%20Place%20Relevance%20Backgrounder.pdf>. In such cases, another form of state recognition like state certification may suffice. If something more is required, policymakers can create a specialized license for providers who want to engage in work for which they would be reimbursed—without limiting entry into the larger occupation.

⁸⁸ Twenty-two states restrict the use “certified interior designer” or a similar appellation. ID laws matrix. (n.d.). <http://www.iida.org/resources/content/1/0/2/documents/ID%20Laws%20Matrix.pdf>; Interior designer applications & instructions. (n.d.). <http://www.msboa.ms.gov/Pages/InteriorDesignApplications.aspx>. New York restricts the use of the title “certified athletic trainer.” Certified athletic trainer. (n.d.). <https://labor.ny.gov/stats/olcny/certified-athletic-trainer.shtm>. At the time of this writing, the New York State Athletic Trainers’ Association was pushing two bills that would impose licensure. Governmental affairs. (n.d.). <https://gonysata2.org/page-1075378>

⁸⁹ How to become a Certified Interior Designer. (n.d.). <https://ccidc.org/becoming-a-certified-interior-designer/>; Continuing education policy. (n.d.). <https://ccidc.org/ceus-requirements/>

⁹⁰ Or expired while an enforcement action was pending. Enforcement actions against Certified Interior Designers. (n.d.). <https://ccidc.org/enforcement-actions/>

⁹¹ For details on such steps, see Johnson, 2015.

⁹² Chartered Financial Analyst programs are an example. Kleiner, 2015.

⁹³ Carpenter et al., 2017.