

CLEAN CUT

How Clipping Unnecessary Licensing Can
Grow Opportunities for Barbers and
Manicurists *and* Keep Consumers Safe

By Matthew P. West, Ph.D.

January 2025

 INSTITUTE
for JUSTICE

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Executive Summary

In every state and in the District of Columbia, manicurists and barbers need an occupational license—effectively a government permission slip—to do their jobs. These licenses, which are often quite onerous to obtain, come with high costs for aspiring workers and consumers. Licensing proponents say these costs are justified by the need to protect public health and safety. Empirical evidence for this claim is lacking, however, with vanishingly little research exploring the necessity of licensing for workers in these or other beauty and personal care occupations.

This study aims to change that. It uses data on health inspection outcomes—a common measure of health and safety risks—and a research design that takes advantage of variation around state borders to answer the question: Do licenses for manicurists and barbers equate to better public health and safety outcomes?

For manicurists, this study compares the outcomes of 2,148 nail salon inspections in Connecticut and New York during a period when Connecticut did not license the

occupation. For barbers, this study compares the outcomes of 3,218 barbershop inspections in Alabama, which licenses the occupation less onerously, and Mississippi, which licenses it more onerously. If manicurist and barber licenses bolster health and safety, then nail salons and barbershops in unlicensed or less onerously licensed states should exhibit worse inspection outcomes than counterparts who need to meet steeper state-imposed requirements.

This study's results do not support that hypothesis. In fact, they suggest licensing and licensing burdens have no substantive impact on health and safety risks. Inspection outcomes were favorable across the board, regardless of licensing regime. Not only that, differences were quite small (and in the opposite direction licensing proponents would hypothesize). In short, unlicensed nail salons and less onerously licensed barbershops were just as clean and safe as businesses facing steeper licensing requirements.

These results suggest states are subjecting aspiring manicurists and barbers to expensive and time-consuming



licensing for no good reason. As such, they add to a growing body of research suggesting licensing has few benefits and many costs. Licensing requirements are costly in terms of time and money for aspiring workers to fulfill, and, in one way or another, these costs are passed along to consumers. Yet most research, like this study, suggests licensing and licensing burdens improve neither service quality in general nor health and safety in particular.

These results also point to an existing regulatory alternative that is both less costly than licensing and more targeted to protecting the public: health inspections. Already widespread, inspections focus on what matters—safe, sanitary practices at the point of service. Inspections are what Connecticut relied on to protect nail salon patrons during the period when it did not license manicurists, and there is no evidence that this system did not work. Indeed, this study’s results suggest the expectation of inspections, together with ordinary market incentives, was sufficient to ensure safe, sanitary service at Connecticut nail salons.

This is good news. It means that states can eliminate occupational licenses for manicurists, barbers, and other beauty and personal care workers, and instead rely on inspections of the places where they provide their services, without sacrificing health and safety. In so doing, they will fulfill their duty of protecting the public while opening opportunities for people to earn an honest living—without bearing unnecessary and often unaffordable costs.



Introduction

Craig Hunt started cutting hair very young out of necessity. Like many boys and men in his predominantly black community, he needed frequent haircuts to maintain his preferred style, but his family could not afford biweekly trips to the barbershop. The solution was for his mom, another relative, or a neighbor to cut his hair. Eventually, he picked up a pair of clippers and started cutting hair himself, becoming a “neighborhood barber.” Craig had found his calling. Today, Craig is the owner of two successful barbershops in the Des Moines area. Across the two shops, he employs around 20 people. Craig is also an educator who welcomes apprentices in his shops.

But it has not been an easy road. To legally practice his craft for pay, Craig had to get government permission in the form of an occupational license. This meant fees, exams, and—*notwithstanding* his years of experience—2,100 hours of expensive schooling.¹ Craig first attempted to fulfill these requirements in 1997. He estimates he completed 1,500 hours of the barber program, but he was young and could not put off earning a living. So he dropped out without finishing. More than a decade later, he decided to try again, assuming he would get credit for the 1,500 hours he had already completed. He did not. As he tells it, “They said my hours didn’t count. They just wanted to get the money out of me.” But Craig kept at it, redoing

the program in its entirety and getting his license in 2015. Despite this, Craig feels lucky. When he first attended barber school, he paid about \$5,000. Aspiring barbers in Iowa today are likely to pay quadruple that amount or more.²

Craig has seen many other neighborhood barbers give up on becoming licensed—or never even try—due to the high costs in both time and money. These individuals have either opted to work as underground barbers or pursued a different occupation altogether. And this predicament isn’t unique to barbers. Kristin House, a Tulsa, Oklahoma-based nail technician and educator with over a decade of industry experience across three states, sees the same patterns among manicurists. According to Kristin, who has worked as a beauty school instructor and an in-house trainer for salons, many manicurists start out as “in-house techs,” providing unlicensed services from their homes. Often, they build their clientele through word of mouth, but customers also find them on social media apps like Instagram and TikTok, where nail content is popular. When they eventually pursue licensing, many in-house techs are frustrated by the cost and poor quality of the schooling required for licensure and stay underground or choose different careers.





Craig Hunt

Iowa-based barber
and educator

Among low- and middle-income occupations, barbers and manicurists, along with cosmetologists and skin care specialists, are some of the most widely and onerously licensed. These beauty and personal care occupations are licensed by every state and the District of Columbia—and often quite burdensomely so. In the third edition of the Institute for Justice’s *License to Work*, barber and manicurist rank as the 6th and 11th most widely and onerously licensed among 102 lower-income occupations.³ Licenses like these come with high costs for aspiring workers. And, in one way or another, many of those costs are passed on to consumers in the form of higher prices.

Proponents justify the costs of licensing with appeals to public health and safety, arguing that licensing protects us from incompetent or unscrupulous service providers. However, there is a paucity of empirical evidence finding that licensing uniquely bolsters health and safety. And very little prior research has explored the question of whether licensing influences health and safety with respect to the manicurist and barber occupations.

For this study, I used granular, firm-level health inspection data from nail salons and barbershops, and a research design that takes advantage of variation around state borders, to get to the heart of this unanswered question. Negative health inspection outcomes are a common measure of public health and safety risks. So

if it is true that licensing or more stringent licensing burdens are necessary to protect health and safety, then businesses in states that do *not* mandate licensing or that have *lower* licensing burdens should exhibit more negative inspection outcomes—like health and safety violations or failed inspections—compared to businesses in states that *do* mandate licensing or that have *higher* licensing burdens. For manicurists, I compared inspection outcomes from 2017 to 2018 for nail salons in a then-unlicensed state (Connecticut) with those for nail salons in a neighboring licensed state (New York). The same type of comparison—that is, licensed state versus unlicensed state—was not possible for barbers. So for that occupation, I compared inspection outcomes from 2014 to 2018 for barbershops in neighboring states with disparate licensing requirements that represent the lower (Alabama) and higher (Mississippi) ends of the range.

The results suggest that licensing and licensing burdens have no substantive impact on health and safety risks to the public from manicurists and barbers. Indeed, they suggest that, if anything, licensing and licensing burdens may slightly increase risks. These results undercut a core argument in favor of licensing. And together with other research, they suggest licensing burdens can be reduced or eliminated without harming the public.



Kristin House
Oklahoma-based
nail technician and
educator

The results suggest that licensing and licensing burdens have no substantive impact on health and safety risks to the public from manicurists and barbers. These results undercut a core argument in favor of licensing.



●● Across Occupations, Research Finds Licensing Benefits Few but Costs Many

There is a large body of research on occupational licensing across a wide range of jobs. Most of this research has explored the economic effects of licensing, providing ample evidence that it benefits existing licensees economically—and that these private benefits come at a cost to aspiring workers and consumers. Research exploring licensing’s effects on health and safety or service quality is comparatively sparse. However, most available evidence suggests licensing does little to improve service quality or safety.

Gatekeeping Benefits Gatekeepers

Occupational licensing bestows substantial benefits on existing practitioners in an occupation. Much prior research has documented how licensing restricts competition, allowing practitioners to charge more for their services.⁴ A 2015 White House paper calling for licensing reform reported that licensing increases the costs of services by 3% to 16%, with specific estimates varying across time, place, and occupation.⁵ More recent studies derive estimates in the same range.⁶

Licensing also gives existing practitioners power that they can use to further restrict competition within their occupations and even from other occupations.⁷ This is because practitioners often dominate licensing boards and other bodies with the power to create or enforce occupational regulations.⁸ Licensing boards and other regulatory bodies with the power to regulate occupations are often able to create new barriers to entry or continued practice. In a phenomenon known as “license creep,” they may also be able to reinterpret their license’s scope of practice to encompass practices that were not contemplated at the time of their license’s creation.⁹ In this way, licensing boards can sweep similar or related, but ultimately distinct, occupations into their domain. Licensing boards for a wide variety of occupations have attempted this, often successfully.¹⁰ Cosmetology boards have been particularly zealous, with cosmetology license creep ensnaring occupations including African-style natural hair braiders, eyebrow threaders, eyelash extension specialists, and makeup artists.¹¹

These benefits help explain why existing practitioners are often behind campaigns for licensure.¹² Although the stated rationales for gatekeeping occupational entry are typically the desire to protect health and safety and the desire to “professionalize” occupations not traditionally considered high status, there is ample evidence that another motivation is the desire to reduce competition or, put more generously, to boost wages in traditionally lower-income occupations.¹³ For example, in the late 19th and early 20th centuries, barber unions pursued licensure—with great success—to restrict competition from “discount barbers” and graduates of barber colleges, then a new route into the occupation and an alternative to lengthy apprenticeships under union members.¹⁴ The unions often framed this as being necessary to protect the public from unsanitary barbers, but research suggests they intentionally overstated the risks to achieve their goal—and that barbershop prices went up with licensure.¹⁵

Aspiring workers fulfill these requirements
believing they are investing in their futures,
but research suggests these investments
often fail to pay off.





Aspiring Workers and Consumers Pay the Price

The benefits of licensing to existing practitioners come at a cost to aspiring workers and consumers. To work in licensed occupations, aspiring workers must fulfill the government's requirements, which is often a tall order in terms of both time and money. People aspiring to work in licensed beauty and personal care occupations, for example, generally face fees, exams, and hundreds of hours of expensive schooling, among other hurdles.¹⁶ A 2021 Institute for Justice study found that, as of the 2016–2017 school year, the education required for cosmetology licensure cost more than \$16,000 on average and took about a year to complete for students graduating on time. Aspirants also typically incurred significant student loan debt to finance it, borrowing over \$7,300 on average.¹⁷

Aspiring workers fulfill these requirements believing they are investing in their futures, but research suggests these investments often fail to pay off. For example, the 2021 IJ study found that cosmetologists were earning only around \$26,000 a year on average—less than restaurant cooks, janitors, and concierges, occupations without costly and burdensome state licensure or state-mandated education requirements.¹⁸ Other research finds barber and beauty school programs frequently provide a negative lifetime return on investment: 86% of the time, the costs of these programs are greater than any increase in earnings over a worker's lifetime.¹⁹

Aspirants who cannot or do not want to fulfill licensing requirements are shut out of the occupation. With some level of skill, if not formal training, some may decide to work in the occupation illegally, putting them at perpetual risk of legal sanctions if detected. These sanctions can include heavy fines and even jail time.²⁰ To avoid detection, they may not risk advertising their services or building a network and, as a result, have a less reliable source of income compared to their licensed counterparts.

Other aspirants shut out by licensing may reasonably decide to pursue a different, unlicensed or less onerously licensed, occupation—perhaps one requiring similar skills. Regardless of how aspirants feel about this, it distorts the labor market, resulting in spillover effects: Research has shown that licensing one occupation depresses wages in occupations requiring similar skills that have lower barriers to entry.²¹ More simply, as those shut out by a license move to other occupations, wages in those fields go down.

Consumers also pay the price for licensing. Due to reduced competition, they enjoy less choice and pay higher prices in the market for services whose provision requires a license.²² This is despite evidence that a service provider's licensing status is not a major factor in consumer decision-making. Instead, consumers are more sensitive to price and reputation.²³ Nonetheless, consumers are forced to subsidize the licensing system, paying a premium for services that, as I discuss below, are no better than they would be without licensing.

Evidence Is Scarce That Licensing Improves Quality or Safety

Although proponents say licensing improves service quality and makes the public safer, most available evidence suggests it does not.²⁴ Notably, several studies, including some on beauty and personal care occupations, have found no substantive relationship between licensing and licensing burdens and service quality as rated by consumers and even practitioners.²⁵ It seems likely that if harms from unlicensed occupations were widespread, this would be reflected in consumer ratings. However, if these studies speak to health and safety, they do so only indirectly.

Unfortunately, there is little research directly exploring the health and safety effects of occupational licenses and even less directly exploring the health and safety effects of beauty and personal care licenses specifically.²⁶ As far as I am aware, there is only one.²⁷ That study, from 2023, looked at historical newspapers and found the adoption of barber licensing in the late 19th and early 20th centuries was associated with more cases of barber's itch—an infection licensing was supposedly necessary to combat—rather than fewer.²⁸

My study builds on this small body of literature by examining how licensing and licensing burdens relate to health and safety with respect to manicurists and barbers through the use of health inspection outcomes. Inspection outcomes offer at least three advantages over consumer ratings as a measure of health and safety. First, they are a more direct measure of health and safety, as inspectors are explicitly tasked with looking for health and safety risks. Consumer ratings, on the other hand, often reflect other dimensions of service quality. Second, inspections are less subjective than consumer ratings. Intuitively, consumers are more likely to rate or review service providers when they have a notably good experience or a notably bad one. Inspectors, meanwhile, are supposed to apply the same standards to every business of a certain type that they inspect. Third, and related to the first two, inspectors are trained. If licensing proponents are right, nail salons and barbershops with unlicensed or less onerously licensed staff should be engaged in less safe practices. This should be apparent to inspectors and reflected in inspection outcomes. Comparing inspection outcomes therefore allows for a precise test of the claim that licensing and licensing burdens produce safer and more sanitary service in nail salons and barbershops. Before describing the study methods, the next sections describe the licensing requirements and inspection systems for manicurists and barbers.





Comparing inspection outcomes allows for a precise test of the claim that licensing and licensing burdens produce safer and more sanitary service in nail salons and barbershops.

●● Licensing Requirements for Manicurists and Barbers

Both manicurists and barbers are currently licensed by all 50 states and the District of Columbia. Both are also often subject to onerous education and experience requirements, exams, fees, and other hurdles, though specifics vary widely.²⁹ Such variation calls into question the basis for and necessity of licensing mandates.³⁰ However, it also enables this study to examine whether less burdensome licensing—or, in the case of manicurists, none at all—compromises health and safety outcomes.

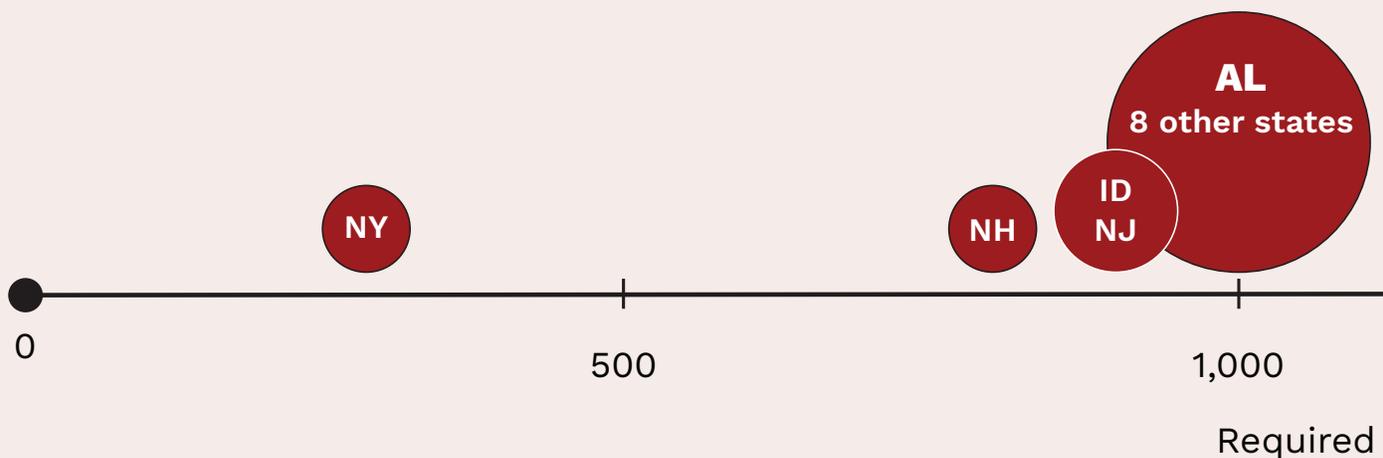
Although every state and the District of Columbia now license manicurists, for roughly 40 years, Connecticut did not. After a sunset review finding the state’s manicurist license “[could not] be justified in terms of public health and safety,” Connecticut eliminated the license in 1980,

becoming the only state not to license the occupation.³¹ It relicensed manicurists only in 2021.³² Connecticut’s period without a manicurist license creates an opportunity to compare nail salon health inspection outcomes in an unlicensed state to those in a neighboring licensed state—a strong test of licensing’s efficacy. This study uses New York as a comparator because it had the best available data among the states that share a border with Connecticut. During the study period (and as of 2022), New York’s license required 250 hours of education, two exams, and \$70 in fees, as well as a minimum age of 17 years old.³³

Like manicurists, it was only recently that barbers came to be licensed by every state and the District of Columbia. For more than three decades, from 1981 to 2014,

Figure 1. Barber Education Requirements During Study Period

Hours requirements varied widely across states, but Alabama’s and Mississippi’s were the two most common

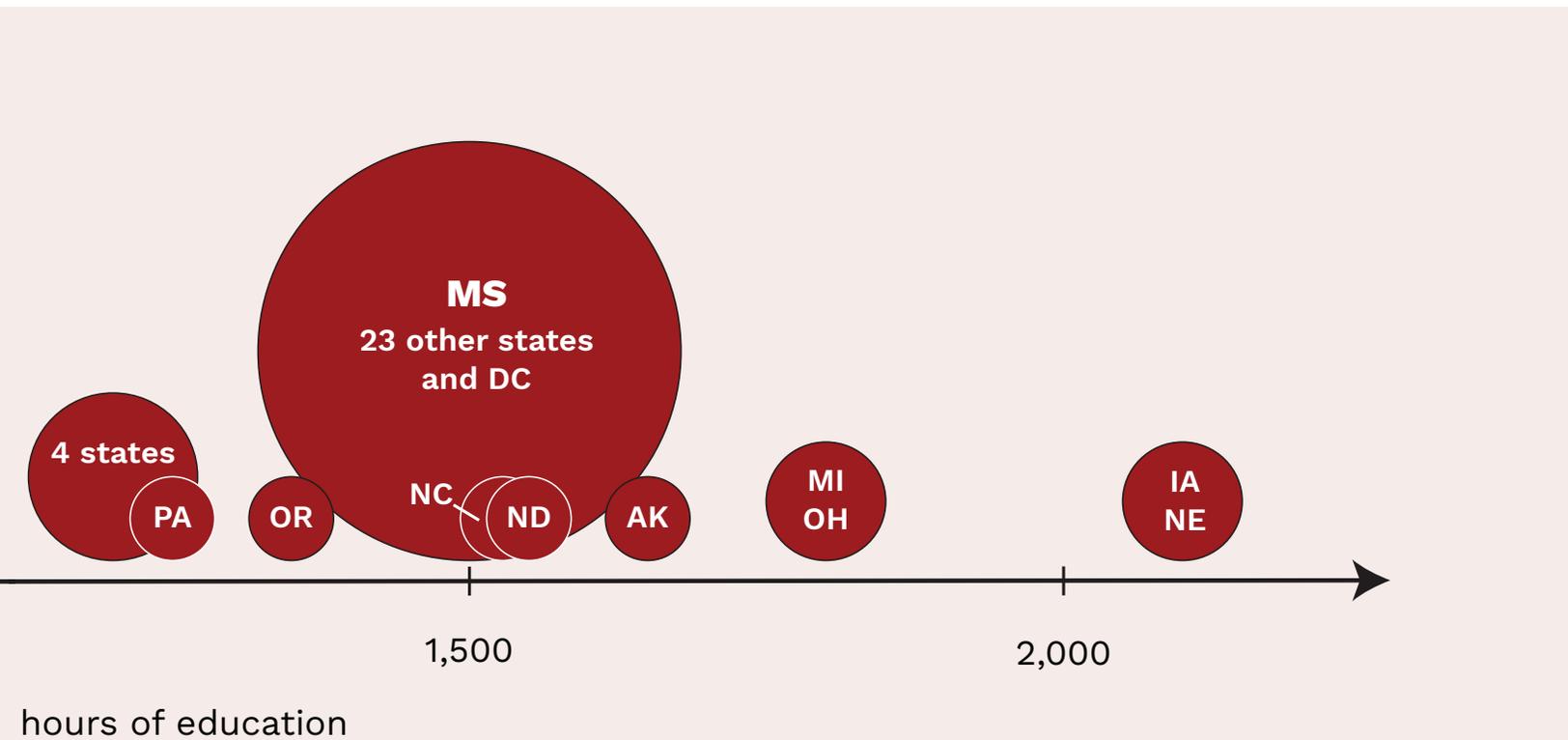


Note. Kentucky, Massachusetts, Minnesota, Nevada, North Carolina, North Dakota, and South Dakota required experience on top of their education requirements.

Source: Carpenter, D. M., Knepper, L., Sweetland, K., & McDonald, J. (2017). *License to work: A national study of burdens from occupational licensing* (2nd ed.). Institute for Justice. <https://ij.org/report/license-to-work-2/>

Alabama did not license the occupation at the state level, though some counties maintained their own licensing systems.³⁴ And when the state reintroduced licensing, it did so only for full-service (“Class 2”) barbers and grandfathered in existing barbers.³⁵ Unfortunately, the presence of county-level licensing during the period of state-level delicensing, along with other data limitations, makes it impossible to compare barbershop health inspection outcomes in unlicensed Alabama to those in a licensed neighboring state. Instead, this study compares inspection outcomes in two neighboring states—Alabama and Mississippi—with disparate licensing requirements. During the study period, Alabama—like eight other states—required 1,000 hours of schooling, plus exams

and fees, to become a licensed barber.³⁶ While steep, Alabama’s education mandate was on the lower end, with only four states requiring fewer hours during the study period.³⁷ Mississippi required 50% more education—1,500 hours—plus exams and fees, as did 23 other states and the District of Columbia.³⁸ This put Mississippi on the higher end of education mandates for barbers, with only seven states requiring more schooling during the study period.³⁹ Thus, Alabama and Mississippi represented the two most common education requirements, as well as both relatively low and high burdens.⁴⁰ Figure 1 illustrates how the education requirements for barbers in Alabama and Mississippi compared to those in the other 48 states and the District of Columbia in 2017.



●● Health Inspections for Nail Salons and Barbershops

Manicurist and barber licenses often exist alongside health inspection systems for nail salons and barbershops, and the same can be said for other beauty and personal care occupations and establishments. State or local governments typically require nail salons, barbershops, and similar businesses to adhere to health and safety standards, typically promulgated by state and local regulators and enforced through inspections. A basic and common regulation for such businesses is ensuring that hand soap is available in restrooms.⁴¹

Inspections typically occur when a business opens and then regularly thereafter (often annually), as well as on a case-by-case basis, such as when there is a complaint.⁴² The person doing the inspections is usually a representative of the health department or the licensing board. When workers in a business must be licensed, inspections can involve checking workers' licensing status in addition to looking for health and safety violations.

Although there is some variation in standards and inspection forms for nail salons and barbershops, they are substantively similar across jurisdictions in important ways. First, standards generally emphasize adhering to sanitary practices (e.g., properly sanitizing implements, maintaining clean and functional restrooms) and managing exposure to chemicals and tools that can harm people (e.g., formaldehyde, certain types of razors). Second, inspection forms generally list possible violations, and there is an implicit or explicit scoring system that determines the outcome of the inspection.⁴³

Nail Salon Inspections in Connecticut and New York

Although Connecticut now requires licensure for manicurists, it previously relied on inspection systems to ensure health and safety. The responsibility for enforcing health and safety standards largely was, and is, borne by local health departments and districts. For this reason, there may be variation in who conducts inspections and in the specific standards enforced. The same bill that relicensed manicurists required the creation of a more uniform inspection form and guidelines for nail salons. However, even prior to relicensure, health directors (or their representatives) had the power to enforce public health regulations in nail salons.⁴⁴

As one example, the Meriden Health Department was, and is, responsible for conducting inspections of nail salons, as well as barbershops and hair salons, in the city of Meriden, Connecticut. The department's inspection form listed 40 standards, and inspectors reported whether a salon was compliant or noncompliant with each. If salons were not compliant with certain standards (e.g., "Equipment/utensils used on customer cleaned and disinfected after each customer"), reinspection was required, along with an associated fee.⁴⁵ Repeated violations could result in suspension and revocation of the permit to operate the nail salon.⁴⁶ See Figure 2 for an example of a completed inspection form from Meriden.

Figure 2. Completed Inspection Report for a Nail Salon in Meriden, Connecticut

**MERIDEN HEALTH DEPARTMENT
BARBERSHOP, HAIRDRESSING & COSMETOLOGY
INSPECTION REPORT**

Annual Inspection
 Reinspection
 Complaint
 Other

Barbershop
 Pedicures/Nails
 Hairdressing/Cosmetology
 Other Waxing

Name of Establishment _____ Address _____

Based on an inspection this day, the items circled below identify violations of the Meriden City Code, Chapter 70, which must be corrected by the date specified.

A. Water Supply

✓1. Water supply adequate, safe.
 ✓2. Hot and cold water under pressure, provided as required.

B. Sewage Disposal

✓3. Approved method of sewage disposal.

C. Plumbing

✓4. Approved plumbing fixtures, clean, maintained.
 ✓5. **No potential cross connection, back siphonage, backflow**

D. Toilet/Handwashing Facilities

✓6. **Toilets and washbasins adequate, convenient, accessible, designed, installed.**
 ✓7. Proper fixtures in good repair, clean.
 ✓8. Soap in dispensers and single-service paper towels provided.

E. Garbage Disposal

✓9. Adequate number of covered refuse containers provided, clean.
 ✓10. Outside disposal area and enclosures properly constructed, clean.

F. Floors/Walls/Ceilings

✓11. Floors properly constructed, in good repair, clean.
 ✓12. Ceilings properly constructed, in good repair, clean.
 ✓13. Walls properly constructed, in good repair, clean.
 ✓14. Attached equipment, fixtures, properly constructed, maintained, clean, free of hair clippings.

G. Lighting

✓15. Adequate lighting provided as required.

H. Ventilation

✓16. Adequate ventilation, no excess heat or odors.

I. Storage

✓17. Cabinets for clean linens and towels are adequate, clean, with tight fitting doors.
 ✓18. Covered receptacle provided exclusively for soiled linens and towels.

J. Housekeeping

✓19. **In-residence shop completely separate from living/sleeping quarters.**
 ✓20. No foods or beverages prepared, stored, or sold on premises unless permitted.
 ✓21. No animals/pets.
 ✓22. Aisles/work spaces properly maintained.
 ✓23. Establishment and premises free of litter, no insect/rodent harborage, no unnecessary articles.

K. Personnel

✓24. All personnel properly licensed as required by State.
 ✓25. **No person with infection or communicable disease attended or working.**
 ✓26. Good hygienic practices, smoking restricted.
 ✓27. Clean outer garments.
 ✓28. Hands washed with soap and water before serving each customer.

L. Utensils/Equipment Handling (other than single service)

✓29. The following items are prohibited: neck dusters, powder puffs, sponges, shaving brushes, shaving mugs.
 ✓30. Hair clippings removed frequently and in proper manner.
 ✓31. Head rest covered with clean towels or paper.
 ✓32. Sanitary paper strip pieced around neck before protective device.
 ✓33. Shaker-top container used for dispensing lotion or powders.
 ✓34. Alum or other materials to stop the flow of blood provided in powder or liquid form.

M. Utensils/Equipment Sanitizing (other than single serve)

✓35. **Utility sink provided for instrument cleaning.**
 ✓36. **Equipment/utensils used on customer cleaned and disinfected after each customer.**
 37. Proper use of recommended sanitizing/sterilizing device after thorough cleansing of implements.
 38. Disinfected utensils kept in sanitary covered containers when not in use.
 39. Linens and towels properly sanitized when washed on premises.

N. Display of Registration

✓40. License displayed next to or near workstations.

(*) BOLDDED ITEMS ARE MAJOR VIOLATIONS AND WILL REQUIRE A REINSPECTION.

Date of Inspection: 4-5-17 Date of Required Compliance: 1 week

Sanitarian's Signature _____ Signature of Person in Charge _____

COMMENTS: See attached

5/03

Note. Referenced attachment omitted for space and privacy reasons.

Compared to Connecticut, the New York inspection system is more centralized and standardized. The New York Department of State operates both the licensing and inspection systems.⁴⁷ Nail salons fall under the umbrella of “appearance enhancement businesses.” As such, they must adhere to the state’s more general standards for all such businesses, as well as to its specific standards for nail salons.⁴⁸ Appearance enhancement businesses are subject to inspections at any time, without notice, but inspections are typically conducted annually.⁴⁹ Violations can result in license suspension or revocation, as well as fines.⁵⁰

New York does not make its inspection rubric publicly available. However, the Department of State provides a self-inspection checklist for appearance enhancement businesses that identifies the most common issues inspectors look for.⁵¹ The second page of the checklist is specific to health and safety and is provided in Figure 3. In the inspection data the state provided, there are seven health and safety violations, which include, for example, “No Use / Improper Disinfectants Used” and “Improperly Reprocessed / Stored Implements.”

Figure 3. Self-Inspection Checklist for Appearance Enhancement Business Owners in New York State (Second Page Only)

Self-Inspection Checklist for Appearance Enhancement Business Owners	
SANITATION / HEALTH & SAFETY	
Do you have MSDS sheets available for all supplies and chemicals used in your place of business?	<input type="checkbox"/> Yes
Do you have a sufficient supply of disinfectant and receipts for the same?	<input type="checkbox"/> Yes
Are all products maintained with the original manufacturer labeling intact?	<input type="checkbox"/> Yes
Are flammable and combustible chemicals stored in a metal cabinet remote from potential sources of ignition?	<input type="checkbox"/> Yes
Is every client served with clean, freshly laundered linen or disposable towels?	<input type="checkbox"/> Yes
Are all supplies that cannot be disinfected disposed of in a waste receptacle immediately after use?	<input type="checkbox"/> Yes
Are shelves, furniture and fixtures kept clean, free of dust, dirt and hair, and in good working condition?	<input type="checkbox"/> Yes
Are all styling stations, working stations and manicure tables sanitized and cleaned between each client service?	<input type="checkbox"/> Yes
Are all supplies and implements transported to and from the remote location in covered containers?	<input type="checkbox"/> Yes
Are clean implements and supplies (e.g., towels) kept in containers separate from those implements and supplies that have been used and marked according to their status?	<input type="checkbox"/> Yes
Are hand washing facilities available in all lavatories?	<input type="checkbox"/> Yes
Is there hot and cold running water in the establishment?	<input type="checkbox"/> Yes
Is there a public toilet room?	<input type="checkbox"/> Yes
Are there cabinets for storage of clean linen and towels?	<input type="checkbox"/> Yes
Are all nail care chemicals stored in closed bottles?	<input type="checkbox"/> Yes
If you offer Nail Specialty Services, are there sufficient gloves for each work station?	<input type="checkbox"/> Yes
If you offer Nail Specialty Services, are there sufficient respirators for each work station?	<input type="checkbox"/> Yes
If you offer Nail Specialty Services, is there sufficient eye protection whenever workers will be preparing, transferring or pouring potentially hazardous chemicals?	<input type="checkbox"/> Yes
Is waste disposed of in a covered waste container?	<input type="checkbox"/> Yes

Note. First page covers establishment and personal license requirements.

Barbershop Inspections in Alabama and Mississippi

The Alabama Board of Cosmetology and Barbering conducts barbershop inspections in Alabama.⁵² As shown in Figure 4, the board’s inspection form—which is also used for hair salons, nail salons, and other beauty and personal care establishments—looks for more than 15 violations.⁵³ Some relate to licensing, but most deal with general sanitation practices like “Implements Properly

Cleaned, Sanitized, Stored, and Used.” Each standard gets a weighted score, with sanitary violations generally receiving a greater weight than licensing-related violations. A low score results in reinspection, with repeated violations making disciplinary action, including a fine, more likely.⁵⁴ A failed inspection means at least one of the following: (1) The shop has unlicensed staff; (2) the shop is providing unlicensed services; (3) the shop is violating health and safety standards.⁵⁵

Figure 4. Sample Inspection/Citation Report for Salons and Barbershops in Alabama

ALABAMA BOARD OF COSMETOLOGY
INSPECTION/CITATION REPORT
TOLL FREE: 1-800-815-7453

Date: _____ Time In: _____ Record ID: _____ Score: _____

Salon Name: Sample Owner: _____

Address: 334-242-1918 or 1-800-815-7453
Street City Zip County

Phone: _____ **Circle Services: Hair Nails Skin Circle Days Closed: S M T W T F S**

** Serious Violations Subject to Fines of up to \$500 each As Provided in Code of Alabama, 1975, § 34-7A-15(c)
 ** Points May Be Doubled For Uncorrected Deficiencies Reported On Second Inspection, Tripled For Third.

#	Yes	No		
1			Salon and Workers Properly Licensed	(100)
2			Licensee Performing Services Within Scope of License	(100)
3			All Licenses Properly Displayed	5
4			Master for Each Apprentice, Signs, Records Properly Maintained	5
5			Latest Inspection Report Properly Posted	10
6			Reception Area, Walls, Floors, Ceilings Clean and Free of Clutter	10
7			Work Stations Clean and Free of Dust and Clutter	10
8			Pedi Spas and Filters Properly Sanitized and Clean	10
9			Toilet Clean With Proper Supplies, Soap, Water and Towels	5
10			Implements Properly Cleaned, Sanitized, Stored, and Used.	10
11			Clean and Soiled Towels, Waste Properly Stored and Covered	5
12			Disinfectant Containers and Bins Properly Used	10
13			Pumps, Spatulas and All Single Used Items Properly Used; Absence of Roll-On Wax	10
14			Chemicals Properly Labeled and Stored, MSDS sheet per each chemical product	5
15			Salon Free of Insects, Animals, and Pests (Except as Provided in 250-X-3-.02)	5
16			Salon Free Of Non-Nail Drills, Callous Razors And Illegal Implements	(100)
17			Salon Free of Substances (MMA)	-

P	A	Licensee Name	LIC #	Type	EXP	P	A	Licensee Name	LIC #	Type	EXP

Comments: _____
Sample: Brief explanation on
opposite side.

Signature of Owner/Manager _____ Date _____

Signature of Inspector _____ Date _____ Time Out _____ Revised 2/13

Note. Referenced opposite side provides explanations of numbered items 1 through 17.

During the period for the barber comparison, the Mississippi Board of Barber Examiners was responsible for inspecting barbershops in Mississippi.⁵⁶ The board’s inspection form—the first page of which is shown in Figure 5—lists over 20 possible violations, including licensing-related violations and health and safety violations.⁵⁷ Similar to Alabama, inspections can be failed, and fines imposed, for either or both types of violations, with fines compounding for repeated violations. Violations categorized as “Class C” are considered most serious and those categorized as “Class A” least serious.⁵⁸ Inspections

result in an overall grade of A, B, or C, where a grade of C is in effect a failed inspection. There are no explicit criteria for how the grade is to be calculated. However, per the inspection form, an A is defined as “Excellent – no violations” and a C is defined as “Bad, must be improved” and “Unsatisfactory or subject to closure,” so a B presumably means that violations were both minor and few (e.g., a single first-time violation for barbers not being “neatly dressed”). Inspections occur initially and then biennially, though they can occur on a case-by-case basis for several reasons, including no reason.⁵⁹

Figure 5. Blank Inspection Report for Barbershops in Mississippi (First Page Only)

BOARD OF BARBER EXAMINERS INSPECTION REPORT						
SHOP NAME			SHOP LICENSE NUMBER			
ADDRESS			COUNTY			
CITY STATE ZIP			DATE OF INSPECTION			
SIGNATURE OF OWNER / SHOP REPRESENTATIVE			SIGNATURE OF EXAMINER / INSPECTOR			
Purpose: <input type="checkbox"/> General Inspection <input type="checkbox"/> New Shop Inspection <input type="checkbox"/> Change of Location <input type="checkbox"/> Follow-up Inspection <input type="checkbox"/> Violation(s)						
OVERALL INSPECTION RATING (CIRCLE ONLY ONE)						
<h1>A</h1> EXCELLENT – NO VIOLATIONS	<h1>B</h1> FAIR		<h1>C</h1> BAD, MUST BE IMPROVED Unsatisfactory or subject to closure			
IDENTIFY ALL BARBERS AT LOCATION						
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
_____ License # _____		○ Active: ○ Expired - Date: _____				
VIOLATIONS OF LAW – an inspection of your barber shop has this day been made and violations marked. Any violation of the following codes requires immediate action pursuant to § 73-5-9 (3) (a) (b) (c) INSPECTOR: CIRCLE THE APPROPRIATE VIOLATION #1 OR VIOLATION #2 AMOUNT, IF ANY					FINE AMOUNT: \$ _____	
VIOLATION	Law / Rule Reference	Class C	Class B	Class A	1 st Violation	2 nd Violation
Certificate of registration as a registered barber shall be displayed (owner, manager, or licensee responsible)	73-5-23			√	\$100	\$500
Shop employing unlicensed individuals performing barber services	73-5-33(2)				\$500	\$1000
Copy of rules and regulations relating to the sanitation of barber shops	Rule 2.3			√	\$100	\$400
Receptacles containing face or talcum powder shall have tops	Rule 2.3			√	\$200	\$800
Clean cupboard or cabinet in which to keep all linen or paper towels free from dust	Rule 2.3.C			√	\$200	\$800
Clean and in good repair / floors in cutting and styling area as well as any area used for shampooing shall be covered with non-porous material that is easily cleanable	Rule 2.3.A			√	\$200	\$800

Note. Second page covers additional violations.





Methods

If licensing and licensing burdens are necessary to protect health and safety, this would mean that businesses like barbershops and nail salons with unlicensed or less onerously licensed staff present a greater threat to health and safety than similar businesses with licensed or more onerously licensed staff. Using inspection outcomes as a measure of health and safety risks, I test whether licensing and licensing burdens are related to inspection outcomes.

To do this, I employed a design that approximates a randomized controlled trial. In a true randomized controlled trial, I would randomly assign nail salons and barbershops to states with different licensing conditions and compare their inspection outcomes. This would allow me to attribute any differences in inspection outcomes between businesses in the states to their licensing conditions and not to other potential differences between the states. Obviously, such a research design was not feasible. However, there are various ways to approximate a randomized controlled trial, and one of those ways is to use a geographic regression discontinuity design, a research design that takes advantage of variation around geographic boundaries.⁶⁰ Subject to qualifications, the basic idea is that, on average, businesses and business environments equidistant from the border between two states are similar, with that similarity increasing as the distance to the border decreases. Intuitively, this makes sense. For example, one would expect businesses and business environments in Kansas City, Kansas, to be more comparable to businesses and business environments a few miles away in Kansas City, Missouri, than to those hundreds of miles away in St. Louis.

The reason the design approximates a randomized controlled trial is that, within a certain, relatively short, distance of the border—known as a “bandwidth”—it is *as if* the businesses were randomly assigned to one side of the border or the other. Assuming this is true, it is possible to estimate the expected difference in inspection outcomes between a business with unlicensed or less onerously licensed workers on one side of the border and a business with licensed or more onerously licensed workers on the other. In essence, each inspection outcome receives a weight that is a function of the businesses’ distance to the border. The estimated expected difference is a weighted average effect of licensing requirements on inspection outcomes, with more weight given to businesses assumed to be more similar (i.e., those closer to the border) and less weight given to businesses assumed to be less similar (i.e., those farther from the border). In this way, this design allows us to attribute differences in health and safety outcomes, as measured by inspections, to differences in licensing regimes.

This study uses nail salon inspection data from Connecticut and New York and barbershop inspection data from Alabama and Mississippi to answer this question: All else constant, do businesses with licensed staff or more onerously licensed staff commit fewer violations and have a greater probability of passing inspections compared to businesses with unlicensed staff or less onerously licensed staff?

This study uses inspection data to answer this question:
All else constant, do businesses with licensed staff or more onerously licensed staff commit fewer violations and have a greater probability of passing inspections compared to businesses with unlicensed staff or less onerously licensed staff?

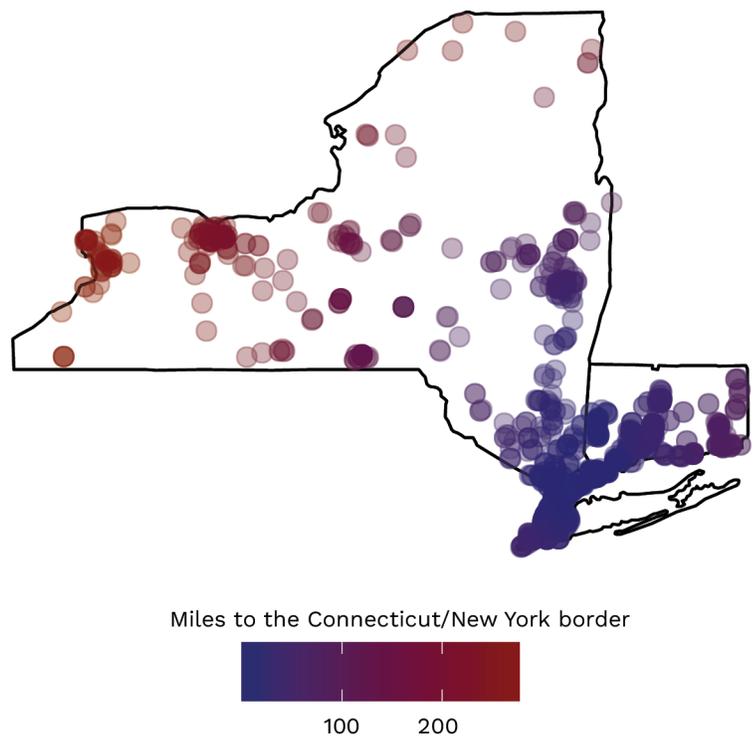
Comparing Nail Salon Inspection Outcomes in Connecticut and New York

IJ obtained inspection data from local health agencies in Connecticut and from the Department of State in New York. The full dataset for Connecticut and New York comprises 2,594 inspections across 1,988 firms for 2017 and 2018, years during which New York licensed manicurists and Connecticut did not. However, I excluded firms on Long Island from the analysis because they are separated by the Long Island Sound.⁶¹ This reduced the sample to 2,148 inspections across 1,604 firms. Figure 6 displays the geographic location of inspections, with the color of the dots representing the distance to the Connecticut/New York border. Dots with similar colors are assumed to reflect more similar businesses and business environments, whereas dots with different colors are assumed to reflect less similar businesses and business environments. As described above, inspections of businesses closer to the border (i.e., the blue dots) receive greater weight in my analysis. Despite differences in the states' inspection regimes, their forms are similar in that they list possible violations and require inspectors to identify actual violations. Thus, health and safety violations can be distinguished from other types of violations (like licensing violations) in the data, quantified, and compared across states.

There are more possible health and safety violations in Connecticut (roughly 30 to 40, depending on the locality) than in New York (seven), so comparing the raw count of violations per inspection would be misleading. I therefore created two standardized variables that account for the different numbers of possible violations. The first outcome variable I created by transforming the count of violations into standard deviation scores, often called “z-scores,” specific to each state. A score of zero for a given inspection would mean the inspection resulted in the average number of health and safety violations per inspection for the state, while a positive or negative score would mean the inspection resulted in an above or below average number of health and safety violations for the state. The second outcome variable I created by dividing the number of violations by the number of possible violations (i.e., the rate of violations per possible violation). Higher values indicate an inspection resulted in a higher rate of violations.

Figure 6. Locations of Connecticut and New York Nail Salon Inspections

The analysis weights nail salons closer to the border more heavily, as they, and the locations in which they operate, are assumed to be more similar



My analytical strategy started with simple comparisons of inspection outcomes and then proceeded to the regression discontinuity analysis. First, I calculated descriptive statistics, including the average violation z-score and the average rate of violations for nail salon inspections in Connecticut and New York. I calculated the same statistics restricted to nail salons within the bandwidth around the border—the businesses and business environments assumed to be most similar. Second, I estimated the relationship between the salons' distance to the border and inspection outcomes in each state. The expected outcome of an inspection for a nail salon in Connecticut compared to New York is estimated as the difference between the predicted outcome in Connecticut and the predicted outcome in New York for a hypothetical nail salon that is located on the border. For both the simple comparisons and the more sophisticated analyses, I used both the violation z-score and violation rate as outcome variables.

Whether licensing is the cause of any differences in inspection outcomes depends on the extent to which businesses on either side of the border are essentially similar but for licensing conditions (i.e., randomly distributed within the bandwidth around the border). I therefore conducted tests to assess the validity of the study design. First, I examined whether census block groups near the border were similar in population size, percentage of the population with a bachelor's degree, and median household income; I reran my analysis adjusting for these characteristics. Second, to account for the possibility that some business owners might have chosen to set up shop in Connecticut rather than New York precisely to avoid New York's license, I reran the analysis excluding those businesses closest to the border.

Comparing Barbershop Inspection Outcomes in Alabama and Mississippi

IJ obtained inspection data from the boards responsible for licensing barbers in Alabama and Mississippi. The full dataset for Alabama and Mississippi includes 3,218 inspections across 1,748 firms for the years 2014 through 2018. Figure 7 illustrates the geographic location of inspections. As in Figure 6, the dots' color represents the distance to the border between the states, with inspections closer to the border receiving greater weight. During the years analyzed, licensure was required in both Alabama and Mississippi, but the amount of schooling hours required to obtain licensure was 50% higher in Mississippi.

The barbershop inspections data IJ received from Mississippi are comparable in detail to the nail salon inspections data IJ received from Connecticut and New York. However, the barbershop inspections data IJ received from Alabama are less detailed. Specifically, the Alabama data indicate only whether an inspection was passed or failed. I therefore could not compare the number of health and safety violations across Alabama and Mississippi. Instead, I examined whether inspections were more likely to be passed in Mississippi compared to in Alabama. To make outcomes in Mississippi comparable to those in Alabama, I treated inspection grades of an A or a B as a pass and grades of a C as a fail, which, as described above, is consistent with how the grades are treated in the state.

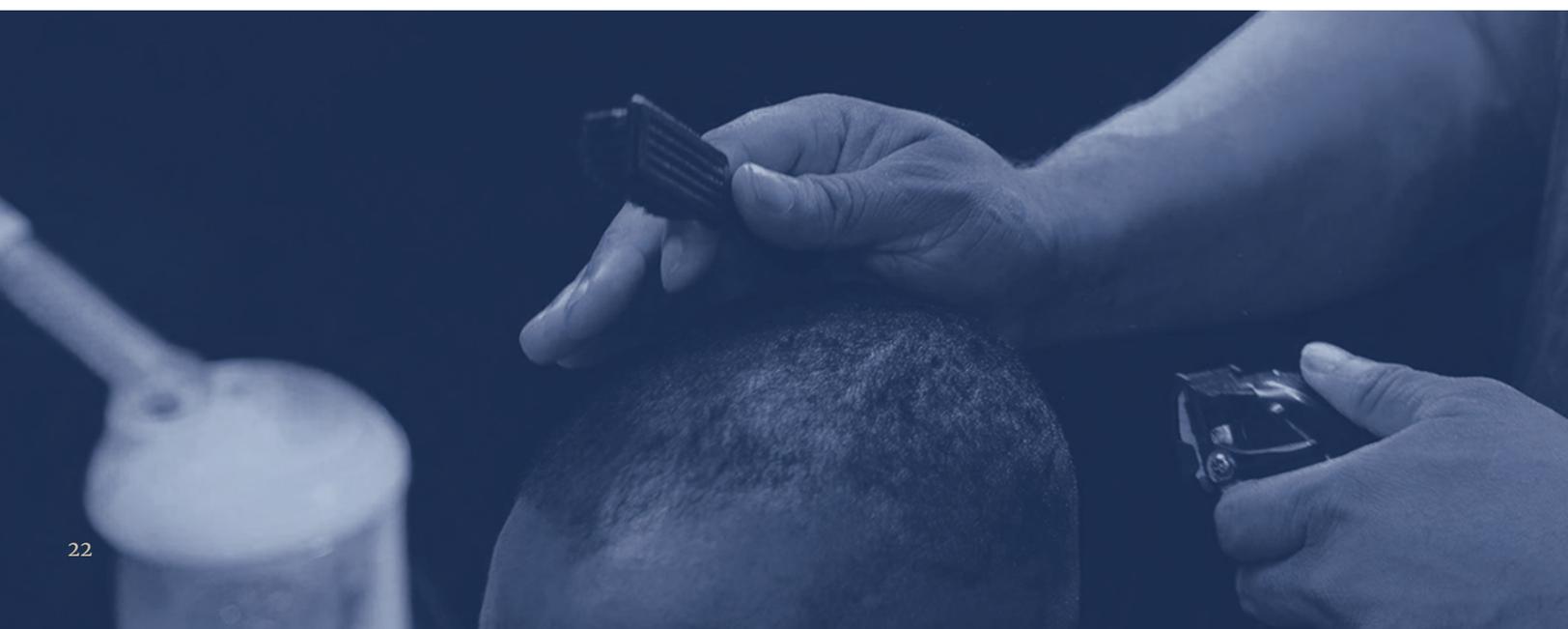
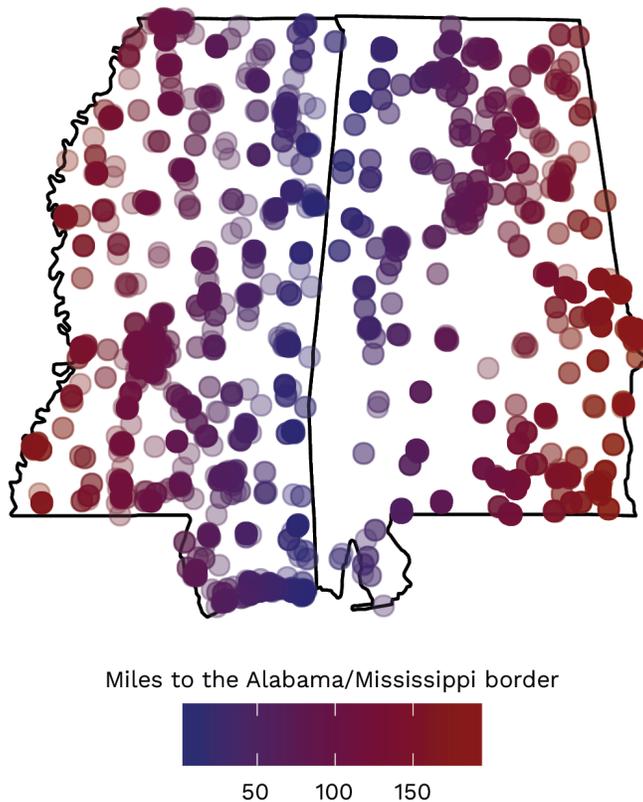


Figure 7. Locations of Alabama and Mississippi Barbershop Inspections

The analysis weights barbershops closer to the border more heavily, as they, and the locations in which they operate, are assumed to be more similar



During the years analyzed, licensure was required in both Alabama and Mississippi, but the amount of schooling hours required to obtain licensure was 50% higher in Mississippi.

I followed a similar analytical process for the comparisons of barbershop inspection outcomes in Alabama and Mississippi as for the comparisons of nail salon inspection outcomes in Connecticut and New York. That is, I started with descriptive comparisons of barbershop inspections throughout the whole of each state and then restricted to barbershops within the bandwidth around the border, before conducting a regression

discontinuity analysis and performing tests to evaluate the design. There were some minor differences, however. For example, there was only one outcome variable, and it was binary (inspections passed or failed).

For full details of my methods, see Appendix A, and for full details of my results, see Appendix B.





●● Results: Licensing Has Little Impact on Health and Safety

Put simply, this study finds no substantive evidence that licensing or more stringent licensing is necessary to protect public health and safety. Specifically, it finds no substantive difference in health inspection outcomes for businesses in licensed or more stringently licensed states and businesses in unlicensed or less stringently licensed states. This holds true whether looking at the raw numbers or the results of my more sophisticated analysis focused on businesses likely to be most similar based on their proximity to the border. These results suggest that businesses with unlicensed or less onerously licensed workers do not present a greater risk to public health and safety than do their counterparts with licensed or more onerously licensed workers.

By the raw numbers, inspection outcomes were favorable across the board, regardless of licensing conditions. Looking at all businesses, most nail salon health inspections in both Connecticut and New York

resulted in zero violations. Similarly, in both Alabama and Mississippi, virtually all barbershop health inspections were passed. This was also the case when looking at businesses within the relatively short distance on either side of the state borders for which businesses and business environments are likely to be most similar. Within that bandwidth, not only were inspection outcomes again favorable across the board, but outcomes were actually better, if only slightly, where licensing was absent or less burdensome. Figure 8 shows the average rate of violations per possible violation for nail salons within the bandwidth around the Connecticut/New York border. In Connecticut, salons near the border passed 98% of standards per inspection on average, while in New York, they passed 95%. Figure 9 shows that 98% of inspections for barbershops within the bandwidth were passed on the Alabama side, compared to 95% on the Mississippi side.

Figure 8. Average Nail Salon Violation Rates

On average, nail salons near the border had low violation rates in both Connecticut and New York, though Connecticut's rate was slightly lower

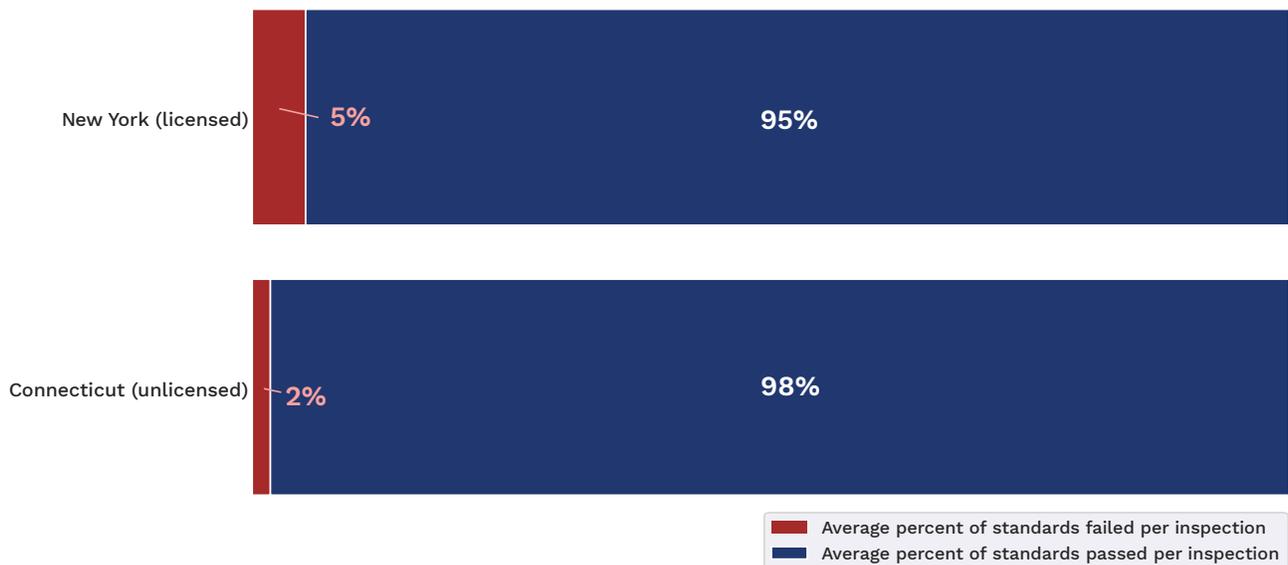


Figure 9: Barbershop Inspection Pass Rates

Barbershops near the border had high inspection pass rates in both Alabama and Mississippi, though Alabama's rate was slightly higher



These results were borne out by those from my more sophisticated regression discontinuity analyses. In fact, the results suggest that the presence of licensing was associated with more violations among manicurists and that greater licensing burdens were associated with more failed inspections among barbers. The differences were statistically significant, though their magnitudes were small. In other words, the differences are likely real—that is, more than just statistical noise—but they are not practically meaningful. Thus, the more sophisticated analyses confirm what the raw numbers show: There was very little difference in inspection outcomes on either side of the borders.

For the comparison of nail salons in Connecticut and New York, results for both the model using the violation z-score and the one using violation rate indicated that licensing was associated with increased violations. This was also true when I reran the analysis adjusting for income, education, and population, as well as when I reran the analysis with businesses closest to the border excluded. These results offer support for the conclusion that licensing increases health and safety violations among manicurists. However, as noted, the effect was very small. Compared to a comparable nail salon in Connecticut, a nail salon in

New York might exhibit one more violation over the course of nearly two dozen inspections—and those inspections would typically result in zero violations. Considering the results holistically, a conservative conclusion is that there is no substantive difference in health and safety violations for nail salons with licensed workers compared to ones with unlicensed workers.

For the comparison of barbershops in Alabama and Mississippi, results again indicated that licensing was associated with worse inspection outcomes. Inspections at barbershops in Mississippi were about 8% less likely to result in a pass compared to inspections at barbershops in Alabama. My results were about the same when adjusting for income, education, and population and when excluding businesses closest to the border. However, with the base rates for passing an inspection hovering close to 100%, one could predict the outcome of any given inspection without any other information, such as licensing conditions. Thus, as with the comparison of nail salons in Connecticut and New York, a reasonable and conservative conclusion is that licensing has no meaningful impact on health inspection outcomes. See Appendix B for the full details of my results.



Why Licensing Has Little Impact on Health and Safety

When Alabama relicensed barbers and Connecticut relicensed manicurists, the expressed motivation was to protect public health and safety. The Alabama state legislator who introduced the bill to relicense barbers described barbers as operating “without any accountability” and stressed a “duty to make those services safe and sanitary with the highest level of care.”⁶² Similarly, one sponsor of the legislation to relicense manicurists in Connecticut said, “Through licensing . . . we would surely increase the health and safety quality of salons across our state.”⁶³

Anecdotes and speculation about alleged harms abounded. Absent were hard data. Proponents of relicensure failed to present any empirical evidence of supposed harms—nor of how licensing would address them.⁶⁴ The likely reason for this lapse is that such evidence does not exist. Indeed, the claim that licensing and licensing burdens ensure safe and sanitary service is at odds with empirical evidence. Instead, this study, as well as others, suggests the assumed impact of licensing and licensing burdens on health and safety is often overrated.⁶⁵ But why might this be? As it happens, there are several possible, and complementary, explanations for why licensing appears to have little impact on health and safety.

First, it is possible that ordinary market competition, along with the promise of health inspections, is sufficient to motivate safe, sanitary service in barbershops and nail salons. As I discuss in greater detail in the next section,

the need to compete for customers gives businesses every incentive to work cleanly and safely. Visits from the health inspector give barbershops and nail salons additional reason to stay on their toes.

Second, licensing is not narrowly targeted to health and safety. Much of aspiring barbers’ and manicurists’ time in mandatory schooling is spent learning hair or nail techniques and business practices—things consumers can, and do, judge for themselves. Comparatively little time is spent on topics related to keeping consumers healthy and safe. A 2021 study found that, on average, only about 26% of barber (or cosmetologist) curricula and 40% of manicurist curricula teach about health and safety.⁶⁶ This is not to say that curricula spend too little time on health and safety (Nebraska, for example, requires about 600 hours⁶⁷), but rather to point out that state-mandated barber and beauty education is mostly about other matters.

Moreover, many of the practices barbers and manicurists must follow to keep customers safe are relatively simple. For example, they should wash their hands frequently; they should clean and disinfect their tools between customers; and they should read the labels of chemical products and follow the instructions for use.⁶⁸ A lot of this is common sense. Not only that, but there are inexpensive courses that teach the basics in very little time.⁶⁹ And after all, my findings show that nail salons and barbershops in different jurisdictions have little trouble complying with health and safety regulations.



Third, licensing shuts aspiring workers out of occupations for reasons that have nothing to do with safe practice, like whether they are willing and able to complete an expensive and time-consuming barber or beauty school program.⁷⁰ And it does so regardless of their knowledge, their skills, and, perhaps most importantly, their conscientiousness, to say nothing of the existence of alternative, more affordable ways to learn. Having the disposable income, or the ability to qualify for student loans with which to pay for school, does not mean a person will be more motivated to adhere to health and safety rules when later employed at a barbershop or nail salon, and neither does having the English language proficiency needed to complete school, to name but two possible obstacles that can thwart aspirants. If a person is not conscientious, a license is not going to make them conscientious. On top of that, skilled or conscientious workers may decide the opportunity costs of fulfilling licensing requirements are too steep and choose other occupations instead.⁷¹ Thus, licensing may exclude aspiring workers willing and able to provide safe, high-quality service as much it includes them.

Finally, licensing may just be a fundamentally misguided approach. Licensing is premised, in part, on the notion that health and safety risks can be mitigated by policing who can enter an occupation. But regardless of who provides them, beauty and personal care services like manicuring and barbering are going to involve potentially risky things like using toxic chemicals or sharp objects

on or around people. Whether workers are licensed or unlicensed, accidents can happen. In her testimony opposing relicensure of manicurists in Connecticut, one salon owner neatly summed up the problem:

Anecdotal stories of unclean salons and services that have caused harm are not unique to this industry. Licensed trades have plenty of lousy technicians and improper work resulting in bad experiences. Many people have stories for just about any industry and beauty is no exception. With over twenty years' experience and a very successful business, I have seen many people who have had unpleasant experiences. . . . In all of the years and cases I have seen, every single one has been performed by [a] trained and certified or licensed individual. It is in my experience serving well over a thousand clients that this is not an issue of untrained or unlicensed technicians but simple mistakes or unforeseen reactions or allergies that are part of the risk in this business.⁷²

Given the nature of the risks involved, it just does not make sense to rely on barriers to occupational entry to protect the public. Fortunately, there are other ways to mitigate risks that are more targeted to health and safety and the actual practice of these occupations than licensing—and that do not come with licensing's costs.

The claim that licensing and licensing burdens ensure safe and sanitary service is at odds with empirical evidence. Instead, this study, as well as others, suggests the assumed impact of licensing and licensing burdens on health and safety is often overrated.



are also more targeted to health and safety than licensing systems.

A fourth reason, and one already alluded to, is a practical one: Inspection systems for nail salons, barbershops, and other beauty and personal establishments typically already exist. This means that, in general, policymakers would at most have to tweak an existing system rather than create an entirely new one. And if a state does not have an appropriate inspection system already in place, it almost certainly has inspection systems for other types of businesses on which to model a system for beauty and personal care businesses. The food service industry is perhaps the most obvious example. Rather than tightly controlling who gets to be a chef, the government regulates the conditions of service, such as the environment in which food is prepared.⁷⁷ Looking to other states for models is also an option.

In conjunction with inspection systems, there are also ways for people to voluntarily obtain education or training and receive certification or another credential. For example, the United Kingdom does not license barbers or hairdressers. Instead, barbers and hairdressers can voluntarily register with the Hair & Barber Council when they meet certain education and experience requirements.⁷⁸ This allows them to call themselves “State Registered” and thus to distinguish themselves from other barbers and hairdressers who have not met the Council’s requirements (or who have but have not bothered to register). Although called registration, this is, in effect, a state certification program that restricts the use of a particular title (“State Registered Barber” or “State Registered Hairdresser”). At any rate, barbers and hairdressers have the *option* to obtain certification if they are interested, willing, and able; employers have the *option* to hire certified employees if that is what they desire; and consumers have the *option* to patronize certified barbers and hairdressers if they are willing and able. But certification does not stand as a barrier to entering the occupations, hiring workers, or patronizing the barber or hairdresser of one’s choice.

Although it operates in addition to a licensing system, California’s Healthy Nail Salon Recognition Program illustrates a similar approach. In participating jurisdictions, salon owners can voluntarily apply for certification as a “Healthy Nail Salon,” which means the business goes above and beyond minimum health and safety standards. As part of the program, owners and workers receive specialized training, after which the business must pass a special inspection to receive certification. Once certified, businesses are subject to annual compliance audits, which go beyond a typical inspection. For example, the inspection is meant to be unannounced, and the criteria are much more comprehensive and stringent, particularly for salons wishing to obtain or maintain the higher tier “Gold Certificate.” For example, salons cannot have *any*

outstanding health violations. A benefit of being certified is advertising—salons receive a certificate that they can display to potential customers. In addition, the salons are highlighted on local government websites.⁷⁹

Training resources tailored to managing risks to health and safety in an occupation are available from several sources. And they are often low duration and low cost (if not free). Government agencies, private companies, and professional associations offer brief courses or other resources specifically on health and safety for manicurists, barbers, and other beauty and personal care occupations.⁸⁰ Such resources have been studied and shown to increase knowledge and communication about health and safety, as well as improve safety practices.⁸¹ The COVID-19 pandemic was a notable impetus for new health and safety training. For example, Barbicide and the American Barber Association both created special training and certification programs on how to safely serve the public during the pandemic.⁸² Barbers who completed the trainings could display their certificates to reassure potential customers.

Finally, the power of market competition to incentivize safe, high-quality service should not be underestimated. If consumers believe the services or conditions of service are unsanitary or unsafe in some way based on their experience, they will be less likely to return to an establishment. They may also share their experiences with others in their community or online, on a platform like Google or Yelp. Given prior research showing that consumers are sensitive to reputation and factor things like consumer ratings into their decision-making about which service providers to patronize, businesses have every incentive to minimize negative experiences and be responsive to such feedback.⁸³ If they do not take steps to improve their reputation, their market share is likely to decline, and they may eventually go out of business. Business owners are very aware of this risk—Craig Hunt put it bluntly: “No client is going to sit in a dirty barber’s seat.”

Any occupation for which there is some risk to health and safety will have a non-zero amount of health and safety incidents. However, it is possible to manage those risks systemically without licensing. A system characterized by market competition, in combination with inspections, can achieve the only legitimate goal of licensing—safe service—without the costs of licensing.⁸⁴ In fact, this is virtually what the system was for manicurists in Connecticut before the state relicensed the occupation. And as this study shows, most inspections resulted in zero violations, and there was no substantive difference in outcomes between unlicensed Connecticut and licensed New York. A plausible explanation for these findings is that inspections and market incentives were sufficiently ensuring safe and sanitary service.



The Tragedy of Licensing

My study finds licensing for manicurists and more burdensome licensing for barbers has no effect on public health and safety—even though protecting health and safety is the official rationale for licensing those and many other occupations. If licensing fails to achieve this goal, then that makes its costs especially troubling, even tragic, because they are entirely avoidable.

Some barbers and manicurists have successful careers. Craig Hunt and Kristin House, for instance, are successful business owners. But for many, maybe even *most*, their expensive and time-consuming training may never pay off.

Today, an aspiring manicurist in Connecticut will likely pay over \$4,000 to attend an approved 100-hour training program at a private beauty school.⁸⁵ That \$4,000 equates to 13% of the median annual wage of manicurists in Connecticut.⁸⁶ Meanwhile, an aspiring barber in Mississippi will likely pay even more to attend an approved 1,500-hour training program at a private institution.⁸⁷ Yet the median wage for barbers in Mississippi is a mere \$22,190.⁸⁸ As noted above, their lifetime return on investment is likely to be negative.⁸⁹

These burdens often fall most heavily on the people least able to bear them.⁹⁰ People who attend training programs to obtain licensure tend to come from less educated households—a major determinant of income and wealth.⁹¹ And research on cosmetology school students specifically has found they tend to come from lower-income households—with disproportionate numbers qualifying for Pell grants, which cover only a portion of their education expenses.⁹² Taking out loans to attend cosmetology school is common, as is failing to graduate on time, which often means having to pay additional tuition. Common, too, is dropping out, which may mean being left with crippling debt and nothing to show for it.⁹³ As Kristin put it, “This job [manicurist] is great for single moms, people coming out of prison, and the cost is just so steep.”

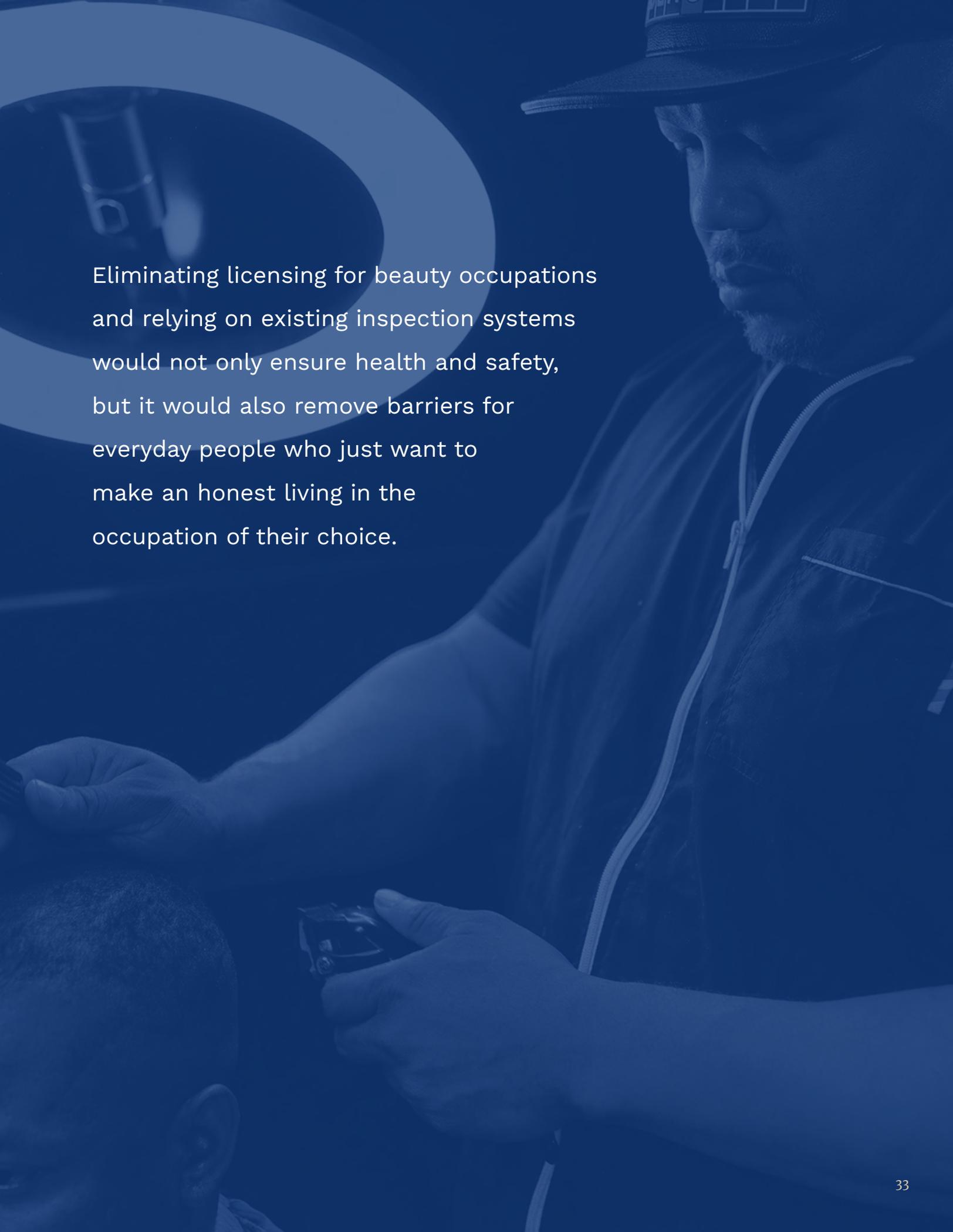
Ironically, schools were once the more accessible doorway for everyday people to enter an occupation like barber.⁹⁴ But that was when schools had to compete for students by providing value—before government made attendance all but mandatory, giving schools a captive audience. As it stands, many graduates of beauty and personal care training programs—about 1 in 6 cosmetology program graduates according to one survey—report *never* using the skills they learned in their program in their current job.⁹⁵ The reason for this is unknown, but it seems likely that at least some of these people entered the job market underprepared for the occupation they trained for. Indeed, Craig and Kristin report that this is a major problem in their industries, with graduates of barber and manicurist programs and those wishing to hire new barbers and manicurists all frustrated by the poor training schools provide. This is a big part of why Craig and Kristin feel an obligation to help ease the way for the next generation of barbers and manicurists. Craig mentors aspiring barbers and offers apprenticeships. Kristin mentors aspiring nail technicians and has an educational podcast. One of her favorite pieces of advice for aspirants: Find the cheapest program that will fulfill licensing requirements in your state and save your money for courses on the techniques you want to specialize in.

The government has a legitimate interest in protecting the public. It does not have a legitimate interest in forcing people into expensive and time-consuming training programs that will saddle them with debt for no good reason. Eliminating licensing for beauty occupations and relying on existing inspection systems would not only ensure health and safety, but it would also remove barriers for everyday people who just want to make an honest living in the occupation of their choice.⁹⁶



The government has a legitimate interest in protecting the public.

It does not have a legitimate interest in forcing people into expensive and time-consuming training programs that will saddle them with debt for no good reason.



Eliminating licensing for beauty occupations and relying on existing inspection systems would not only ensure health and safety, but it would also remove barriers for everyday people who just want to make an honest living in the occupation of their choice.

Appendix A: Methods

Model Estimation

I conducted the geographic regression discontinuity analyses using the *rdrobust* package in *R*.⁹⁷ Because inspections were nested within firms, I used Bartalotti and Brummet’s approach, which allows for cluster dependence in the error term and is incorporated into the *rdrobust* package.⁹⁸ I determined the bandwidth using a mean-squared error-optimal bandwidth selector in the package *rdbselect*.⁹⁹ I report both conventional and robust statistics.

Comparing Nail Salon Inspection Outcomes in Connecticut and New York

A regression discontinuity analysis essentially involves two regression models. On each side of the “cutoff,” a polynomial regression model is estimated with the dependent variable regressed onto the “forcing variable.” In my manicurist analysis, the cutoff was the Connecticut/New York border, the dependent variable was either of two measures of nail salon inspection outcomes (violation z-score or violation rate), and the forcing variable was the distance in miles to the border. The “treatment effect” is calculated as the difference between the intercepts for the two regression equations. For example, when the dependent variable was the violation z-score, the intercept on the Connecticut side was the violation z-score for a hypothetical nail salon in Connecticut directly on the border, the intercept on the New York side was the violation z-score for a hypothetical nail salon in New York directly on the border, and the treatment effect was the difference between those two intercepts. Theoretically, the two intercepts represent a counterfactual. For instance, inspection outcomes for nail salons with licensed workers in Connecticut during the study period are unknowable because the state did not require licensure. However, subject to qualifications, inspection outcomes of nail salons in New York should reasonably represent that unobservable counterfactual—the inspection outcomes that would have been observed had Connecticut required licensure.

The key assumption of a regression discontinuity

design is that, within a specified bandwidth, units on either side of the cutoff are balanced on covariates.¹⁰⁰ This assumption cannot be directly tested, but its plausibility can be evaluated. Ideally, I would be able to compare firms’ characteristics, such as the number of employees and the types of services offered. Such information was unavailable, so I performed checks using three variables from the census (at the census block group level) that may reflect the consumer market of the firms—median household income, percentage of the population with at least a bachelor’s degree, and population. Household income, for example, is associated with greater spending on personal care products and services.¹⁰¹ Thus, firms in areas with higher household incomes may be more responsive to consumer demand for safe, clean service compared to firms in areas with lower household incomes.

There were significant discontinuities at the border in the total population (i.e., New York had a larger population), but not in income or education. On the one hand, the discontinuity in total population could be interpreted as evidence of the implausibility of a key assumption of the design, while the continuities in income and education could be interpreted as evidence of the assumption’s plausibility. On the other hand, however, these variables are at the census block group level and might not capture firm-level differences or similarities (to the extent either exist). I report the original model, as well as the model with estimates adjusted for income, education, and population.

As a sensitivity test, I reran all the models using the “donut hole” approach.¹⁰² Generally, regression discontinuity design model estimates are most influenced by observations closest to the cutoff, which can be problematic if there is non-random “sorting” or “manipulation” around the border. For example, an entrepreneur might have chosen to open a nail salon on the Connecticut side rather than the New York side to avoid the latter state’s license. The donut hole approach involves excluding observations within certain radiuses and re-estimating the models. My assumption is that if businesses were sorting themselves in a non-random way, it would be most likely to occur closer to the border.¹⁰³ By running the analyses excluding potential manipulators, I can evaluate the sensitivity of the results to them. I reran the analyses with donut hole radiuses of 1, 2, and 3 miles for the Connecticut and New York sample.

Some sensitivity is expected because the estimation routine tends to be more influenced by observations very close to the border, but if those observations were exceptionally unique in some way or ways, the results would be very sensitive to whether those observations were included or excluded.¹⁰⁴ The idea is similar to how an average can be influenced by extreme, atypical values—if there are nine people in a room who are all 5 feet tall and one person walks in who is 10 feet tall, the average height in the room will go up by 6 inches. Analogously, if businesses very close to the border were like that person who is 10 feet tall, then excluding them would result in substantially different findings.

Comparing Barbershop Inspection Outcomes in Alabama and Mississippi

For my barber analysis, I employed the same analytical strategy with the sample of barbershops in Alabama and Mississippi. In this case, the dependent variable was a binary indicator of whether the inspection was passed or failed. I used a linear probability model because it is straightforward to interpret, it can produce unbiased estimates of treatment effects, and the residual heteroskedasticity intrinsic to it can be addressed by estimating robust (“sandwich”) standard errors.¹⁰⁵

As with the Connecticut/New York comparison, there were discontinuities in covariates at the border. Specifically, census block groups on the Alabama side of the border had a slightly greater proportion of people with at least a bachelor’s degree and a larger population overall. There was not a discontinuity in household income. As with the Connecticut/New York comparison, I reran my analysis adjusted for income, education, and population.

Also as with the Connecticut/New York comparison, I employed the donut hole approach to evaluate the sensitivity of my results. However, I used larger radiuses of 5, 6, and 7 miles for the Alabama and Mississippi sample. This was because the number of observations closer to the border was too small. For example, there were only three observations within 3 miles of the Alabama/Mississippi border.



Appendix B: Results

Table B1 presents the results of the geographic regression discontinuity analyses comparing nail salon inspection outcomes in Connecticut and New York. The coefficients represent the expected difference in an inspection outcome between a nail salon in New York and a nail salon in Connecticut. For example, the coefficient of 0.049 in the violation rate model indicates that an inspection in New York would be expected to result in a violation rate about 4 percentage points higher than an inspection in Connecticut. The confidence intervals, shown in parentheses adjacent to coefficients, reflect a range of values within which the “true” difference likely falls. For example, the coefficient of 0.049 has a confidence interval ranging from 0.025 to 0.074, indicating that the true difference in the expected violation rate could be about 2 percentage points on the lower end or about 7 percentage points on the upper end.

Table B1. Regression Discontinuity Results for Nail Salon Inspection Outcomes in Connecticut & New York

	Coefficient (95% CI)	
	Conventional	Robust
Violation Z-Score		
Model	0.662 (0.370, 0.953)	0.697 (0.342, 1.051)
Model + Covariates	0.671 (0.429, 0.913)	0.691 (0.395, 0.987)
Violation Rate		
Model	0.049 (0.025, 0.074)	0.048 (0.019, 0.077)
Model + Covariates	0.049 (0.029, 0.068)	0.047 (0.023, 0.070)

Note. All coefficients are statistically significant at the 5% level. CI: Confidence Interval.

Table B2 reports descriptive statistics for inspection outcomes for firms in Connecticut and New York within the bandwidth around the border.

Table B2. Descriptive Statistics for Nail Salon Inspection Outcomes in Connecticut & New York

	Connecticut	New York
Total Observations	690	1,458
Bandwidth	18.295	18.295
Effective Observations	320	334
Mean Violation Z-Score	-0.166	0.067
SD Violation Z-Score	0.897	1.03
Mean Violation Rate	0.018	0.052
SD Violation Rate	0.032	0.095

Note. Bandwidth units are miles. Bias bandwidth is 33.055. Inspections on Long Island were excluded. SD: Standard deviation.

Figure B1 is a visualization of the discontinuity in violations at the border of Connecticut (left side of chart) and New York (right side of chart). The geographic regression discontinuity design here involves estimating the trends in inspection outcomes in both states as the distance to the border decreases. The blue dots in the figure represent average outcomes among subsets of observations with similar distances to the border. The red lines represent trends in those average outcomes. The treatment effect is the difference between the intercepts of the two trendlines.

Figure B1. Regression Discontinuity Plot for Connecticut and New York Nail Salon Inspection Outcomes

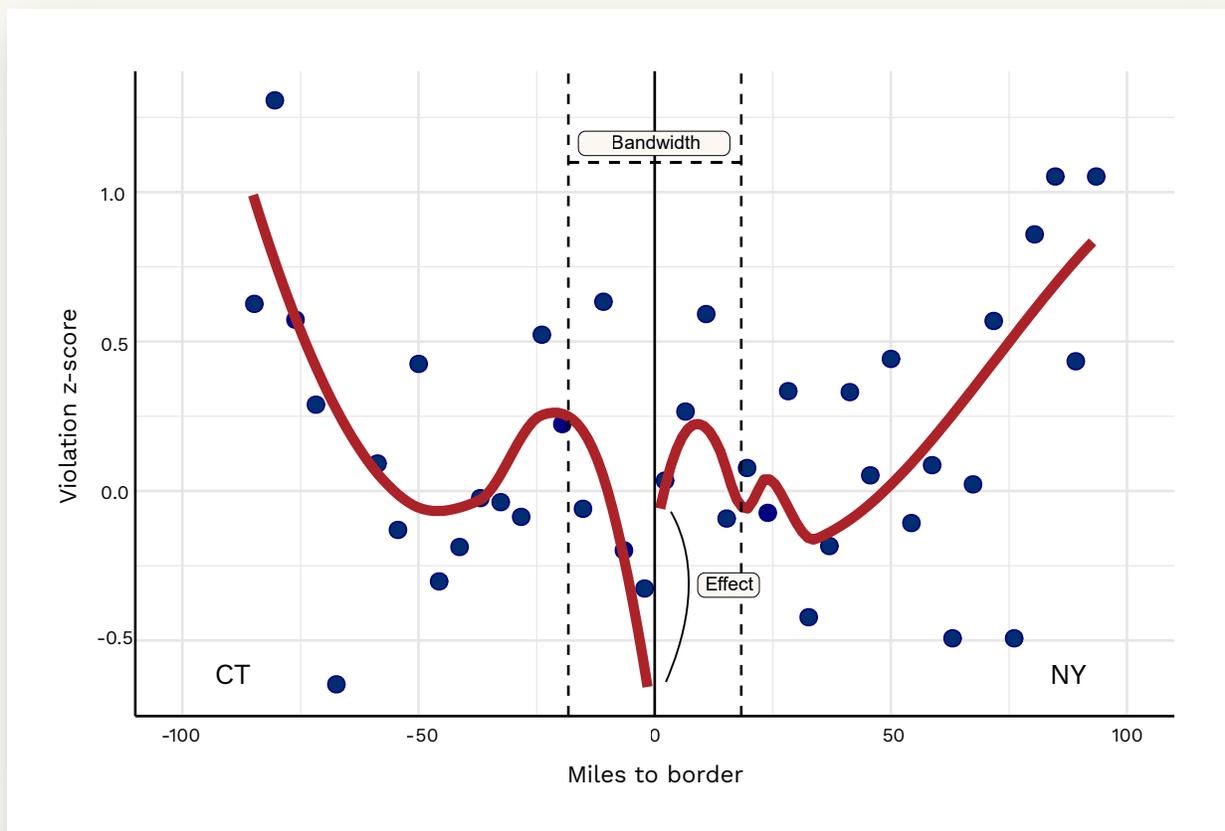


Table B3 shows the results of the geographic regression discontinuity analyses comparing barbershop inspection outcomes in Alabama and Mississippi.

Table B3. Regression Discontinuity Results for Barbershop Inspection Outcomes in Alabama & Mississippi

	Coefficient (95% CI)	
	Conventional	Robust
Model	-0.076 (-0.134, -0.017)	-0.083 (-0.158, -0.009)
Model + Covariates	-0.069 (-0.120, -0.019)	-0.078 (-0.145, -0.011)

Note. All coefficients are statistically significant at the 5% level. CI: Confidence Interval.

Table B4 reports descriptive statistics of inspection outcomes for firms in Alabama and Mississippi within the bandwidth around the border.

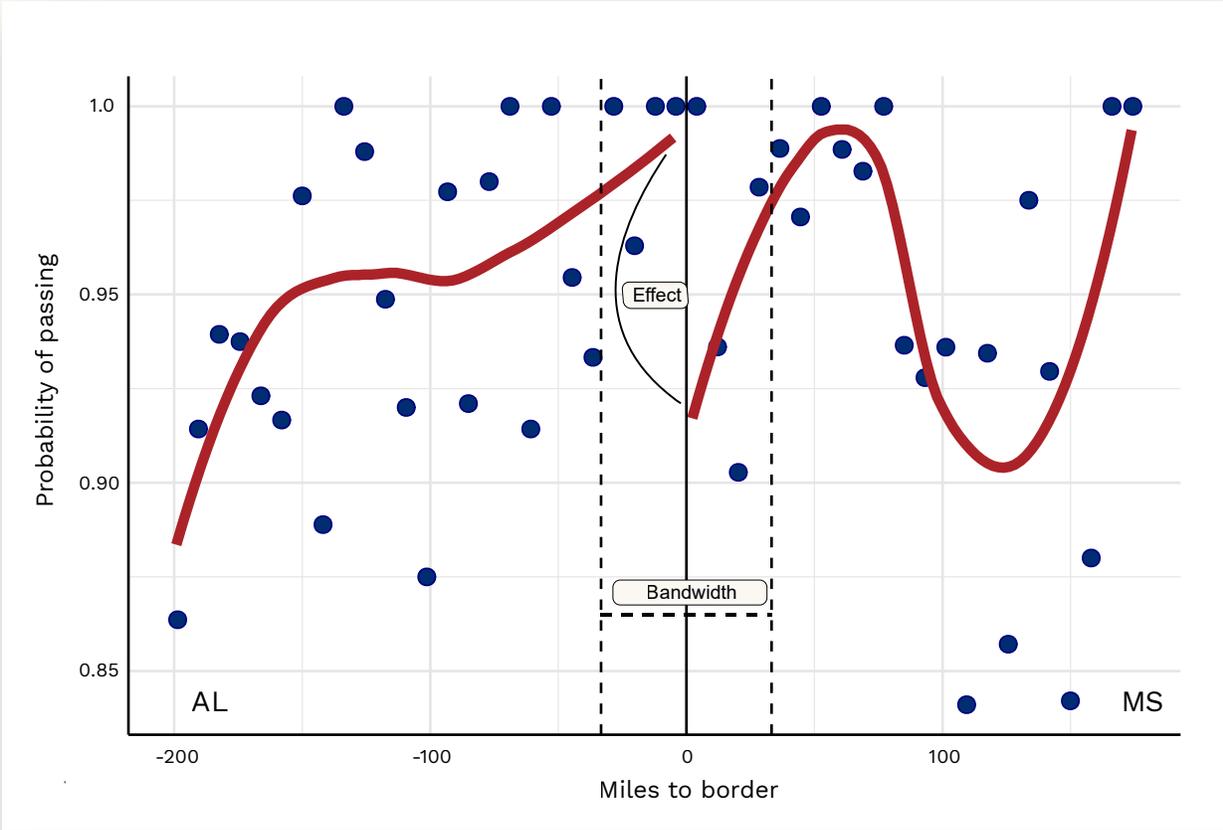
Table B4. Descriptive Statistics for Barbershop Inspection Outcomes in Alabama & Mississippi

	Alabama	Mississippi
Total Observations	896	2,322
Bandwidth	33.298	33.298
Effective Observations	81	478
Percent Passed	97.5	95.4

Note. Bandwidth units are miles. Bias bandwidth is 68.255.

Figure B2 is a visualization of the discontinuity in inspection outcomes at the border of Alabama (left side of chart) and Mississippi (right side of chart).

Figure B2. Regression Discontinuity Plot for Alabama and Mississippi Barbershop Inspection Outcomes



Tables B5 and B6 show the results of the sensitivity analyses. Table B5 reports only the results for the violation z-score dependent variable, but results were comparable for the violation rate dependent variable. Overall, the magnitudes of coefficients changed—which is to be expected given that regression discontinuity design model estimates are most influenced by observations closest to the cutoff—but substantive conclusions did not.¹⁰⁶

Table B5. Regression Discontinuity Model of Nail Salon Violations (Z-Score) in Connecticut & New York with Donut Hole Approach

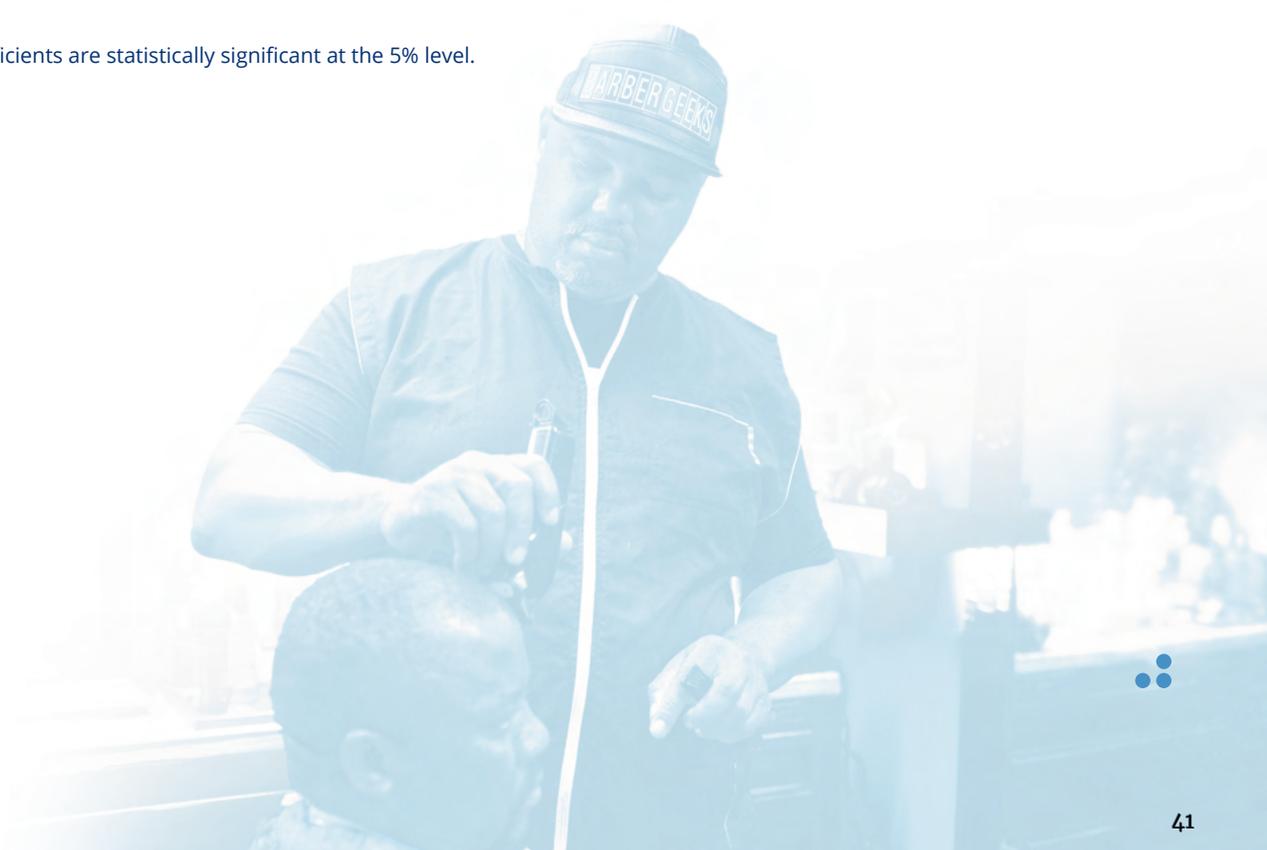
	Coefficient (95% CI)	
	Conventional	Robust
Full		
Model	0.662 (0.370, 0.953)	0.697 (0.342, 1.051)
Model + Covariates	0.671 (0.429, 0.913)	0.691 (0.395, 0.987)
Donut Radius = 1 Mile		
Model	0.545 (0.220, 0.870)	0.590 (0.201, 0.980)
Model + Covariates	0.689 (0.439, 0.939)	0.728 (0.418, 1.037)
Donut Radius = 2 Miles		
Model	0.476 (0.055, 0.898)	0.541 (0.025, 1.056)
Model + Covariates	0.559 (0.202, 0.917)	0.589 (0.120, 1.057)
Donut Radius = 3 Miles		
Model ^{ns}	0.377 (-0.081, 0.835)	0.430 (-0.140, 1.000)
Model + Covariates ^{ns}	0.398 (0.008, 0.788)	0.386 (-0.144, 0.916)

Note. All coefficients are statistically significant at the 5% level, except the two indicated with “ns.”

Table B6. Regression Discontinuity Model of Barbershop Inspection Outcomes in Alabama & Mississippi with Donut Hole Approach

	Coefficient (95% CI)	
	Conventional	Robust
Full		
Model	-0.076 (-0.134, -0.017)	-0.083 (-0.158, -0.009)
Model + Covariates	-0.069 (-0.120, -0.019)	-0.078 (-0.145, -0.011)
Donut Radius = 5 Miles		
Model	-0.090 (-0.152, -0.027)	-0.098 (-0.178, -0.018)
Model + Covariates	-0.084 (-0.138, -0.030)	-0.093 (-0.164, -0.022)
Donut Radius = 6 Miles		
Model	-0.097 (-0.163, -0.031)	-0.108 (-0.191, -0.024)
Model + Covariates	-0.092 (-0.148, -0.036)	-0.102 (-0.175, -0.029)
Donut Radius = 7 Miles		
Model	-0.105 (-0.175, -0.035)	-0.118 (-0.205, -0.031)
Model + Covariates	-0.098 (-0.157, -0.040)	-0.109 (-0.184, -0.034)

Note. All coefficients are statistically significant at the 5% level.





Endnotes

- 1 Iowa's barber license now requires 1,550 hours of education. H.F. 652, 90th Gen. Assemb., Reg. Sess. (Iowa 2024).
- 2 See, e.g., CTC Barber Academy. (n.d.). *Programs*. <https://www.ctcbarberacademy.com/programs>; PCI Academy. (n.d.). *Cosmetology and barbering*. <https://www.pci-academy.com/programs/cosmetology/>; The Salon Professional Academy. (2023). *Cost of attendance (COA) elements disclosure*. https://www.tspacedarfalls.com/wp-content/uploads/sites/25/2024/07/2024_Cost_of_Attenance_Elements_Disclosure_7-2023-_2_.pdf
- 3 Knepper, L., Deyo, D., Sweetland, K., Tiezzi, J., & Mena, A. (2022). *License to work: A national study of burdens from occupational licensing* (3rd ed.). Institute for Justice. <https://ij.org/report/license-to-work-3/>
- 4 See, e.g., Kleiner, M. M. (2006). *Licensing occupations: Ensuring quality or restricting competition?* W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/9781429454865>; Thornton, R. J., & Timmons, E. J. (2013). Licensing one of the world's oldest professions: Massage. *Journal of Law and Economics*, 56(2). <https://doi.org/10.1086/667840>; Pizzola, B., & Tabarrok, A. (2017). Occupational licensing causes a wage premium: Evidence from a natural experiment in Colorado's funeral services industry. *International Review of Law and Economics*, 50, 50–59. <https://doi.org/10.1016/j.irle.2017.04.005>; Kleiner, M. M., & Vorotnikov, E. S. (2018). *At what cost? State and national estimates of the economic costs of occupational licensing*. Institute for Justice. <https://ij.org/report/at-what-cost/>; Timmons, E. J., & Mills, A. (2018). Bringing the effects of occupational licensing in to focus: Optician licensing in the United States. *Eastern Economic Journal*, 44(1), 69–83. <https://doi.org/10.1057/eej.2016.4>; Han, S., & Kleiner, M. M. (2021). Analyzing the influence of occupational licensing duration and grandfathering on wage determination. *Industrial Relations: A Journal of Economy and Society*, 60(2), 147–187. <https://doi.org/10.1111/irel.12274>; Dodini, S. (2023). The spillover effects of labor regulations on the structure of earnings and employment: Evidence from occupational licensing. *Journal of Public Economics*, 225, <https://doi.org/10.1016/j.jpubeco.2023.104947>; Kleiner, M. M., & Soltas, E. J. (2023). A welfare analysis of occupational licensing in U.S. states. *The Review of Economic Studies*, 90(5), 2481–2516. <https://doi.org/10.1093/restud/rdad015>
- 5 Department of the Treasury Office of Economic Policy, Council of Economic Advisers, & Department of Labor. (2015). *Occupational licensing: A framework for policymakers*. https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf
- 6 See, e.g., Pizzola and Tabarrok, 2017; Kleiner and Vorotnikov, 2018; Timmons and Mills, 2018; Han and Kleiner, 2021; Dodini, 2023; Kleiner and Soltas, 2023.
- 7 See, e.g., Kleiner, M. M. (2015). *Guild-ridden labor markets: The curious case of occupational licensing*. W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/9780880995023>; Mellor, W. H., & Carpenter, D. M. (2016). *Bottleneckers: Gaming the government for power and private profit*. Encounter Books.
- 8 See, e.g., Allensworth, R. H. (2017). Foxes at the henhouse: Occupational licensing boards up close. *California Law Review*, 105(6), 1567–1610. <https://scholarship.law.vanderbilt.edu/cgi/viewcontent.cgi?article=1010&context=faculty-publications>; Slivinski, S. (2020). *A cosmetology board capture index: Measuring the influence of self-interest in occupational licensing* (Policy Report No. 2020-02). Center for the Study of Economic Liberty, Arizona State University. <https://cse.l.asu.edu/research/publications/ACosmetologyBoardCaptureIndex>
- 9 For a discussion of license creep, see Mellor and Carpenter, 2016, pp. 45–70.
- 10 Examples include boards regulating dentistry (which have gone after teeth whiteners); dietetics and nutrition (health coaches); embalming and cremation (casket sales, headstone sales); engineering and land surveying (mappers and drone photographers); private detection (computer repair, unclaimed property recovery); and veterinary medicine (horse tooth floaters). Institute for Justice. (2015, July 17). *Teeth-whitening ruling is nothing to smile about* [Press release]. <https://ij.org/press-release/teeth-whitening-ruling-is-nothing-to-smile-about/>; Powers, M. (2019, July 18). *Federal court upholds censorship of dietary advice* [Press release]. Institute for Justice. <https://ij.org/press-release/federal-court-upholds-censorship-of-dietary-advice/>; Kramer, J. (2015, March 21). *U.S. Supreme Court denies case examining constitutionality of economic protectionism* [Press release]. Institute for justice. <https://ij.org/press-release/oklahoma-caskets-latest-release/>; Institute for Justice. (2018a, February 23). *Federal judge upholds protectionist New Jersey headstone law* [Press release]. <https://ij.org/press-release/federal-judge-upholds-protectionist-new-jersey-headstone-law/>; Suderman, P. (2024b, September 10). *California veteran and entrepreneur asks Supreme Court to uphold First Amendment right to provide information to willing customers* [Press release]. Institute for Justice. <https://ij.org/press-release/california-veteran-and-entrepreneur-asks-supreme-court-to-uphold-first-amendment-right-to-provide-information-to-willing-customers/>; Suderman, P. (2024c,

- September 10). *North Carolina drone photographer asks Supreme Court to uphold First Amendment right to provide information to willing customers* [Press release]. Institute for Justice. <https://ij.org/press-release/north-carolina-drone-photographer-asks-supreme-court-to-uphold-first-amendment-right-to-provide-information-to-willing-customers/>; Kramer, J. (2008, October 31). *Texas private security board again refuses to exempt computer repair from licensing law* [Press release]. Institute for Justice. <https://ij.org/press-release/texas-private-security-board-again-refuses-to-exempt-computer-repair-from-licensing-law/>; Suderman, P. (2024a, March 14). *Small business owner sues Illinois for the right to help property owners claim their lost property* [Press release]. Institute for Justice. <https://ij.org/press-release/small-business-owner-sues-illinois-for-the-right-to-help-property-owners-claim-their-lost-property/>; Powers, M. (2008, June 23). *Minnesota district court upholds economic protectionism* [Press release]. Institute for Justice. <https://ij.org/press-release/minnesota-district-court-upholds-economic-protectionism/>
- 11** See, e.g., Wimer, A. (2018, June 4). *New specialty braiding license signed into law* [Press release]. Institute for Justice. <https://ij.org/press-release/new-specialty-braiding-license-signed-into-law/>; Wilson, J. J. (2015, June 26). *Texas Supreme Court strikes down useless eyebrow threading license* [Press release]. Institute for Justice. <https://ij.org/press-release/texas-supreme-court-strikes-down-useless-eyebrow-threading-license/>; King, D. (2024, October 16). *Victory: Oklahoma eyelash extension specialist dismisses lawsuit after state grants her license* [Press release]. Institute for Justice. <https://ij.org/press-release/victory-oklahoma-eyelash-extension-specialist-dismisses-lawsuit-after-state-grants-her-license/>; Institute for Justice. (2018b, March 8). *North Carolina makeup artists declare victory over makeup police* [Press release]. Institute for Justice. <https://ij.org/press-release/north-carolina-makeup-artists-declare-victory-makeup-police/>
- 12** See, e.g., Carollo, N. A., Hicks, J. F., Karch, A., & Kleiner, M. M. (2022). *The origins and evolution of occupational licensing in the United States* [Preliminary draft]. <https://www.aeaweb.org/conference/2023/program/paper/356kQYiG>; Sanchez, K., Smith Pohl, E., & Knepper, L. (2022). *Too many licenses? Government “sunrise reviews” cast doubt on barriers to work*. Institute for Justice. <https://ij.org/report/too-many-licenses/>; Mellor and Carpenter, 2016; Thornton, R. J., & Timmons, E. J. (2015, May). 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>; Carpenter, D. M. (2007). *Designing cartels: How industry insiders cut out competition*. Institute for Justice. <https://ij.org/report/designing-cartels-2/>
- 13** Alvarez, S. P., Scheck, M., & Smith, D. J. (2023). *Examining the public health rationale for barber licensure during the Progressive Era*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4253108; Carollo et al., 2022; Corley, T., & Witcher, M. M. (2021). Barber licensing in Arkansas: Public health or private gain? *Cato Journal*, 41(1), 115–138. <https://www.cato.org/cato-journal/winter-2021/barber-licensing-arkansas-public-health-or-private-gain>; Gellhorn, W. (1976). The abuse of occupational licensing. *The University of Chicago Law Review*, 44(1), 6–27. <https://chicagounbound.uchicago.edu/uclrev/vol44/iss1/4>
- 14** Alvarez et al., 2023. The first barber college was established in 1893 and went on to become a national chain in relatively short order. The curriculum could be completed in a matter of weeks. Prior to the rise of barber colleges, the traditional route into the occupation was a yearslong apprenticeship that “often involved a lengthy initial period doing menial tasks . . . that imparted no barbering skills and often offered little compensation.” Alvarez et al., 2023, p. 18. The unions did not like people bypassing this system by going to barber college or the fact that barber colleges ran barbershops where people could get discount services from students learning the trade, so they tried to drive the schools out of business. See also Corley and Witcher, 2021.
- 15** Alvarez and Smith, 2023.
- 16** Knepper et al., 2022.
- 17** Menjou, M., Bednarczuk, M., & Hunter, A. (2021). *Beauty school debt and drop-outs: How state cosmetology licensing fails aspiring beauty workers*. Institute for Justice. <https://ij.org/report/beauty-school-debt-and-drop-outs/>
- 18** Menjou et al., 2021. The imbalance between cosmetology student debt and future earnings is such that at least some cosmetology programs may struggle to maintain eligibility for federal student aid programs under the federal government’s new “Gainful Employment” rule. The same is likely true for programs in closely related fields like barbering and manicuring. U.S. Department of Education. (2023, September 27). *Biden-Harris administration announces landmark final rules to protect consumers from unaffordable student debt and increase transparency* [Press release]. <https://www.ed.gov/news/press-releases/biden-harris-administration-announces-landmark-final-rules-protect-consumers-unaffordable-student-debt-and-increase-transparency>

- 19** Cooper, P. (2022). *Is community college worth it? A comprehensive return on investment analysis*. Foundation for Research on Equal Opportunity. <https://freopp.org/is-community-college-worth-it-a-comprehensive-return-on-investment-analysis-72a631bb72ce>. See also, e.g., Cellini, S. R., & Turner, N. (2019). Gainfully employed? Assessing the employment and earnings of for-profit college students using administrative data. *Journal of Human Resources*, 54(2), 342–370. <https://doi.org/10.3368/jhr.54.2.1016.8302R1>; Lam, B. (2016, June 1). Most for-profit students wind up worse off than if they had never enrolled in the first place. *The Atlantic*. <https://www.theatlantic.com/business/archive/2016/06/for-profit-earnings/485141/>; Looney, A. (2020, November 10). *Dept. of Education's College Scorecard shows where student loans pay off... and where they don't*. Brookings Institution. <https://www.brookings.edu/research/ed-depts-college-scorecard-shows-where-student-loans-pay-off-and-where-they-dont/>; Simpson, K. M., Hendrickson, C., Dwayne Norris, C. D., Vander Molen, R. J., Vestal, D., Kavanagh, K., Lilly, S., Rege, G., & Smith, D. (2016). *Examination of cosmetology licensing issues*. American Institutes for Research. https://fbic.org/wp-content/uploads/2018/11/PBA_Examination_of_Cosmetology_Licensing_Issues_Abridged_2016_0912.pdf; Menjou et al., 2021.
- 20** See, e.g., N.Y. Gen. Bus. Law § 412; Ala. Admin. Code r. 34-7B-7.a.
- 21** Dodini, 2023.
- 22** Kleiner, 2006; Thornton and Timmons, 2013; Pizzola and Tabarrok, 2017; Kleiner and Vorotnikov, 2018; Timmons and Mills, 2018; Han and Kleiner, 2021; Dodini, 2023; Kleiner and Soltas, 2023.
- 23** Farronato, C., Fradkin, A., Larsen, B., & Brynjolfsson, E. (2020). *Consumer protection in an online world: An analysis of occupational licensing* (NBER Working Paper No. 26601). National Bureau of Economic Research. <https://www.nber.org/papers/w26601>. Ironically, those consumers who do care about licensing status may be harmed if they are under the impression they are receiving higher quality and safer service and that impression is incorrect (in other words, if licensing is giving them a false sense of security).
- 24** See, e.g., Sweetland, K., & Carpenter, D. M. (2022). *Raising barriers, not quality: Occupational licensing fails to improve services*. Institute for Justice. <https://ij.org/report/raising-barriers-not-quality/>; Deyo, D. (2022). Testing licensing and consumer satisfaction for beauty services in the United States. In M. M. Kleiner & M. Koumenta (Eds.), *Grease or grit? International case studies of occupational licensing and its effects on efficiency and quality* (pp. 123–142). W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/9780880996877>; Carpenter, D. M. (2012). Testing the utility of licensing: Evidence from a field experiment on occupational regulation. *Journal of Applied Business and Economics*, 13(2), 28–41. http://www.na-businesspress.com/jabe/carpenterdm_web13_2_.pdf; Bowblis, J. R., & Smith, A. C. (2021). Occupational licensing of social services and nursing home quality: A regression discontinuity approach. *ILR Review*, 74(1), 199–223. <https://doi.org/10.1177/0019793919858332>; Kleiner, M. M., & Kudrle, R. T. (2000). Does regulation affect economic outcomes? The case of dentistry. *The Journal of Law and Economics*, 43(2), 547–582. <https://www.journals.uchicago.edu/doi/epdf/10.1086/467465>; Timmons and Mills, 2018; Alvarez et al., 2023. Exceptions are few and usually study licensing of health occupations in the early 20th century. See Anderson, D. M., Brown, R., Charles, K. K., & Rees, D. I. (2020). Occupational licensing and maternal health: Evidence from early midwifery laws. *Journal of Political Economy*, 128(11), 4337–4383. <https://doi.org/10.1086/710555>
- 25** Sweetland and Carpenter, 2022; Deyo, 2022; Carpenter, 2012.
- 26** Studies exploring the health and safety effects of licensing among an array of occupations include Bowblis and Smith, 2021; Kleiner and Kudrle, 2000; Timmons and Mills, 2018.
- 27** Alvarez et al., 2023.
- 28** Alvarez et al., 2023.
- 29** Knepper et al., 2022.
- 30** For more discussion of this issue, see Knepper et al., 2022, pp. 37–43.
- 31** Connecticut General Assembly Legislative Program Review and Investigations Committee. (1980). *Sunset review: Regulation of hairdressers and cosmeticians* (Vol. 1-1). <https://www.cga.ct.gov/pri/docs/Sunset%201980/PRI%20Sunset%20Review%20Report%20on%20Regulations%20of%20Hairdressers%20and%20Cosmeticians-%201980.pdf>, p. 7; 1980 Conn. Acts No. 484 (Reg. Sess.); Kasprak, J. (2001). *Nail technicians* (OLR Research Report 2001-R-0626). Office of Legislative Research. <https://www.cga.ct.gov/2001/rpt/2001-R-0626.htm>
- 32** H.B. 6742, 2019 Gen. Assemb., Reg. Sess. (Conn. 2019); H.B. 7424, 2019 Gen. Assemb., Reg. Sess. (Conn. 2019); Connecticut State Department of Public Health. (n.d.).

Nail technician. <https://portal.ct.gov/dph/practitioner-licensing--investigations/nailtechs/nail-technician>

- 33** Carpenter, D. M., Knepper, L., Sweetland, K., & McDonald, J. (2017). *License to work: A national study of burdens from occupational licensing* (2nd ed.). Institute for Justice. <https://ij.org/report/license-to-work-2/>; Knepper et al., 2022. Another of Connecticut's neighbors, Rhode Island, required slightly more education than New York (300 clock hours compared to 250). However, because the Connecticut/Rhode Island border is largely rural, there were not enough firms for a meaningful comparison.
- 34** See H.B. 184, 2013 Leg., Reg. Sess. (Ala. 2012); Alabama Department of Archives & History (2022, December 6). Alabama Board of Cosmetology and Barbering ledgers [Blog post]. *For the Record: The Records Management Blog of the Alabama Department of Archives & History*. [https://fortherecordalabama.blog/2022/12/06/cosmetology-and-barbering-ledgers/#:~:text=The%20history%20of%20cosmetology%20licensure,regulation%20of%20the%20barbering%20profession](https://fortherecordalabama.blog/2022/12/06/cosmetology-and-barbering-ledgers/#:~:text=The%20history%20of%20cosmetology%20licensure,regulation%20of%20the%20barbering%20profession.). See also Thornton and Timmons, 2015; Timmons, E. J., & Thornton, R. J. (2018). There and back again: The de-licensing and re-licensing of barbers in Alabama. *British Journal of Industrial Relations*, 57(4), 764–790. <https://doi.org/10.1111/bjir.12438>
- 35** See H.B. 184, 2013 Leg., Reg. Sess. (Ala. 2012); Ala. Admin. Code r. 34-7B-17.a. Class 2 barbers are defined as barbers who “shave or trim the beard, cut or dress the hair, give facial or scalp massages with or without oils or creams or other preparations made for that purpose, hair care with the use of chemicals, which includes cutting and styling.” Class 1 barbers are defined as barbers who “only shave[] or trim[] the beard or trim[] the hair.” They do not require a license. Alabama Board of Cosmetology and Barbering. (n.d., c). *License types*. <https://www.aboc.alabama.gov/licensing/license-types>. See also Ala. Admin. Code r. 34-7B-11-4.
- 36** Carpenter et al., 2017. See also the “comparison dataset” used for Knepper et al., 2022, as it reflects corrections made to the data for Carpenter et al., 2017, relevant to barber licensing requirements: <https://ij.org/report/license-to-work-3/ltw3-data/>. One of the eight other states that required 1,000 hours of education, Massachusetts, also had an experience requirement.
- 37** Carpenter et al., 2017.
- 38** Carpenter et al., 2017. Four of the states that, like Mississippi, required 1,500 hours of education also had experience requirements.
- 39** Carpenter et al., 2017.
- 40** As of 2022, this was still the case. Knepper et al., 2022. In addition to education, both during the study period and as of 2022, most states’ barber licenses required exams, fees, and age and grade minimums. The following states’ licenses required experience (typically in the form of an apprenticeship) on top of their education requirements during the study period: Kentucky, Massachusetts, Minnesota, Nevada, North Carolina, North Dakota, South Dakota. As of 2022, only Kentucky, Nevada, and North Carolina still had experience requirements. Carpenter et al., 2017; Knepper et al., 2022; <https://ij.org/report/license-to-work-3/ltw3-data/>
- 41** See, e.g., Ala. Admin. Code r. 250-X-3-.01(7); Fla. Admin. Code Ann. r. 61G3-19.011(14); Ga. Comp. R. & Regs. 240-4-.01(6-7); 30-1801-5 Miss. Code R. § 5:1; Tenn. Comp. R. & Regs. 0200-03-.11f.
- 42** See, e.g., Conn. Gen. Stat. § 19a-231; N.Y. Comp. Codes R. & Regs. tit. 19 § 160.13(a), 14(a); Ala. Admin. Code r. 250-X-3-.08; Mississippi Board of Barber Examiners. (n.d., b). *Protocol 200 barber business inspections*. http://www.msbarberboard.com/sites/default/files/mbbe.22.establishmentinspectionprotocol_0.pdf; Mich. Comp. Laws § 339.1111(1), .1113; Nev. Rev Stat. § 644A.600; Nevada State Board of Cosmetology. (n.d., a). *Inspection services*; <https://www.nvcosmo.com/inspection-services>; Ariz. Rev. Stat. Ann. § 32-542; Iowa Code § 157.11.
- 43** See, e.g., Connecticut State Department of Public Health. (2019). *Connecticut local health salon inspection form guidelines*. <https://portal.ct.gov/dph/practitioner-licensing--investigations/saloninspection/salon-inspection-form-guidelines>; New York State Department of State Division of Licensing Services. (2021). *Self-inspection checklist for appearance enhancement business owners*. https://dos.ny.gov/system/files/documents/2023/08/dos-2031-self-inspection-checklist-for-ae-business-owners_09.2021.pdf; Alabama Board of Cosmetology and Barbering. (n.d., a). *Alabama Board of Cosmetology inspection/citation report*. <https://www.aboc.alabama.gov/sites/default/files/2021-07/InspectionSheetExample.pdf>; Mississippi Board of Barber Examiners. (n.d., a). *Board of Barber Examiners inspection report*. http://www.msbarberboard.com/sites/default/files/mbbe.21.inspection.form.w.citations_0.pdf; Michigan Licensing and Regulatory Affairs. (2016). *Barber shop and college inspections FAQ*. <https://www.michigan.gov/lara/-/media/Project/Websites/lara/bpl/Barbers/Board-Information-and-FAQs/Barber-Shop-and-College-Inspections-FAQs.pdf?rev=b943127fb2ed406c9b77300f00256786&hash=472FCAADE6FD>

- F029160A012E56B597B2; Michigan Licensing and Regulatory Affairs. (n.d.). *Inspection requirements: Barber shop*. https://www.michigan.gov/-/media/Project/Websites/lara/bpl/Folder11/BARBER_INSPECTION_SHEET.pdf?rev=48b142a6c-5da4a3e88803b19990ce610; Nevada State Board of Cosmetology. (n.d., b). *Salon checklist*. https://www.nvcosmo.com/_files/ugd/505bd6_b64916fd497b4f7bad0b397d9673bb96.pdf; Arizona Barbering & Cosmetology Board. (n.d.). *Establishment self-inspection sheet*. <https://bcb.az.gov/sites/default/files/2024-02/2024%20Self-Inspection%20Sheet.pdf>; Iowa Board of Barbering & Cosmetology Arts and Sciences. (n.d.). *Self-inspection checklist*. <https://dial.iowa.gov/media/8294/download?inline=>
- 44** Conn. Gen. Stat. § 19a-231(b) (2018), Conn. Gen. Stat. § 19a-231(c) (2023); H.B. 6742, 2019 Gen. Assemb., Reg. Sess. (Conn. 2019); H.B. 7424, 2019 Gen. Assemb., Reg. Sess. (Conn. 2019); Connecticut State Department of Public Health, 2019.
- 45** Meriden, Conn., Code § 70-4(B) (2015), <https://ecode360.com/13482937>
- 46** Meriden, Conn., Code § 70-5(B) (2015), <https://ecode360.com/13482937>
- 47** New York State Department of State. (n.d.). *Nail specialty*. <https://dos.ny.gov/nail-specialty>; New York State Department of State Division of Licensing Services, 2021.
- 48** New York State Department of State Division of Licensing Services, 2021.
- 49** N.Y. Gen. Bus. Law § 160.14.
- 50** N.Y. Gen. Bus. Law § 410(e); 13 N.Y. Jur. 2d Businesses and Occupations § 376; New York State Department of State Division of Licensing Services, 2021.
- 51** New York State Department of State Division of Licensing Services, 2021.
- 52** Alabama Board of Cosmetology and Barbering. (n.d., b). *How to prepare for a shop inspection*. <https://www.aboc.alabama.gov/shops>
- 53** The sample inspection form presented here is available on the board's website: <https://www.aboc.alabama.gov/sites/default/files/2021-07/InspectionSheetExample.pdf>. It includes an attachment with explanations of the violations.
- 54** Ala. Admin. Code r. 250-X-3-.08(5)-(6).
- 55** Ala. Admin. Code r. 250-X-3-.08, (3)-(5).
- 56** Miss. Code § 73-5-7. In 2024, the Mississippi Legislature passed a bill to combine the barber and cosmetology boards. H.B. 313, 2024 Leg., Reg. Sess. (Miss. 2024).
- 57** The blank inspection form presented here is available on the board's website: http://www.msbarberboard.com/sites/default/files/mbbe.21.inspection.form.w.citations_0.pdf
- 58** 30-1801-10 Miss. Code R. § 10.
- 59** Mississippi Board of Barber Examiners, n.d., b.
- 60** Keele, L. J., & Titiunik, R. (2015). Geographic boundaries as regression discontinuities. *Political Analysis*, 23(1), 127–155. <https://doi.org/10.1093/pan/mpu014>
- 61** The fact that a section of the Connecticut/New York border runs through the Long Island Sound presents a complication for my research design. In essence, my design assumes that there is an inverse relationship between distance and the similarity of businesses and business environments. It is, of course, not very plausible to assume that there are nail salons in the water and that salons' distance to a line in the middle of a body of water functionally determines how comparable they and their environments are. For this reason, I excluded Long Island and used the land border to calculate salons' distance to the border. Salons in Long Island exhibited an average violation z-score of -0.264 and an average violation ratio of 0.021. While it would be methodologically unsound to make a direct comparison, these descriptive statistics are similar to Connecticut's descriptive statistics, which, if anything, reinforces my conclusion that there is no substantive difference in inspection outcomes across Connecticut and New York.
- 62** Majors, K. (2012, April 19). Regulations for barbers? *The Andalusia Star News*. <https://www.andalusiastarnews.com/2012/04/19/regulations-for-barbers/>
- 63** *we-ha.com*. (2019, January 15). Jillian Gilchrest proposes first bill: Requiring licenses for estheticians, nail and eyelash technicians. <https://we-ha.com/jillian-gilchrest-proposes-first-bill-requiring-licenses-for-estheticians-nail-and-eyelash-technicians/>. The sponsor also claimed that, absent manicurist licensing, Connecticut nail salons were a “hotbed” of human trafficking. Munson, E. (2019, January 14). CT could join 49 other states licensing nail techs. *ctpost*. <https://www.ctpost.com/politics/article/Connecticut-considers-licensing-nail-techs-13531775.php>
- 64** For example, more than two dozen individuals and organizations provided public testimony on Connecticut's bill to relicense manicurists (along

with estheticians and eyelash technicians), most of them principally in favor of the bill. Not a one provided any empirical evidence that unlicensed practice was harming public health and safety. See “Public Hearing Testimony” at this link: https://www.cga.ct.gov/asp/cgabillstatus/cgabillstatus.asp?selBillType=Bill&which_year=2019&bill_num=HB06742/. See also Puri, S. (2019, January 15). Proposed bill seeks state licensing for beauty technicians. *NBC Connecticut*. <https://www.nbcconnecticut.com/news/local/proposed-bill-seeks-state-licensing-for-beauty-technicians/601/>; Fox61 Staff. (2019, January 14). Connecticut lawmakers want to crack down on who can give you a manicure. *Fox61*. <https://www.fox61.com/article/news/local/outreach/awareness-months/connecticut-lawmakers-want-to-crack-down-on-who-can-give-you-a-manicure/520-e93b784b-0c59-4583-84d3-564bf574140b>; Shackford, S. (2019a, February 5). ‘Human trafficking’ used as excuse to try to destroy nail salon jobs in Connecticut. *Reason*. <https://reason.com/2019/02/05/human-trafficking-used-as-excuse-to-try/>; Shackford, S. (2019b, June 6). How oppressive will Connecticut’s new nail salon occupational licensing be? Stay tuned. *Reason*. <https://reason.com/2019/06/06/how-oppressive-will-connecticuts-new-nail-salon-occupational-licensing-be-stay-tuned/>; Dawkins, S. (2012, April 19). Bill would create regulation for barber shops. *The Clanton Advertiser*. <https://www.clantonadvertiser.com/2012/04/19/bill-would-create-regulation-for-barber-shops/>; Cason, M. (2013, May 31). Alabama gears up to license and regulate barbers under new law. *AL.com*. https://www.al.com/wire/2013/05/alabama_gears_up_to_license_an.html

b). *BarberSAFE infection control certificate*. <https://americanbarber.org/abcc/barbersafe/>

- 65** See e.g., Alvarez et al., 2023; Bowblis and Smith, 2021; Kleiner and Kudrle, 2000; Timmons and Mills, 2018.
- 66** Greenberg, D. (2021). Regulating glamour: A quantitative analysis of the health and safety training of appearance professionals. *University of Illinois Chicago Law Review*, 54(1), 123–246. <https://repository.law.uic.edu/cgi/viewcontent.cgi?article=2840&context=lawreview>
- 67** Greenberg, 2021. Nebraska’s barber license requires 1,800 hours of education, of which an estimated 36% cover health and safety.
- 68** Barbicide. (2020, March 11). *Barbicide infection control best practices*. <https://www.barbicide.com/barbicide-infection-control-best-practices/>; Barbicide. (2021, June 1). *Health & public safety – The basis of licensure* [Blog post]. <https://www.barbicide.com/ask-leslie-june-2021/>
- 69** Barbicide. (n.d.). *Barbicide certification*. <https://certifications.barbicide.com/courses/barbicide-certification/>; Prevention Salon and Spa Disinfectants. (n.d.). *Infection prevention certification*. <https://preventiondisinfectants.com/certification/>; American Barber Association. (n.d.,
- 70** Some states give aspiring barbers and manicurists the option of completing an apprenticeship in lieu of a barber or beauty school program. Barber-license.com. (n.d.). *How to decide if a barbering apprenticeship is right for you*. <https://www.barber-license.com/barber-apprenticeships/>; Cosmetology-license.com. (n.d.). *Nail technician licensing requirement*. <https://www.cosmetology-license.com/nail-technician-license/>. Aspirants apparently avail themselves of this option fairly rarely. For example, according to data from the U.S. Department of Labor, there were in the whole of the United States only about 15,000 active apprenticeships in fiscal year 2021 in the “other services” industry, a large catchall category that includes barbers, manicurists, and other beauty and personal care occupations, along with dozens of other occupations. U.S. Department of Labor (n.d.). *FY 2021 data and statistics*. <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2021>; U.S. Bureau of Labor Statistics. (2024, October 2). *Industries at a glance: Other services (except public administration): NAICS 81*. <https://www.bls.gov/iag/tgs/iag81.htm>. The reasons for this are not well studied, but one possible explanation is that there are only 257 barber and 120 manicurist apprenticeship programs registered with the Department of Labor nationwide. ApprenticeshipUSA (n.d.). *Apprenticeship programs*. <https://www.apprenticeship.gov/finder/active-program/listings?searchType=active-programs&search=&location=>
- 71** Research on accountant and teacher licensing has found evidence that stricter licensing may be a barrier to higher-ability aspirants. See, e.g., Barrios, J. M. (2022). Occupational licensing and accountant quality: Evidence from the 150-hour rule. *Journal of Accounting Research*, 60(1), 3–43. <https://doi.org/10.1111/1475-679X.12408>; Berger, M. C., & Toma, E. F. (1994). Variation in state education policies and effects on student performance. *Journal of Policy Analysis and Management*, 13(3), 477–491. <https://doi.org/10.2307/3325387>. And at least one study has found evidence that less burdensome licensing for teachers may induce higher-ability aspirants to enter the occupation. Shuls, J. V., & Trivitt, J. R. (2015). Teacher effectiveness: An analysis of licensure screens. *Educational Policy*, 29(4), 645–675. <https://doi.org/10.1177/0895904813510777>
- 72** H.B. 6742 Hearing (statement of Tara Swagger), available at <https://www.cga.ct.gov/2019/gaedata/TMY/2019HB-06742-R000325-Swagger,%20Tara-TMY.PDF>
- 73** See Carpenter, D. M., & McGrath, L. (2014). *The balance between public protection and the right to earn a living*

[Resource brief]. Council on Licensure, Enforcement and Regulation. <https://ij.org/report/the-balance-between-public-protection-and-the-right-to-earn-a-living/>; Hemphill, T. A., & Carpenter, D. M. (2016). Occupations: A hierarchy of regulatory options. *Regulation*, 39(3), 20–24. <https://www.cato.org/regulation/fall-2016/occupations-hierarchy-regulatory-options>; Ross, J. K. (2017). *The inverted pyramid: 10 less restrictive alternatives to occupational licensing*. Institute for Justice. <https://ij.org/report/the-inverted-pyramid/>

- 74** These include construction trades, where inspections are already common and, as with beauty and personal care occupations, often appear alongside licensing requirements, as well as food-service industry jobs, where inspections are used to the exclusion of burdensome occupational licensing. Ross, 2017. To be clear, food handling permits are commonly required in the food-service industry, although not universally, and not necessarily for all workers. However, these permits look very different from licenses for barbers and beauty workers. The requirements can typically be satisfied in a few hours, often online, and at a very low cost. Moreover, they are specifically targeted to food safety. See, e.g., Krook, D. (n.d.). How to get (and keep) a food handlers permit [Blog post]. *TouchBistro*. <https://www.touchbistro.com/blog/how-to-get-and-keep-a-food-handlers-permit/>; WebrestaurantStore. (2020, September 24). *Food handling certification: How to obtain a food handling certificate*. <https://www.webstaurantstore.com/article/126/food-handling-certification-how-to-obtain-a-food-handling-certificate.html>; Henshaw, A. (2023, July 17). Food handlers card requirements by state [Blog post]. *Next Insurance*. <https://www.nextinsurance.com/blog/food-handler-license-requirements/>. See also Anderson, D. M., Charles, K. K., McKelligott, M., & Rees, D. I. (2022). *Safeguarding consumers through minimum quality standards: Milk inspections and urban mortality, 1880–1910* (Working Paper No. 30063). National Bureau of Economic Research. <http://www.nber.org/papers/w30063>
- 75** On the recognition point, see the Healthy Nail Salon Recognition Program in California for an example. California Department of Toxic Substances Control. (2018). *Healthy Nail Salon Recognition Program guidelines*. <https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/10/AB2125-HNSR-Program-Guidelines.pdf>. As for encouraging businesses to post their inspection results, some jurisdictions already require this. See, e.g., Ala. Admin. Code r. 250-X-3-.01(10)(c); 30-1801-10 Miss. Code R. § 10.
- 76** Lux, L., Marshall, J., Parker, S., Collard, S., Rogers, B., & Fuson, S. (2014). Do educational interventions targeted to nail salon workers and customers improve infection control practices in these salons? *Journal of the American Podiatric Medical Association*, 104(2), 174–176. <https://doi.org/10.7547/0003-0538-104.2.174>
- 77** As described above, food handling permits are commonly required (though not universally, and not necessarily for all workers), but these are very different from the expensive and time-consuming licenses typically required for beauty and personal care occupations.
- 78** The Hair Council. (n.d., a). *The Barber Council*. <https://haircouncil.org.uk/about-us/barber-council/>; The Hair Council. (n.d., b). *About the Hair Council*. <https://haircouncil.org.uk/about-us/hair-council/>; Conway, L. (2022). *Regulation of hairdressers* (Briefing Paper No. 8592). House of Commons Library, UK Parliament. <https://researchbriefings.files.parliament.uk/documents/CBP-8592/CBP-8592.pdf>. The Hair & Barber Council wants the registration scheme to become mandatory, but its campaign has so far been unsuccessful.
- 79** California Department of Toxic Substances Control. (n.d.). *Healthy Nail Salon Recognition Program*. <https://dtsc.ca.gov/scp/healthy-nail-salon-recognition-program/>; California Department of Toxic Substances Control, 2018. See also Garcia, E., Sharma, S., Pierce, M., Bhatia, S., Argao, S. T., Hoang, K., & Quach, T. (2015). Evaluating a county-based Healthy Nail Salon Recognition Program. *American Journal of Industrial Medicine*, 58(2), 193–202. <https://doi.org/10.1002/ajim.22379>
- 80** See, e.g., U.S. Department of Labor Occupational Safety and Health Administration. (2012). *Stay healthy and safe while giving manicures and pedicures: A guide for nail salon workers* (OSHA 3542-05 2012). <https://www.osha.gov/sites/default/files/publications/3542nail-salon-workers-guide.pdf>; California Board of Barbering and Cosmetology. (n.d.) *CASafeSalon: Safety data sheets*. https://www.barbercosmo.ca.gov/consumers/safesalon_datasheet.pdf; California Hazard Evaluation System and Information Service. (2000). *Artificial fingernail products: A guide to chemical exposures in the nail salon*. <https://www.cdph.ca.gov/Programs/CCDC/PHP/DEODC/OHB/HESIS/CDPH%20Document%20Library/artnails.pdf>; CareerSafe. (n.d.). *OSHA 10-hour general industry (cosmetology)*. <https://www.careersafeonline.com/courses/osha-10-hour-general-industry-cosmetology>; Barbicide, n.d.; Prevention Salon and Spa Disinfectants, n.d.; American Barber Association, n.d., b.
- 81** Rosemberg, M.-A. S., Le, A. B., Luu, M., & Nguyen, T. (2024). An online training module to increase knowledge and awareness of chemical exposures and safety measures among nail salon workers. *Journal of Occupational and Environmental Medicine*, 66(9), 776–771. <https://doi.org/10.1097/JOM.0000000000003153>; Mayer,

- A. S., Brazile, W. J., Erb, S., Autenrieth, D. A., Serrano, K., & Van Dyke, M. V. (2015). Developing effective worker health and safety training materials: Hazard awareness, identification, recognition, and control for the salon industry. *Journal of Occupational and Environmental Medicine*, 57(5), 537–542. <https://doi.org/10.1097/JOM.0000000000000400>. See also Garcia et al., 2015.
- 82** Bailey, M. (2020, May 12). Beauty professionals take COVID-19 certification course to ease customers' safety concerns. *ABC 33/40 News*. <https://abc3340.com/news/local/beauty-professionals-take-covid-19-certification-course-to-ease-customers-safety-concerns>; American Barber Association. (n.d., a). *BarberSAFE COVID 19 compliance for barbershops*. <https://americanbarber.org/abcc/barbersafe/barbersafe-covid-19-barbershop/>
- 83** Farronato et al., 2020.
- 84** Voluntary training and certification enable workers and businesses to set themselves apart from competitors, if they wish, without barring other entrants.
- 85** See, e.g., International Institute of Cosmetology (n.d.). *Nail technician program*. <https://www.studyhair.com/programs/nails/>; Bravado Academy. (n.d.). *Nail technician*. <https://bravadoacademy.com/nail-technician>; Gorgeous by Glam. (n.d.). *Nail technician*. <https://gorgeousbyglam.com/nail-technician>; River Valley Esthetics Institute. (n.d.). *Nail technology*. <https://www.myrvei.com/nail-technology>; Belle Academy of Cosmetology. (n.d.). *Nail technology*. <https://www.belleacademy.com/nail-technician.html>; Branford Academy of Hair & Cosmetology. (n.d.). *Nail technician*. <https://www.branfordacademy.com/courses-Nail-Tech.php>. A public school program would be somewhat less expensive. See CT State Community College. (n.d.). *Nail technician*. <https://ctstate.edu/programs/nail-technician>. See also Nail Tech 101. (n.d.). *Nail technician schools in Connecticut*. <https://nailtech101.com/nail-technician-schools-in-connecticut/>
- 86** In 2023, the median annual wage for manicurists (and pedicurists) in Connecticut was \$30,280. U.S. Bureau of Labor Statistics. (n.d.). *Occupational employment and wage statistics (OEWS) tables: May 2023 state*. <https://www.bls.gov/oes/tables.htm>
- 87** See, e.g., Art of Hair Academy. (n.d.). *Tuition & fees*. https://www.artofhairacademy.org/_files/ugd/34dbba_55b4a6fff0694aae90fa77facf23225f.pdf; Barber Concierge Academy. (n.d.). *Contract costs and payment terms*. https://www.barberconciergeacademy.com/_files/ugd/13a518_c844b5d0b80b42b88694d5b59b035b37.pdf; Chris Beauty College. (n.d.). *Barber*. <https://www.chrisbeautycollege.edu/services/barber>; Dynasty College. (n.d.). *Tuition & fees*. <https://www.dynastycollege.net/financial-aid>; Traxler's School of Hair. (2022). *Student handbook\catalog*. <https://irp.cdn-website.com/8776e448/files/uploaded/catalog.pdf>; Upper Kutz Barber & Style College. (2024). *School catalog/handbook: 2024–2025 school term*. https://www.upperkutzbarbercollege.com/_files/ugd/42fbce_cd838aabb1994abfa027a19e374c42fc.pdf. As with Connecticut manicurist programs, a public school barber program would be somewhat less expensive. See, e.g., Hinds Community College. (n.d., a). *Barber, stylist*. <https://www.hindscc.edu/pathways/hospitality-human-services/barber-stylist>; Hinds Community College. (n.d., b). *Tuition & fees*. <https://www.hindscc.edu/admissions/costs-aid/tuition-fees>
- 88** U.S. Bureau of Labor Statistics, n.d.
- 89** Cooper, 2022.
- 90** See, e.g., Blair, P. Q., & Chung, B. W. (2022). Job market signaling through occupational licensing. *The Review of Economics and Statistics*, 1–45. https://doi.org/10.1162/rest_a_01265; Dodini, 2023; Kim, J. J. (2022). Racial disparities in social workers' licensing rates. *Research on Social Work Practice*, 32(4), 374–387. <https://doi.org/10.1177/10497315211066907>; Menjou et al., 2021.
- 91** Zhang, J., & Oymak, C. (2018). *Participants in subbaccalaureate occupational education: 2012* (NCES 2018-149). National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018149>; Fry, R. (2021). *First-generation college graduates lag behind their peers on key economic outcomes*. Pew Research Center. https://www.pewresearch.org/wp-content/uploads/sites/20/2021/05/PSDT_05.18.21_parental.education.report.pdf
- 92** Menjou et al., 2021.
- 93** Menjou et al., 2021.
- 94** Alvarez et al., 2023.
- 95** National Center for Education Statistics. (2016). *Adult training and education survey*. <https://nces.ed.gov/nhes/ates.asp>
- 96** The Institute for Justice has model legislation for repealing individual occupational licenses and replacing them with facility licenses and inspections. See <https://ij.org/legislation/salon-inspection-act/>
- 97** Calonico, S., Cattaneo, M. D., & Titiunik, R. (2015). rdro-

bust: An R package for robust nonparametric inference in regression-discontinuity designs. *The R Journal*, 7(1), 38–51. <https://doi.org/10.32614/RJ-2015-004>

- 98** Bartalotti, O., & Brummet, Q. (2017). Regression discontinuity designs with clustered data. In M. D. Cattaneo & J. C. Escanciano (Eds.), *Regression discontinuity designs: Theory and applications* (Advances in Econometrics, Vol. 38, pp. 383–420). Emerald Publishing. <https://doi.org/10.1108/S0731-905320170000038017>
- 99** See Calonico, S., Cattaneo, M. D., & Farrell, M. H. (2020). Optimal bandwidth choice for robust bias-corrected inference in regression discontinuity designs. *The Econometrics Journal*, 23(2), 192–210. <https://doi.org/10.1093/ectj/utz022>
- 100** Lee, D. S., & Lemieux, T. (2010). Regression discontinuity designs in economics. *Journal of Economic Literature*, 48(2), 281–355. <https://doi.org/10.1257/jel.48.2.281>
- 101** See, e.g., U.S. Bureau of Labor Statistics. (2023, September). *Consumer expenditure surveys, 2022*. <https://www.bls.gov/cex/tables/calendar-year/mean-item-share-average-standard-error/cu-income-before-taxes-2022.pdf>
- 102** Cattaneo, M. D, Idrobo, N., & Titiunik, R. (2019). *A practical introduction to regression discontinuity designs: Foundations*. Cambridge University Press.
- 103** Compare Cattaneo et al., 2019.
- 104** Cattaneo et al., 2019.
- 105** Breen, R., Karlson, K. B., & Holm, A. (2018). Interpreting and understanding logits, probits, and other nonlinear probability models. *Annual Review of Sociology*, 44, 39–54. <https://doi.org/10.1146/annurev-soc-073117-041429>
- 106** Cattaneo et al., 2019.

About the Author



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Matthew P. West is a senior research analyst at the Institute for Justice, where he develops and conducts original social science and policy research to advance IJ's mission. Prior to joining IJ, he was an assistant professor of criminology and criminal justice at Southern Illinois University. There, he taught courses on research methods, statistics, and the justice system, mentored graduate students, and performed and published empirical research on topics like legal decision-making.

Matthew earned a B.S. in psychology from Aquinas College, an M.A. in criminal justice from the University of Nevada-Reno, and a Ph.D. in criminology and criminal justice from the University of Nevada-Las Vegas.

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ABOUT IJ

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