

Reforming Occupational Licensing in North Dakota

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Executive Summary

North Dakota is experiencing a tight labor market with an inability to attract workers for various occupations. While several policies may be considered to alleviate this workforce shortage, policies that remove or reduce restrictions on workers are particularly attractive; they can potentially increase the number of available workers at a very low cost.

One low-cost policy to reduce restrictions on workers is to reform occupational licensing rules. Previous research has shown that occupational licensing has a limited impact on service quality while significantly limiting opportunity.

This research brief highlights several occupations where North Dakota has training requirements, license fees, and/or education requirements that significantly exceed the norm in other states. In professions where the state's licensing requirements exceed those of other states, North Dakota should consider reducing those requirements. Reducing requirements so that they are below (or at least the same as) other states may remove an important barrier preventing North Dakota businesses

from attracting needed workers.

One efficient way to reduce licensing barriers for the state would be to adopt Universal Recognition of Occupational Licensing. According to the Institute for Justice, 20 states have adopted universal licensing, where licenses from other states are recognized. By recognizing licenses from other states, an important impediment could be removed for individuals who wish to pursue work in North Dakota in the same occupation where they are able to work in another state.

Introduction

North Dakota faces a significant labor shortage. As of November 2024, the state has approximately 0.4 unemployed persons per job opening^[1]. This translates to 2.5 open positions for every unemployed person, meaning that even full employment would leave many jobs unfulfilled.

According to a January 2025 report from the North Dakota Job Service, the state had 15,025 online job openings — an increase of

1,869 from the previous month. [II] The highest number of openings were in “Health Care and Social Assistance” (3,246), followed by “Agriculture, Forestry, Fishery and Hunting” (2,485), and “Retail Trade” (1,239) [III].

This is not a new issue; North Dakota has experienced a tight labor market for several years. In a 2022 North Dakota Business Conditions and Climate Survey, 62 percent of North Dakota businesses believed the number one thing holding back their performance was an inability to attract and retain qualified workers. The workforce shortage experienced by employers is forcing policy makers to consider innovative measures, such as a recent grant aimed at seeking local solutions to workforce issues.[IV] Another potential solution is occupational licensing reform.

An occupational license is a minimal legal requirement that is set by a government for a person to work in a specific occupation[V]. A 2015 report from the White House estimated that nearly 25 percent of all workers in the United States require some form of occupational license to formally work in their professions —five times the percentage in the 1950s.[VI],[VII]. Occupational licenses vary in form, ranging from formal educational requirements such as needing a degree or an apprenticeship, to paying a fee or taking a test [VIII].

Justifications for Licensing

There are two dominant theories that have been articulated in the economics profession

to justify occupational licensing. Robert Thornton and Edward Timmons describe one such theory as the “public interest view”, which argues that licensing serves to communicate information regarding the service to the consumer[IX]. This idea is rooted in the concept of asymmetric information. As Hayne Leland explains, because certain professions hold an informational advantage over consumers regarding their qualifications, licensing may be a way to certify quality[X].

Another school of thought argues that occupational licensing constitutes an unnecessary barrier to entry to keep competitors out of the market. Accordingly, licensing can only help those that are already established in their respective industries[XI]. Specifically, by keeping the number of new entrants low, they seek to keep the prices of their services high[XII]. This opens the possibility that licensing could be adversely affecting employment opportunities.

Literature Review

These two competing theories have spawned a rich collection of empirical literature. The literature generally supports the idea that occupational licensing does not significantly impact the quality of service. However, it can hurt employment opportunities.

Because of a lack of data on quality, measuring the impact of occupational licensing on quality is difficult[XIII]. However, the few studies that have been done in this area show a negligible impact of

licensing on quality. For example, Timmons et al. examine a 2017 executive order in Idaho that required all licensing boards to disclose all disciplinary actions made against their members[XIV]. The authors examine these orders to assess the extent to which licensing boards serve as an effective check on quality[XV]. They find that disciplinary actions related to quality are very rare with only 0.01 to 0.38 percent of licenses disciplined for quality reasons[XVI]. Another article, by Morris Kleiner and Robert Kurdle attempts to answer this question by looking at how licensing for dentists impacts the dental health of new air force recruits[XVII]. Observing data from 1978 to 1987 they find no significant impact of licenses on quality[XVIII]. Finally, another study conducted by Joshua Angrist and Jonathan Guryan examines whether increasing testing requirements for teachers leads to an increase in teacher quality[XIX]. They found that testing requirements have either a statistically insignificant or a negative impact on teacher quality[XX].

Studies examining the impacts of occupational licensing on labor markets have looked at the potential for licensing to increase wages and limit opportunity. These types of studies have examined the impacts of occupational licensing on generalized labor markets, specific occupations, and disadvantaged groups. Kleiner and Kruger, using a national employment survey, find that having an occupational license is associated with a wage increase of around 14%, compared to not having an occupational license[XXI].

Another paper by Gittleman et al. uses data from the BLS's Current Population Survey to find that workers who are licensed on the federal level earn 11.4% higher than those who are not licensed. Furthermore, those workers who are licensed on the state level earn 4.0% more than those who are not licensed [XXII].

One study that examines more specific occupations is by Yerlowits and Ingram, who examine how occupational licensing has impacted entry into the medical field. In their study, they look at the demand shock from states that signed onto the Affordable Care Act (ACA) and examine the effect of this shock on entry into the EMT field along with the impact of licensing requirements[XXIII]. They find that for young people, an expected increase in entry of EMTs from the ACA is completely offset by an 18% decrease in EMT entry from licensing restrictions[XXIV]. Another example is from Zapletal, who examines whether occupational licensing impacts the number of cosmetologists by measuring the entry and exit rate of that industry[XXV]. Using data from the US Census Bureau's Longitudinal Business Database, he finds that licensing reduces the yearly entry rate of people who join the cosmetic industry by around -0.5% and the yearly exit rate of people leaving by around -0.41%[XXVI].

One study that tests whether ethnic minorities are impacted more by occupational licensing rules is by Law and Marks[XXVII]. While they generally found that occupational licensing restrictions had

no impact on minority workers, they found that African American barbers who were subjected to licensing in the 1930s were less likely to be employed in their profession [XXVIII]. A more recent study by Boesch et. al finds that workers of a minority background are less likely to be licensed than their White counterparts[XXIX]. Specifically, Latinos are 11% less likely, Asians are 6%, African Americans are 5% and Native Americans are 4%[XXX]. They argue that this underrepresentation in licensing acts as a significant entry barrier, preventing minority workers from accessing higher-paying positions that licenses typically offer[XXXI].

In sum, most studies seem to indicate that occupational licensing does not improve quality, but could lead to negative consequences such as a lower supply of workers for firms and limited employment opportunities for individuals.

Measuring Where North Dakota Stands on Occupational Licensing

To develop effective policy, it is critical to compare North Dakota's occupational licensing requirements with those of other states. This analysis uses data from the Archbridge Institute's 2023 State Occupational Licensing Index (SOLI), covering 343 occupations[XXXII]. The dataset details licensing requirements that each US state, and Washington D.C, issues for each occupation, including mandatory fees, educational requirements, training

requirements, and length of experience. From this data, we measure restrictiveness in terms of three distinct categories: training requirements, fees, and educational requirements.

Training Days Comparison

The first measure assessed is the amount of training days that each state requires for a profession. Specifically, while it can be argued that more training can result in a higher service quality, the time that one takes to get training for an occupation could be spent on other productive activities. Also, lengthy time requirements could be a deterrent for those who may be unable to commit long hours. For every occupation, the following are extracted: the required days of training in North Dakota, the median number of training days for the entire U.S., the percentage difference between the days of training required in North Dakota and the mean, and North Dakota's rank in restrictiveness (from most restrictive to least). Table 1 shows occupations where North Dakota's training days are at least 10 percent higher than the U.S. median.

Table 1: Occupations Where ND's Training Days Are At Least 10% Above the US Median

Table 1: Occupations Where ND's Training Days Are At Least 10% Above the US Median				
Occupation	North Dakota Days	Median Days	Percentage Above the Median	North Dakota Rank (from Most Restrictive to Least)
Private Investigators	333	11	2930	24
State Police Officer	710	147	383	2
Hearing Aid Dealer Hearing Aid Dispensers Hearing Instrument Specialists	355	78	358	9
Public School Superintendent	1775	430	313	7
Nursing Home Administrator	710	215	230	2
Auctioneer	355	0	Undefined	11
Boxing Promoter	355	0	Undefined	3
Dental Assistant	720	0	Undefined	2
Electrician	540	0	Undefined	5
Limited X-ray Machine Operators	33	0	Undefined	7
Manicurist	58	0	Undefined	16
Master Electrician (Class A)	355	0	Undefined	21
Master Plumber	1277	0	Undefined	10
Medical Clinical Laboratory Technicians	50	0	Undefined	9
Music Therapists	180	0	Undefined	5
Polygraph Examiner	180	0	Undefined	12
Preschool Teacher Special Education	70	0	Undefined	11
Professional Fighter Second	355	0	Undefined	1
Professional Fighter Timekeeper	355	0	Undefined	3
Professional Fighting Judge	355	0	Undefined	10
Residential Wireman (Electrician)	500	0	Undefined	10
Speech-Language Pathologist Assistants	17	0	Undefined	9
Subsurface Sewage Installer	1135	0	Undefined	1
Veterinarian Technicians	710	0	Undefined	4
Journeyman Plumber	1420	730	95	6
Licensed Real Estate Appraiser	333	192	74	9
Level Class II Wastewater Operator	1065	710	50	12
Public School Principals	1065	710	50	15
Certified Clinical Supervisor (CCS)	1000	710	41	25
Acupuncturists	438	318	38	3
Level Class III Wastewater Operator	1420	1065	33	12
Level Class IV Wastewater Operator	1775	1420	25	14

As Table 1 shows, there are many occupations where North Dakota’s days of training are well above other states. For example, Master Plumbers requires nearly 1300 days of training in North Dakota and zero days for the median state. Other examples include dental assistants, electricians, veterinary technicians, and state police officers. One thing notable about this table is the presence of occupations that are in North Dakota’s most needed occupational category: “Health Care and Social Assistance”, including hearing aid dealer, nursing home administrator, dental assistant, and medical laboratory technician.

Table 2 shows occupations where North Dakota falls below the median for Training Days. Occupations that are much less restrictive than other states include alcohol and drug counselors, podiatrists, occupational therapists, and speech-language pathologists.

Table 2: Occupations Where ND’s Training Days Are At Least 10% Below the US Median

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Occupation	North Dakota Days	Median Days	Percentage Below the Median	North Dakota Rank (From Most Restrictive to Least)
Clinical Social Worker	500	625	-20	40
Certified Nurse Aides Assistant	13	16	-21	40
Real Estate Salesperson	8	10	-25	32
Family Marriage Therapist Counselor	333	500	-33	34
Asbestos Management Planner	0	2	Undefined	33
Barber Teacher	0	355	Undefined	41
Certified Peer Recovery Support Specialist	0	11	Undefined	45
Certified Prevention Specialist	0	333	Undefined	46
Certified Real Estate Appraiser Trainee Assistant	0	12.5	Undefined	37
Esthetician Instructor	0	83	Undefined	40
Internationally Certified Alcohol & Drug Counselor (ICADC)	0	500	Undefined	42
Lead Inspector	0	4	Undefined	40
Lead Planner Project Designer	0	355	Undefined	41
Mortgage Broker	0	3	Undefined	37
Nail Technician	0	42	Undefined	37
Nail Technician Manicurist Teacher	0	25	Undefined	34
Natural Hair Braider	0	2	Undefined	35
Occupational Therapist	0	168	Undefined	38
Occupational Therapist Assistant	0	60	Undefined	39
Podiatrists	0	355	Undefined	44
Professional Geologist	0	1775	Undefined	39
Real Estate Instructor	0	533	Undefined	35
Speech-Language Pathologist	0	123	Undefined	43

Licensing Fees Comparison

Another measure of restrictedness is the fee that one needs to pay to obtain the license. High entry fees can create a financial barrier for those new entrants who have less disposable income. This can disproportionately fall on those who are both starting out in their fields and have fewer financial resources.

Table 3 shows occupations where North Dakota’s licensing fees are at least 10 percent higher than the national median. Just as the state has many occupations in the healthcare industry that have training requirements well above other states, it also has many where the fees are well above other states. Occupations like behavior analyst specialists, dental assistants, radiologic technologists, and psychologists have fees that are 90 percent higher or more compared to the median for the U.S.

Table 3: Occupations Where ND Licensing Fees Are At Least 10% Above the US Median

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Occupation	North Dakota Fee	Median Fee	Percent Above the Median	North Dakota Rank (From Most Restrictive to Least)
Fuel Piping Contractor	\$450	\$55	718	4
Behavior Analyst Specialist	\$650	\$110	491	3
Genetic Counselors	\$91	\$20	356	24
General Insurance Agent Manager or Exclusive	\$100	\$28	264	14
Dental Assistants	\$130	\$40	225	5
Limited X-ray Machine Operators	\$175	\$60	192	8
Social Worker	\$330	\$118	180	4
Home Inspectors	\$200	\$80	150	19
Journeyman Plumber	\$100	\$40	150	17
Radiologic Technologists Nuclear Medicine Technologists	\$175	\$75	133	4
Family Marriage Therapist Counselors	\$450	\$205	120	2
Lead Inspector Risk Assessor	\$550	\$250	120	6
Clinical Social Worker	\$360	\$164	120	9
Speech-Language Pathologist Assistants	\$100	\$50	100	12
Psychologist	\$650	\$338	92	13
Sanitarian Environmental Health Sanitarian	\$50	\$28	82	22
Physical Therapist Assistant	\$240	\$133	81	10
Cosmetology Teacher	\$105	\$60	75	16

Dietitian	\$60	\$35	71	25
Drug and Alcohol Addictions Counselor	\$300	\$190	58	17
Insurance Producer Resident Individual	\$100	\$65	54	15
Physical Therapist	\$241	\$160	51	16
Asbestos Contractor License	\$150	\$100	50	20
Professional Engineers	\$150	\$100	50	15
Acupuncturists	\$350	\$240	46	6
Occupational Therapist	\$200	\$138	45	1
Athlete Agent Manager	\$250	\$175	43	8
Occupational Therapist Assistant	\$160	\$115	39	4
Clinical Nurse Specialists	\$170	\$123	39	2
Nurse Anesthetists	\$170	\$123	39	1
Advanced Nurse Practitioners	\$170	\$125	36	1
Dental Hygienists	\$200	\$150	34	1
Insurance Producer Non-Resident Individual	\$100	\$75	33	1
Real Estate Salesperson	\$158	\$120	32	6
Licensed Real Estate Appraiser	\$400	\$306	31	5
Public Adjuster (Individual)	\$100	\$78	29	7
Dentists	\$440	\$343	28	2
Licensed Practical Nurses Licensed Vocational Nurse	\$130	\$102	28	7
Private Investigators	\$270	\$213	27	9
Registered Nurses	\$130	\$103	27	8
Cosmetologist	\$125	\$104	21	8
Professional Land Surveyor	\$150	\$125	20	8
Mortgage Broker	\$951	\$850	12	9
Professional Counselors Professional Clinical Counselor	\$150	\$135	11	9
Electrologist	\$50	\$45	11	13
Certified General Appraiser	\$400	\$363	10	12
Certified Residential Real Estate Appraiser	\$400	\$363	10	11
Pharmacists	\$225	\$204	10	12

Occupations where North Dakota has lower fees than other states are identified in Table 4. Table 4 shows occupations where fees are at least 10 percent below the median. There are at least 23 occupations where North Dakota doesn't charge anything for occupational licensing, while other states do. The largest differences appear for certified prevention specialists, internationally certified alcohol & drug counselors (ICADC), and nail technicians. Notability, there are some medical professions that have fees that are close but below the national medians. For example, podiatrists, hearing aid dealers, and optometrists have lower fees than the U.S. median.

Table 4: Occupations Where ND Licensing Fees Are At Least 10% Below the US Median

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Occupation	North Dakota Fee	Median Fee	Percent Below the Median	North Dakota Rank (From Most Restrictive to Least)
Boxing Promoter	\$250	\$300	-17	31
Professional Fighter Timekeeper	\$25	\$30	-17	30
Attorney	\$550	\$663	-17	34
Respiratory Therapist Respiratory Care Practitioner	\$105	\$128	-18	31
Certified Public Accountant	\$120	\$150	-20	29
Podiatrists	\$300	\$389	-23	32
Barber	\$100	\$132	-24	31
Hearing Aid Dealer Hearing Aid Dispenser Hearing Instrument Specialist	\$150	\$200	-25	34
Occupational Therapist Temporary	\$90	\$120	-25	31
Lead Inspector	\$150	\$201	-25	32
Professional Fighter Matchmaker	\$50	\$70	-29	31
Optometrist Diagnostics	\$200	\$288	-30	36
Insurance Administrator License Individual	\$100	\$148	-32	32
Mortgage Loan Originator	\$156	\$231	-32	43
Electrician Journeyman License	\$50	\$75	-33	29
Optometrist	\$200	\$300	-33	40
Optometrist Therapeutics	\$200	\$300	-33	41
Speech-Language Pathologist	\$100	\$150	-33	42
Surplus Lines (Individual) Insurance Agent Broker	\$100	\$150	-33	34
Mixed Martial Arts (MMA) Promoter	\$250	\$388	-35	34
Funeral Directors Mortician	\$100	\$167	-40	39
Lead Planner Project Designer	\$150	\$278	-46	34
Asbestos Inspector	\$50	\$100	-50	34
Asbestos Management Planner	\$50	\$100	-50	34
Asbestos Project Designer	\$50	\$100	-50	32

Investment Advisor	\$100	\$200	-50	43
Professional Fighting Judge	\$25	\$50	-50	34
Public School Teachers	\$30	\$60	-50	36
Veterinarian Technicians	\$25	\$50	-50	34
MD Physician and Surgeon	\$241	\$493	-51	47
Certified Real Estate Appraiser Trainee Assistants	\$100	\$205	-51	41
Physician Assistant	\$96	\$203	-53	44
Veterinarian	\$125	\$270	-54	43
Embalmer	\$50	\$113	-56	35
Esthetician Aesthetician	\$50	\$114	-56	42
Electrical Contractor License	\$50	\$115	-57	28
Athletic Trainer Sports Trainer	\$50	\$138	-64	46
Certified Nurse Aides Assistants	\$25	\$96	-74	44
Pharmacy Intern Registered	\$10	\$43	-77	40
Level Class II Wastewater Operator	\$15	\$100	-85	46
Level Class III Wastewater Operator	\$15	\$100	-85	47
Level Class IV Wastewater Operator	\$10	\$100	-90	45
Licensed Wastewater Operator	\$10	\$100	-90	49
Barber Apprentice	\$0	\$8	Undefined	38
Barber Teacher	\$0	\$78	Undefined	45
Certified Clinical Supervisor (CCS)	\$0	\$53	Undefined	38
Certified Prevention Specialist	\$0	\$200	Undefined	45
EMT	\$0	\$30	Undefined	41
Engineer in Training	\$0	\$25	Undefined	45
Esthetician Instructor	\$0	\$35	Undefined	40
Funeral Resident Intern	\$0	\$35	Undefined	38
Hearing Aid Dispenser Trainee Apprentice	\$0	\$66	Undefined	45
Home Interior Designer	\$0	\$48	Undefined	38
Internationally Certified Alcohol & Drug Counselor (ICADC)	\$0	\$120	Undefined	42
Land Surveyor in Training	\$0	\$25	Undefined	43
Nail Technician	\$0	\$75	Undefined	37
Nail Technician Manicurist Teacher	\$0	\$15	Undefined	35
Natural Hair Braider	\$0	\$20	Undefined	35
Physical Therapist Temporary	\$0	\$5	Undefined	32
Professional Geologist	\$0	\$73	Undefined	40
Professional Solicitors (Charities)	\$0	\$50	Undefined	38
Public School Principals	\$0	\$62	Undefined	40
Public School Superintendent	\$0	\$60	Undefined	41
Real Estate Instructor	\$0	\$43	Undefined	37
Tattooist Tattoo Artist	\$0	\$23	Undefined	35
Wrestling Promoter	\$0	\$50	Undefined	31

Degree Requirements Comparison

The final measure used for this analysis is degree requirements. Going through post-secondary education is rather costly in terms of both time and monetary costs. To measure this, numerical variables are created to represent each level of post-secondary education. 0 means the state does not place any degree requirements above high school, 1 that the state requires some college, 2 for an associate's degree, 3 for a bachelor's, 4 for a master's or law degree, and 5 for a doctorate. The occupations that have a higher Degree Requirement than the national media are listed in Table 5. The most restrictive occupation by this measure is Provisional Psychologist, with North Dakota requiring a doctoral degree to work in this occupation, versus a median of no college. The next most restrictive is a Nutritionist with a need for a master's degree in comparison to the median value of no degree. Finally, in third place, is Diagnostic Medical Sonographer with the need for a Bachelors in North Dakota against a median of no degree. Once again, medical occupations are prevalent in the most restrictive degree requirements.

Table 5: North Dakota's Degree Requirements Above the US Median

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Occupation	North Dakota's Degree Requirements	Median Degree Requirements
Provisional Psychologists	5	0
Nutritionist	4	0
Diagnostic Medical Sonographers	3	0
Lead Inspector Risk Assessor	3	2
Music Therapists	3	0
Parole Probation Officer	3	0
Speech Language Pathologist Assistants	3	2
Embalmer	2	1
Medical Clinical Laboratory Technicians	2	0
Polysomnographic Technologists	2	0
State Police Officer	2	0
Electrician	1	0
Licensed Real Estate Appraiser	1	0
Second Initial Teacher	1	0

Finally, Table 6 shows those occupations where North Dakota's Degree Requirements are below the national medians. From Table 6, lead planner project designer, professional geologist, and real estate instructor are all tied for North Dakota having no required post-secondary education, against a national median of needing a bachelor's degree.

Table 6: North Dakota's Degree Requirements Below the US Median

Table 6: North Dakota's Degree Requirements Below the US Median		
Occupation	North Dakota's Degree Requirements	Median Degree Requirements
Funeral Directors Mortician	0	1
Home Interior Designer	0	2
Lead Planner Project Designer	0	3
Professional Geologist	0	3
Real Estate Instructor	0	3

Conclusion

North Dakota is experiencing a tight labor market with an inability to attract workers for various occupations. While several policies may be considered to alleviate this workforce shortage, policies that remove or reduce restrictions on workers are particularly attractive; they can potentially increase the number of available workers at a very low cost.

One low-cost policy to reduce restrictions on workers is to reform occupational licensing rules. Previous research has shown that occupational licensing has a limited impact on service quality while significantly limiting opportunity.

This research brief highlights several occupations where North Dakota has training requirements, license fees, and/or education requirements that significantly exceed the norm in other states. In professions where the state's licensing requirements exceed those of other states, North Dakota should consider reducing those requirements. Reducing requirements so that they are below (or at least the same as) other states may remove an important barrier preventing North Dakota businesses from attracting needed workers.

This brief also shows occupations where North Dakota has training requirements, license fees, and/or education requirements

significantly below other states. The state should work to ensure that these barriers remain low.

An efficient way to reduce licensing barriers for the state would be to adopt Universal Recognition of Occupational Licensing. According to the Institute for Justice, 20 states have adopted universal licensing, where licenses from other states are recognized.[XXXIII] By recognizing licenses from other states, an important impediment could be removed for individuals who wish to pursue work in North Dakota in the same occupation where they are able to work in another state.

However, in considering Universal Recognition the state should consider the least restrictive form of Universal Recognition that is possible. Twelve states, including Montana and South Dakota, have adopted Universal Recognition that says the license from another state will be recognized only if there are “substantially equivalent” requirements for experience, education, or training.[XXXIV] This still prevents licenses from being recognized from states that have lower requirements for these things.

A preferred form of Universal Licensing is one where the license is recognized if the home state license has a similar “scope of practice” to the new state.[1] By adopting this form of universal licensing, North Dakota could immediately eliminate a barrier created by our state having different standards than others in obtaining occupational licenses.

It is well known that North Dakota has some disadvantages, or perceived disadvantages, in comparison to other states. By streamlining and reducing occupational licensing barriers as much as possible, the state may be able to at least partially overcome disadvantages such as weather to improve our ability to attract workers.

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