

Building the Runway For Universal Licensing Recognition

By Brett Bantle, Research Specialist, NDSU Challey Institute

01/27/26

Executive Summary

Occupational licensing is a major feature of the U.S. labor market, affecting large numbers of workers in professional and related occupations. Research finds that licensing often raises prices and restricts employment and mobility without consistent gains in measured service quality. As states face workforce shortages and rising demand for licensed services, policies that reduce unnecessary barriers are attractive because they can expand labor supply at relatively low cost.

This policy brief examines universal license recognition, a fast-growing state policy that allows workers licensed in good standing in one state to obtain a license in another without having to repeat duplicative requirements. While universal license recognition can improve access and mobility, it is not a single uniform policy. States vary widely in design features such as residency requirements, “substantial equivalence” tests, prior-practice thresholds, occupational carve-outs, decision timelines, and temporary practice provisions.

These differences determine whether universal license recognition functions as a streamlined pathway or a new barrier.

To clarify how universal license recognition varies across states, this brief introduces a Universal Licensing Friction Index that scores recognition laws based on the presence of provisions that slow or limit license transfer. The brief also highlights that universal license recognition primarily addresses interstate movers and does not resolve the broader underutilization of foreign-trained talent when states lack clear foreign credential recognition pathways. It concludes with recommendations to reduce statutory frictions, remove substantial equivalence barriers, expand temporary practice models, and build credible foreign-credential routes that convert proven human capital into work while maintaining safety standards.

Introduction

Occupational licensing is a state-based system that requires specific education or training, exams, fees, and good standing before a person can work in a regulated job.

The scale is significant: in 2024, the Bureau of Labor Statistics reports that about 21.6% of all U.S. workers age 16+ hold an occupational license, and 40.2% of workers in professional and related occupations are licensed.¹ With that many jobs behind a license, how states design and coordinate their licensing rules has broad labor-market implications.

A substantial body of research finds that licensing can raise prices and constrain opportunities without consistent, demonstrable improvements in measured quality. Federal and academic reviews report price increases alongside reduced employment and migration when licensing rules are more restrictive, summarizing that licensing often raises prices and can reduce employment opportunities.^{2,3} One policy response that targets duplication while keeping safety checks is universal licensing recognition, which converts a worker's existing, clean license into a predictable path to practice in a new state.

Universal licensing recognition is the bridge from "already qualified" to "already working." Put simply, if a professional is already licensed in good standing in one state, another state can recognize that license rather than making them start over. While universal license recognition intends to reduce occupational licensing as a barrier to opportunity, not all state universal licensing laws are the same. States implement this portability law

differently; some add residency clauses, "substantial equivalence" tests, temporary or provisional licenses, carve-outs, or experience-based routes. These frictions contribute to why recognition can feel seamless in some places and cumbersome in others.

The portability problem exists because occupational licensing is set and enforced state by state. To work in a licensed occupation, prospective employees typically must finish specified education or training, pass exams, pay fees, and maintain good standing. Many of these completed requirements don't automatically transfer when they move. As a result, workers often carry their skills across borders but face duplicative processes to use them.

For immigrant workers, the situation is even worse. Immigrants who have been trained and achieved an occupational license in another country are not able to transfer their skills and work within the U.S. under the occupation they held previously. Few states have pathways for licensing foreign-trained individuals.

Background

Previous research demonstrates that occupational licensing functions as a barrier to entry when requirements exceed what's needed to protect health and safety.

¹ Bureau of Labor Statistics. "Certification and Licensing Status of the Employed by Occupation." Accessed January 5, 2026. <https://www.bls.gov/cps/cpsaat53.htm>.

² "OCCUPATIONAL LICENSING: A FRAMEWORK FOR POLICYMAKERS." Obama White House Archives, July 2015. https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf.

³ Kleiner, Morris. "Reforming Occupational Licensing Policies." The Hamilton Project, January 27, 2015. <https://www.hamiltonproject.org/publication/policy-proposal/reforming-occupational-licensing-policies/>.

The empirical record is clear: licensing tends to raise prices and restrict employment, often without measurable gains in service quality. As Kleiner summarizes, economic studies have demonstrated far more cases in which occupational licensing has reduced employment and increased the prices and wages of licensed workers than where it has improved the quality and safety of services, with estimated consumer costs and job losses at the national scale. Standard models imply up to 2.85 million fewer jobs and about \$203 billion in annual consumer costs³ due to occupational licensing, reinforcing that entry barriers can suppress output while transferring income from consumers to licensed workers. The Obama Administration's review similarly notes that licensing can raise consumer expenses by over one hundred billion dollars², and that state-to-state differences in rules and training amplify these costs for workers and families.

Another strand of research focuses on mobility and the unevenness of state systems. A 2015 federal report documents wide state variation in who is licensed and the intensity of requirements, which are due to State policies, not differences in occupation mix², and shows how these differences make it harder to move jobs across borders. Early evidence ties licensing to lower interstate migration; one estimate finds licensing reduces interstate mobility by about 7 percent on average², a gap that recognition

laws are designed to narrow. Universal licensing recognition is one policy response that has been studied in recent years. As Deyo puts it, universal licensing recognition is a fast-growing state legislative tool that can expand economic opportunities for skilled workers⁴, by recognizing a clean, good-standing license from another state. However, as this policy brief highlights, due to frictions in universal licensing laws, the lack of mobility and opportunity resulting from occupational licensing rules remains a problem. Finally, scope matters: since occupational licensing affects more than 20% of workers in the United States⁴, the design of recognition rules affects a considerable share of the labor market.

Moreover, these mobility frictions stack on top of a separate, well-documented problem: underutilization of foreign-trained talent. The federal review highlights that many immigrants arrive with substantial education and experience. Yet, nearly half of immigrants with a bachelor's degree are overqualified for their current jobs² in part because overseas training does not count toward fulfilling the relevant licensing requirements², forcing duplicative, costly steps before they can work. In practical terms, research supports a two-lane system: endorsement for licenses earned in other states, and a clear, standards-based pathway that validates foreign education and experience so qualified newcomers can contribute.

² "OCCUPATIONAL LICENSING: A FRAMEWORK FOR POLICYMAKERS." Obama White House Archives, July 2015. https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf.

³ Kleiner, Morris. "Reforming Occupational Licensing Policies." The Hamilton Project, January 27, 2015. <https://www.hamiltonproject.org/publication/policy-proposal/reforming-occupational-licensing-policies/>.

⁴ Deyo, Darwyn. "Policy Brief: Survey of Universal Licensing Reforms in the United States." Knee Center for the Study of Occupational Regulation. 2022. <https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3AAscds%3AUS%3AAbbca9b02-bcb8-3b96-aaa5-e37945e45cf3>.

Evidence on the effects of universal licensing recognition is increasingly supportive, showing measurable gains in worker mobility, licensing activity, and service access. Academic research finds that universal license recognition increases migration from non-reform states to reform states, with reform-state border counties receiving an additional average net migration of 11 tax filers and 22 dependents, and about \$1.7 million in adjusted gross income.⁵ These findings align with administrative indicators from early adopters. Since Arizona enacted universal license recognition in 2019, the state has issued over 8,000 licenses to workers holding out-of-state licenses. After Montana adopted universal license recognition in 2019, the share of licenses issued by endorsement increased from 42 percent to 48 percent, suggesting recognition is translating into real licensing activity rather than remaining a paper policy.⁹ Beyond mobility, evidence from healthcare shows that recognition can improve consumer welfare through portable practice: a physician-focused study reports that universal license recognition is associated with higher healthcare utilization, particularly among older adults, and fewer instances of not getting care because of cost, driven by increased out-of-state and telehealth practice rather than relocation.⁶ A recent working paper also reports that universal license recognition across 18 states increased geographic mobility and labor market activity among workers in licensed occupations.⁹

Taken together, the research and administrative data suggest universal license recognition is an effective, relatively low-cost reform that can help states attract and retain skilled workers and expand access to services, especially in the post-pandemic environment where labor shortages heighten the value of reducing unnecessary barriers to work.

As shown in Figure 1, universal license recognition has moved from a once small set of early adopters to a broad, multi-region policy. A majority of states now recognize out-of-state licenses for applicants in good standing. The 2025 session added two more states: North Dakota and West Virginia, continuing the policy's spread across the Midwest and South. Utah stands out in a different way: it is the only state that also runs an explicit foreign license recognition program inside its Department of Professional Licensing (DOPL), which oversees foreign applications into the state.

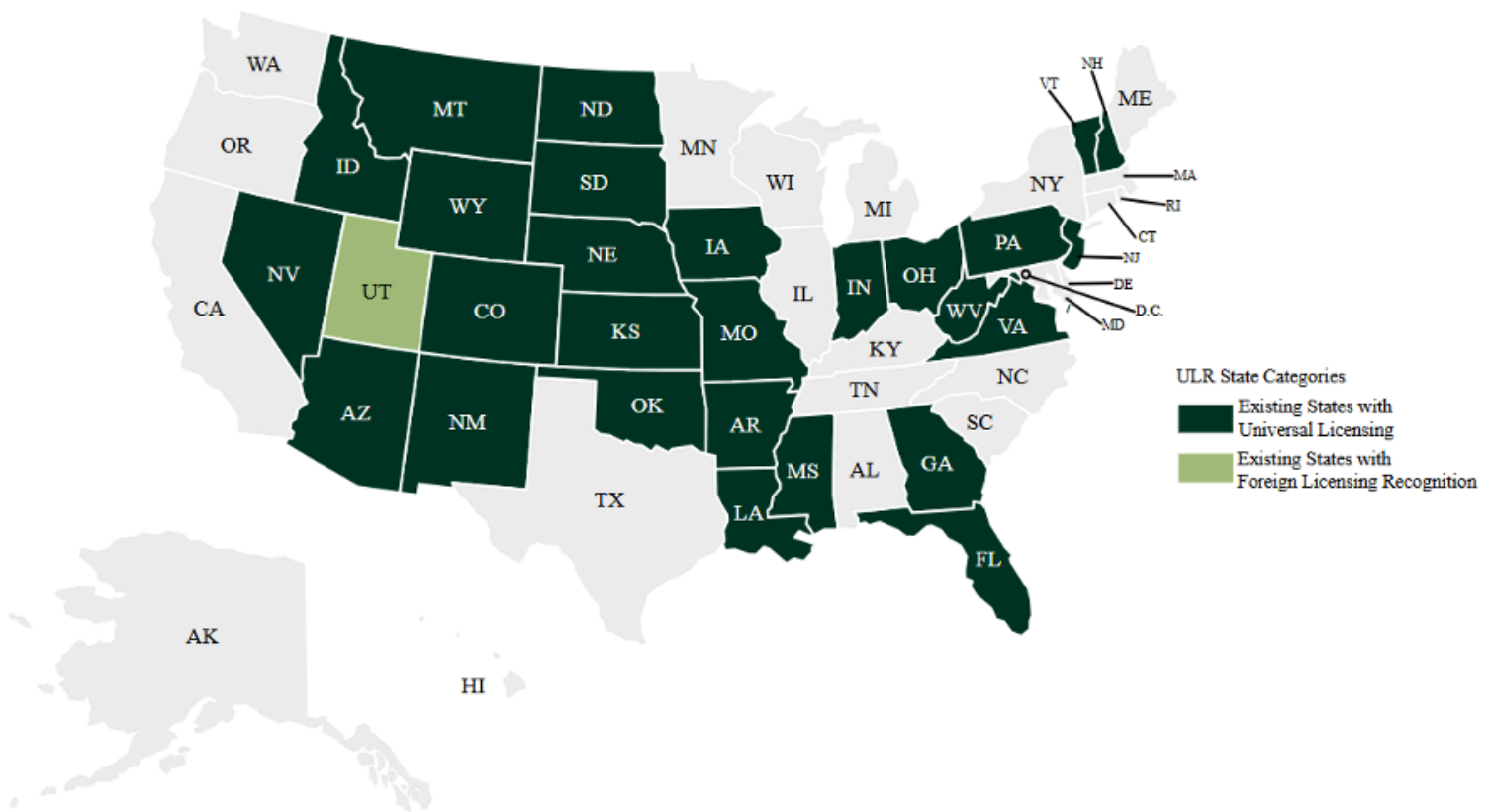
What the colors do not show is that recognition laws are built with different parts that shape how fast and predictable the process feels. Most states require good standing and a clean disciplinary record. Some add residency or years of practice requirements. Others test "substantial equivalence" or accept licenses with a similar scope of practice. Several provide temporary or provisional licensure and set response timelines so boards act within a defined

⁵ Deyo, Darwyn, and Alicia Plemmons. "Have License, Will Travel: Measuring the Effects of Universal Licensing Recognition on Mobility." *Economics Letters* 219 (October 2022): 110800. <https://doi.org/10.1016/j.econlet.2022.110800>.

⁶ Bae, Kihwan, and Edward Timmons. "Now You Can Take It with You: Effects of Occupational Credential Recognition on Labor Market Outcomes." *Economics Faculty Working Papers Series*, March 1, 2023. https://researchrepository.wvu.edu/econ_working-papers/70.

⁹ Bae, Kihwan, and Darwyn Deyo. "Policy Brief: 2024 Update to the Survey of Universal Licensing Reforms in the United States." *Knee Center for the Study of Occupational Regulation*. 2024. <https://csorwvu.com/policy-brief-survey-of-universal-licensing-reforms-in-the-united-states-2024/>.

Figure 1: 2025 Map of Universal License Recognition States



Note: 2 states have introduced universal license recognition in 2025 (ND, WV). Utah is the only state to implement a foreign license recognition program through its Department of Professional Licensing (DOPL).

window. Recent trends include more explicit due-date provisions, experience-recognition routes for applicants from non-licensing states, and stronger procedural protections for applicants facing criminal-history denials. These design choices explain why similarly named laws can function very differently on the ground.

Universal recognition does not override the receiving state's baseline standards. When a statute requires "substantial equivalence," applicants from states with lower training requirements can be denied even if they are in good standing. A North Dakota study illustrates the mechanism: many ND occupations require significantly more training days than the U.S. median⁷, so an otherwise qualified mover can fail the equivalence test at the border. For example, master plumbers face roughly 1,300 training

Why Universal Licensing Isn't Universal

⁷ Orlando, Nicholas. “Reforming Occupational Licensing in North Dakota.” Sheila and Robert Challey Institute for Global Innovation and Growth, February 1, 2025. https://live-ndsuedu.pantheonsite.io/sites/default/files/documents/OccupationalLicensingResearch_0.pdf.

days in ND, compared with about 260 days at the U.S. median⁷, and state police officers, electricians, and several health occupations are also above the national median. The policy implication is straightforward: universal recognition streamlines paperwork, but it cannot override divergent education and practice rules.

Several state recognition laws apply only within a specific title or chapter of the code and then carve out large classes of occupations. Teachers, lawyers, EMTs, and other high-volume credentials are frequently excluded from title-limited laws identified in recent national scans. In practice, a nurse or engineer may complete recognition efficiently, while a teacher or EMT must still complete a full in-state relicensing process. Coverage rules materially shape the applicant pathway and explain much of the observed divergence among states with universal recognition statutes.

Common design choices add delay without clear safety gains: residency requirements, multi-year prior-practice mandates, open-ended “equivalence” reviews that require duplicative documentation, jurisprudence exams layered on top of national exams, the absence of response timelines, prior-practice thresholds, and no option for temporary or supervised practice while verification is pending. Several statutes require applicants

to establish in-state residency and/or document multiple years of prior practice before they can be endorsed. Those conditions fall heaviest on people who are precisely the movers states want to recruit: new graduates, relocating spouses, and early-career professionals. Many of these professionals may have a clean license but lack years in the role or have not yet relocated. In effect, residency and time-in-practice rules delay entry for qualified workers and reduce the very mobility universal recognition is meant to facilitate.

North Dakota shows how unusual licenses magnify portability problems. The Archbridge 2025 State Occupational Licensing Index flags each state’s most uniquely licensed occupation; for North Dakota, it’s diagnostic medical sonographer - an occupation that only four states license at all.⁸ Since a “barrier” means it’s a crime to perform the work without meeting the state’s entry requirements, even when other states allow practice without a dedicated license, a fully trained sonographer moving to North Dakota can be blocked from employment until they satisfy North Dakota’s licensing pathway. That’s precisely the kind of low-safety-risk license that turns universal recognition into a dead end. If the origin state doesn’t license the occupation, a “substantially similar” test won’t help, and the worker is effectively treated as unlicensed despite real experience.

⁷ Orlando, Nicholas. “Reforming Occupational Licensing in North Dakota.” Sheila and Robert Challey Institute for Global Innovation and Growth, February 1, 2025. https://live-ndsuedu.pantheonsite.io/sites/default/files/documents/OccupationalLicensingResearch_0.pdf.

⁸ Trudeau, Noah, Edward Timmons, Benjamin Seevers, and Noah Trudeau Seevers Edward Timmons and Benjamin. “State Occupational Licensing Index 2025.” August 21, 2025. <https://www.archbridgeinstitute.org/state-occupational-licensing-index/>.

Policy	Adds +1 Friction when...
The state lacks foreign licensing recognition	The state has no foreign licensing recognition pathway in effect
Residency is required	Applicants must establish in-state residency
A substantial equivalence test is required	Recognition hinges on broad or undefined “equivalence” to in-state standards
A similar scope/level is not accepted	The law does not recognize licenses at a similar scope or practice level
Prior practice experience is required for endorsement	The bill requires practice experience with the original license
Years of previous practice for endorsement are required	The number of years of practice experience with the original license required for endorsement is set at 1 or more years
Good-standing check is specified	The statute requires a clean license/no discipline record
A jurisprudence exam is required for recognition	The law requires a state-law exam as a condition of recognition
No experience-recognition path from non-licensing states	Applicants from states that do not license the occupation have no work-experience route
Years of experience-recognition is required	The number of years of practice experience for work experience recognition is set at 1 or more years

The Friction Factor

This brief develops a universal licensing friction index to highlight differences across states that implement universal licensing recognition laws. The friction index summarizes how easily an in-good-standing professional can transfer a license under each state’s statute.

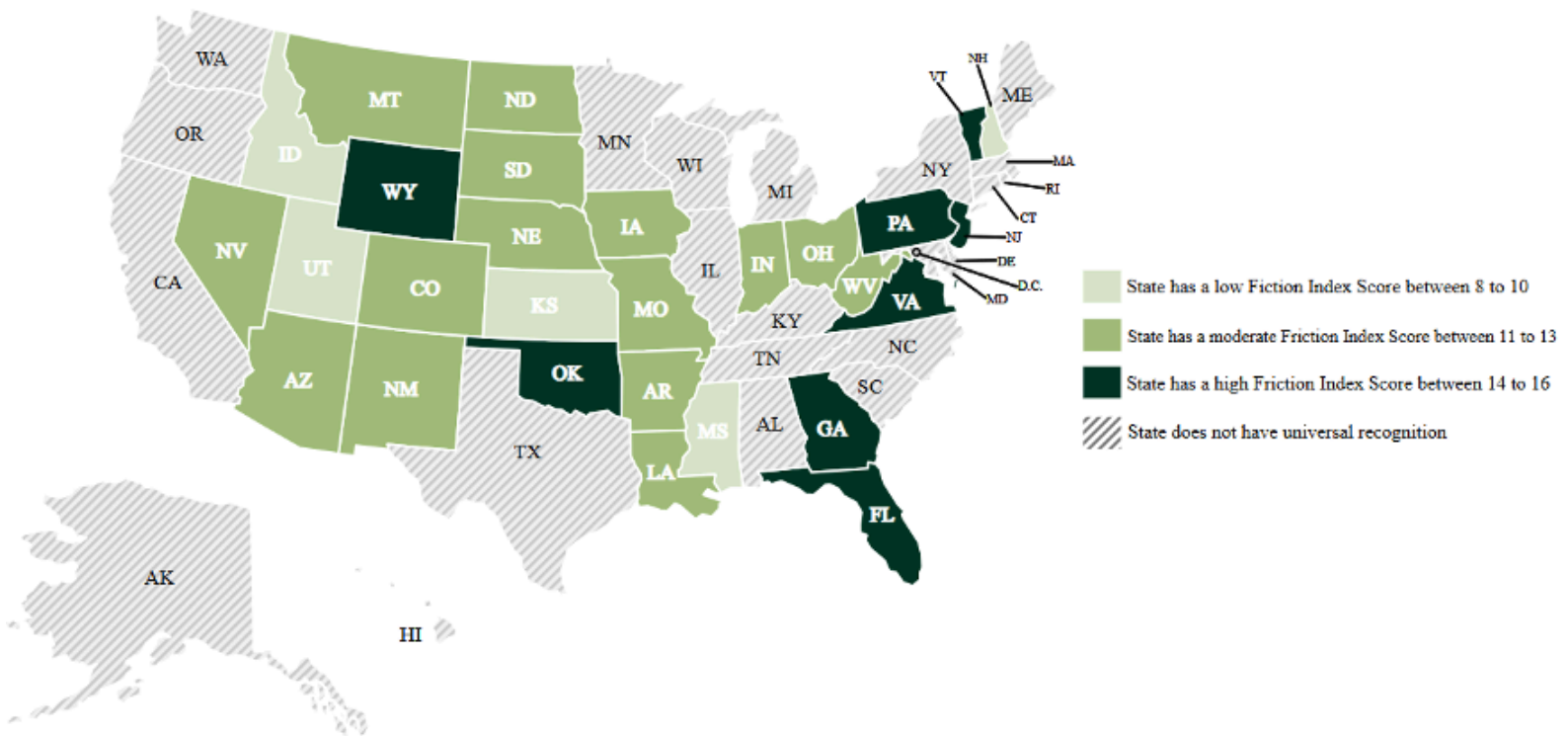
Lower scores reflect “low-friction” design. These statutes recognize clean licenses, accept practice at a similar scope or level without re-creating education line by line, specify response timelines for boards, and allow temporary or supervised practice while verification is completed.

Policy	Adds +1 Friction when...
Law is title specific	The bill is specific to occupations regulated under a particular title or chapter of state statute
The law contains a coverage clause	The bill has an explicit clause on which occupations are eligible or ineligible for licensing recognition
Coordination with compacts	The bill lacks an explicit clause aligning the bill with interstate compacts
Coordination with existing reciprocity	The bill lacks an explicit clause aligning the bill with existing reciprocity between states
No response deadline for boards	There is no due date to take action on applications
No temporary or provisional license	Applicants cannot practice while verification is completed
No periodic review/reporting	Agencies are not required to review or report on program operation
No web posting requirement	Boards are not required to publish procedures and checklists online
Military specialty is not recognized as a credential	The bill does not recognize a military specialty as an occupational credential
No military spouse provision	The statute lacks an explicit military-spouse recognition clause

Many also publish checklists, coordinate with compacts or existing reciprocity, and periodically review the program. Together, these features keep decisions predictable and reduce unnecessary duplication. Findings from recent surveys of state reforms align with this pattern. Higher scores indicate provisions that add steps or uncertainty

without clear safety gains. Common contributors include residency clauses, broad “substantial equivalence” tests, narrow occupational coverage by chapter or carve-outs, and the absence of decision clocks. Long prior-practice requirements can slow early-career movers, and a lack of temporary licensure prolongs

Figure 2: 2025 Universal Licensing Friction Map



vacancies during review. Several states have begun to address procedural issues tied to criminal history; for example, Arizona recently added clearer protections around denials linked to prior records, which improves transparency even if other frictions remain.

Read against the 2025 Friction Index map, these mechanics are visible in the color gradients. Light green identifies low scores (8 to 10) where recognition is straightforward; Idaho and New Hampshire are illustrative cases. Medium green (11 to 13) signals moderate friction that still permits portability but adds steps, as in Indiana and North Dakota. Dark green (14 to 16) marks higher frictions where applicants experience slower,

less predictable endorsements; Florida and Vermont show this profile in the table of scores. The visual makes clear that similarly named “universal recognition” laws can function very differently once the operational details are considered. Individual state scores are shown in Table 2.

Note: This index differs from Archbridge’s SOLI index in focus and method. The Archbridge 2025 State Occupational Licensing Index (SOLI) measures the overall licensing burden in each state by tallying how many occupations are legally barred without a license and how many explicit licenses exist⁸, then normalizing “barriers” and “licenses” to 0–10 scores; SOLI is built on the

⁸ Trudeau, Noah, Edward Timmons, Benjamin Seevers, and Noah Trudeau Seevers Edward Timmons and Benjamin. “State Occupational Licensing Index 2025.” August 21, 2025. <https://www.archbridgeinstitute.org/state-occupational-licensing-index/>.

State	Year Passed	Bill	Friction Index Score	Friction Index Rank
Arizona	2019	HB 2569	12	10
Arkansas	2023	SB 90	11	6
Colorado	2020	HB 20-1326	13	13
Florida	2024	SB 1600	14	20
Georgia	2023	HB 155	14	21
Idaho	2020	SB 1351	8	1
Indiana	2022	SB 5	11	7
Iowa	2020	HF 2627	13	14
Kansas	2021	HB 2066	10	3
Louisiana	2024	SB 60	12	11
Mississippi	2021	HB 1263	10	4
Missouri	2018	SB 840	12	12

Knee Center database and reports state profiles, a “most uniquely licensed occupation,” and a medal-style summary of universal recognition that turns on substantial-similarity and residency requirements. By contrast, the Friction Index here does not count the total amount a state licenses.

It evaluates how a state’s universal recognition statute operates for already-licensed movers: whether residency or substantial-equivalence clauses apply, how broad the coverage is, whether decision timelines and temporary practice are available, and whether agencies publish

State	Year Passed	Bill	Friction Index Score	Friction Index Rank
Montana	2019	HB 105	13	15
Nebraska	2021	LB 390	13	16
Nevada	2017	SB 69	13	17
New Hampshire	2018	SB 334	9	2
New Jersey	2013	AB 1545	15	25
New Mexico	2016	SB 105	11	8
North Dakota	2025	SB 2395	13	18
Ohio	2022	SB 131	11	9
Oklahoma	2021	HB 2873	14	22
Pennsylvania	2019	HB 1172	14	23
South Dakota	2021	HB 1077	14	24
Utah	2020	SB 23	10	5
Vermont	2020	S.233	15	26
Virginia	2023	H 2180, S 1213	16	28
West Virginia	2025	SB 458	13	19
Wyoming	2021	SF 18	15	27

procedures and review performance. In short, SOLI is a breadth-of-licensing measure across occupations. At the same time, this Friction Index is a portability-design measure focused on the speed, predictability, and usability of license transfer for qualified workers.

Solutions and Conclusion

States have workable models to lower friction without lowering standards. First, temporary licensure during emergencies showed that safety and access can be balanced. During COVID, emergency telehealth and out-of-state practice waivers allowed qualified clinicians to serve patients across borders with clear documentation and accountability. A permanent version for licensed professionals would use the same controls: good-standing verification, a similar scope of practice, clear sunset dates for provisional status, and prompt conversion upon verification. To keep the focus on competence rather than paperwork, substantial equivalence requirements should be removed, since they replicate education-hour comparisons that slow qualified applicants without improving safety.

Second, formal recognition should be expanded beyond interstate movement. States should explore reciprocity pilots with Canada and Mexico for United States-Mexico-Canada Agreement (USMCA) eligible occupations where education and testing standards can be readily mapped. Utah's

Department of Professional Licensing offers a practical template for administering applications from foreign-trained professionals, including checklists, timelines, and evaluation partners. A recent Knee Center survey describes universal recognition as a fast-growing state legislative tool that can expand economic opportunities for skilled workers⁹, and the same design logic can be extended to credible foreign-credential routes with supervised bridging where small gaps exist.

Third, a predictable pathway for internationally educated professionals should be created. States should partner with recognized evaluators such as WES or NACES, as New Jersey has done, adopt limited or provisional licenses when competence can be demonstrated, and require national exams where relevant. Universities and community colleges can host short bridge programs to close specific competencies rather than forcing full requalification. The net effect is to convert proven human capital into practice more quickly while retaining quality safeguards. Prior research documents that licensing can raise prices and reduce employment; reforms that focus on recognition and targeted upskilling address those concerns directly by increasing supply while maintaining standards. The federal review summarizes these effects, noting that licensing often raises prices and can reduce employment opportunities² without consistent evidence of quality gains.

² "OCCUPATIONAL LICENSING: A FRAMEWORK FOR POLICYMAKERS." Obama White House Archives, July 2015. https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf.

⁹ Bae, Kihwan, and Darwyn Deyo. "Policy Brief: 2024 Update to the Survey of Universal Licensing Reforms in the United States." Knee Center for the Study of Occupational Regulation. 2024. <https://csorwvu.com/policy-brief-survey-of-universal-licensing-reforms-in-the-united-states-2024/>.

Key Takeaways

Fourth, de-licensing can be considered for narrowly selected occupations where risk is low and effective private or facility credentialing already exists. De-licensing replaces a state license with less-restrictive tools such as voluntary certification, simple registration, insurance or bonding, and employer or facility credentialing, all while maintaining consumer protection. This approach targets titles that few peer states license or where education-hour mandates show little connection to measurable safety outcomes, and removes entry barriers that recognition alone cannot resolve.

Finally, states should measure what matters and account for costs. Agencies should report time-to-decision¹⁰, approval rates, use of provisional practice, complaints, and employment placement by occupation. Employers face opportunity costs when licensed roles stay vacant. Workers face foregone earnings and delayed careers. For immigrants, “brain waste” is a tangible loss to families and to tax bases when education earned abroad does not translate into commensurate work. Universal recognition combined with a clear foreign-credential pathway is the least-cost method to reduce those losses at scale.

1) Design the statute for portability

- Recognize clean licenses at a similar scope of practice, set decision timelines, and allow temporary or supervised practice during verification.
- Avoid substantial equivalence tests, residency requirements, and narrow coverage that exclude major occupations.

2) Expand recognition beyond state borders

- Pilot reciprocity with Canada and Mexico for USMCA-eligible occupations where standards can be mapped.
- Build a credible foreign-credential route: use recognized evaluators (WES/NACES), national exams where applicable, and short, targeted bridge programs.

3) Manage for outcomes

- Track time-to-decision, approval rates, complaints, and placement by occupation to surface bottlenecks and improve compliance.
- Reduce “brain waste” and employer vacancies by minimizing delays; the opportunity cost of waiting is real for workers and firms.

4) See the long-run

- De-licensing, where risk is low and private or facility credentialing is strong, can replace full licensure with lighter tools (certification, registration, insurance).

¹⁰ 10 Bae, Kihwan. “License on the Way: The Effects of Expedited Licensure for Migrant Workers.” SSRN Scholarly Paper No. 5234000. Social Science Research Network, April 21, 2025. <https://doi.org/10.2139/ssrn.5234000>.

References

- 1 Bureau of Labor Statistics. "Certification and Licensing Status of the Employed by Occupation." Accessed January 5, 2026. <https://www.bls.gov/cps/cpsaat53.htm>.
- 2 "OCCUPATIONAL LICENSING: A FRAMEWORK FOR POLICYMAKERS." Obama White House Archives, July 2015. https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf.
- 3 Kleiner, Morris. "Reforming Occupational Licensing Policies." The Hamilton Project, January 27, 2015. <https://www.hamiltonproject.org/publication/policy-proposal/reforming-occupational-licensing-policies/>.
- 4 Deyo, Darwyn. "Policy Brief: Survey of Universal Licensing Reforms in the United States." Knee Center for the Study of Occupational Regulation. 2022. <https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3Ausc%3AUS%3AAbbca9b02-bcb8-3b96-aaa5-e37945e45cf3>.
- 5 Deyo, Darwyn, and Alicia Plemmons. "Have License, Will Travel: Measuring the Effects of Universal Licensing Recognition on Mobility." Economics Letters 219 (October 2022): 110800. <https://doi.org/10.1016/j.econlet.2022.110800>.
- 6 Bae, Kihwan, and Edward Timmons. "Now You Can Take It with You: Effects of Occupational Credential Recognition on Labor Market Outcomes." Economics Faculty Working Papers Series, March 1, 2023. https://researchrepository.wvu.edu/econ_working-papers/70.
- 7 Orlando, Nicholas. "Reforming Occupational Licensing in North Dakota." Sheila and Robert Challey Institute for Global Innovation and Growth, February 1, 2025. https://live-ndsuedu.pantheonsite.io/sites/default/files/documents/OccupationalLicensingResearch_0.pdf.
- 8 Trudeau, Noah, Edward Timmons, Benjamin SeEVERS, and Noah Trudeau SeEVERS Edward Timmons and Benjamin. "State Occupational Licensing Index 2025." August 21, 2025. <https://www.archbridgeinstitute.org/state-occupational-licensing-index/>.
- 9 Bae, Kihwan, and Darwyn Deyo. "Policy Brief: 2024 Update to the Survey of Universal Licensing Reforms in the United States." Knee Center for the Study of Occupational Regulation. 2024. <https://csorwvu.com/policy-brief-survey-of-universal-licensing-reforms-in-the-united-states-2024/>.
- 10 Bae, Kihwan. "License on the Way: The Effects of Expedited Licensure for Migrant Workers." SSRN Scholarly Paper No. 5234000. Social Science Research Network, April 21, 2025. <https://doi.org/10.2139/ssrn.5234000>.

Author



Brett Bantle, MBA | Research Specialist

Brett Bantle is a Research Specialist for the Challey Institute for Global Innovation and Growth. He holds a Bachelor of Business Administration in Accounting at Dickinson State University, and earned a Master of Business Administration at North Dakota State University. His areas of interest include Tax Policy, Immigration Regulations, and Artificial Intelligence. As a research specialist, he evaluates regional policies and their societal impact, providing critical analysis to empower public awareness and decision-making.