An Analysis of Occupational Licensing Policies in Texas

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ABSTRACT

As the regulatory efforts of government continue to increase at all levels, more attention is being given to the public policy topic of occupational licensing. Decisions on whether or not to require occupational licensing should be made on a case-by-case basis, after considering the health and safety risks presented to the public, as well as the costs and benefits of such policies. This dissertation examined occupational licensing policies in Texas by using three methods: case studies of six occupational licensing proposals offered in recent sessions of the Texas legislature, an empirical study of occupational licensing in Texas, and an empirical study comparing occupational licensing policies for behavior analysts across the 50 states.

The findings of the case studies revealed that legislators in Texas often make decisions on whether or not licensing should be required in an occupation with very little information about the health and safety risks to the public, instances of harm that have actually taken place, or the costs and benefits found where licensing is already required. In the empirical studies, it was found that the best predictor of whether or not licensing would be required for an occupation in Texas was the amount of other states requiring licensing for the same occupation. Despite the fact that health and safety concerns are one of the most commonly stated reasons for individuals and groups to support occupational licensing requirements, occupations with higher accident rates were not found to be a significant factor in whether or not an occupation is licensed in Texas.

When comparing Texas to other states, the most significant variable in determining which of the 50 states will require occupational licensing for behavior analysts is the per

capita membership numbers in groups who oppose occupational licensing requirements for behavior analysts.

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Chapter I

INTRODUCTION

Usually a matter of state level policymaking in the United States, occupational licensing policies are estimated to affect about 29 percent of the nationwide workforce, representing about 43 million workers (Kleiner and Krueger 2008). Many areas of public policy which affect economic decisions and outcomes receive a great deal of attention in academic literature and in news reports to the public. For example, Stephenson and Wendt (2009) discuss the increasing coverage of topics such as labor unions and minimum wage laws in texts dealing with economic policy. Yet, as the two authors point out, the topic of licensing does not get the attention that minimum wage policies receive, which tend to affect less than 10 percent of the workforce, including teenagers or others who do not come from households under the poverty threshold. Also, unionization gets more attention but affects only about 12 percent of the workforce (2009, 181). Examining 17 major labor economics textbooks, both in print at the time of their study and out of print, the authors found that only seven contained any coverage of occupational licensing. Those that did cover the topic devoted six pages or less (183-184). Occupational licensing, which is also known as the right to practice, where working in an occupation without meeting state requirements is illegal, is the strongest form of occupational regulation (Kleiner 2011, 3-4). Williams notes that some exceptionally strong licensing laws fix the number of practitioners in a given occupation, in addition to regular entry requirements (2011, 61).

According to Young, scholars have traced regulations of professions very similar in nature to occupational licensing as far back as ancient Babylon and the Code of Hammurabi. When this document was written about 1800 B.C., it set predetermined fees for the services of surgeons and imposed penalties for malpractice. Young believes that the first example of a licensing law similar to today's laws was found in 13th century Sicily, where physicians were required to have extensive training, take an examination, and obtain a license (1989, 9). Kleiner mentions the issue of licensing as discussed by Adam Smith in the Wealth of Nations, where Smith focused on the ability of the crafts to lengthen apprenticeship programs and limit the number of apprenticeships per master as a way to limit practitioners and allow for higher earnings for those already in the occupations (2006, 3). Young also mentions craft guilds of medieval times, which possessed quasi-governmental authority, and states that professional associations worked in conjunction with governmental authorities to implement occupational regulations. In the 16th century, the laissez faire philosophy began to emerge, and people came to see intermediate groups such as guilds to be too controlling and in violation of the social contract between rulers and subjects. As this happened, English guilds came to depend on the state to implement enforceable monopoly privileges, something that Young sees as similar to the current licensing structures found throughout the United States (1989, 10). Occupations first became regulated in the United States when doctors came under licensure in Virginia in 1639 for the purpose of regulating fees. A decade later, regulations in Massachusetts were intended to ensure quality in the practice of medicine. Young states that the early licensing movement in the United States met with considerable resistance in the 1830s and 1840s, as many people subscribed to the laissez

faire philosophy espoused by Thomas Jefferson and Andrew Jackson. During this time, proposed licensing laws were defeated in several states and licensing requirements already in place were repealed in others (11-12). Friedman states that occupational licensing first began to become truly commonplace in American states between 1890 and 1910 (1965, 489). In 1980, Simon Rottenberg published a study concluding that occupational regulation had a positive effect on practitioners, but a negative effect on consumers. Since that time, Kleiner notes that very few studies have detailed the effects of occupational licensing (2006, 3).

One primary goal of this dissertation is to contribute to the study of the political economy of occupational regulation. The justification of occupational licensing and other forms of regulation often has roots in the desire to protect the health and safety of the public. In some professions, there are common and reasonable arguments that negative externalities can result from unqualified practitioners working in the profession. An incompetent physician could make mistakes that turn into a public health crisis. An attorney who hasn't been properly trained could, through his or her actions, place clients in legal jeopardy. Some occupations do not lend themselves to the possibility of having such extreme externalities. Even then, many will argue that the government has an interest in protecting the public, essentially from themselves. Some people will argue that without the government's influence, consumers cannot or will not access enough information to make informed decisions. There is also a belief that consumers will often take risks that are unacceptable if harm could be caused.

Despite some compelling reasons for supporting occupational licensing, others will argue that any type of barrier to economic entry, including occupational licensing,

has more to do with economic protectionism than with protecting public health and safety. Milton Friedman (1965) saw efforts of licensing as attempts to enforce, through legal mechanisms, goals which a trade or professional association was not able to achieve on its own and saw these groups' work as seeking to claim and hold territory against competitors (503-505). At the extreme, Friedman (1979) believes licensing leads to its own danger for consumers—monopolies that arise due to the lack of competition (226).

In contributing to the study on political economy, this dissertation is intended to determine whether occupational licensing protects public health and safety or whether it is typically sought by incumbent practitioners as a way of restricting entry into occupations, with a special focus on Texas. Perhaps both reasons could contribute to whether a particular occupation becomes licensed. While Schlomach (2012) acknowledges a number of arguments in defense of licensing, he states that such defenses are usually advocated by members of the profession and not by the general public. This would seem to indicate that while the public may not be aware of specific benefits from occupational licensing, the public interest could possibly be served at the same time as the economic interests of practitioners.

This dissertation also has a major goal related to the public administration process, and that is to inform policy issues in the state of Texas related to occupational licensing. The paper will also attempt to explain why some occupations have licensing requirements and others do not. For instance, shampooers in Texas who are not cosmetologists must have a license but anesthesiology assistants, who work directly with patients in operating rooms, have no licensure requirement. This dissertation also shines

light on evidence to support the claim often made by economists that professional organizations seek licensing requirements from their occupation rather than the state imposing it upon them without industry support. Many who have studied licensing, such as Dr. Morris Kleiner, believe that professional associations often raise funds from members to lobby legislatures in support of licensing requirements, especially committee chairs of committees which will consider licensing bills (2011, 5). Kleiner surmises that licensing can restrict supply and raise prices (2011, 6) and that licensing has a large influence on wage determination (23).

Chapter 2 of this dissertation will review relevant literature on the topic of occupational licensing, much of which seems to center around economic effects of occupational licensing, the opinion of practitioners on licensing for their own industry, and whether or not the licensing requirements are beneficial for the public. Very little of the literature appears to take an in-depth look at the actual policymaking process leading to occupational licensing requirements.

Chapter 3 describes methodology that will be used including a study of six professions that went through the licensure process in Texas in recent years: roofing contractors, real estate inspectors, veterinary technicians, foundation repair contractors, associate auctioneers, and anesthesiology assistants. Three of these occupations are now licensed by the state, while legislation did not pass requiring licensure for the other three. The study of these particular occupations is intended to show how occupational licensing gets on the legislative agenda, how individuals and groups work in support of or in opposition to occupational licensing legislation, and what makes some attempts at passing occupational licensing legislation succeed, while other similar legislation fails to

pass. Chapter 3 also describes statistical tests that are intended to determine whether occupations presenting a greater risk to the public are the most likely to be licensed, and also that are intended to determine whether there is a correlation between the membership size and political power of a professional association and whether or not their occupation has a licensing requirement. Accident rates are used as an estimate of the level of danger posed to the public by unqualified practitioners in licensed occupations. This measurement follows the idea that higher accident rates are more likely to be associated with dangerous occupations. To determine which professional associations are politically organized, the amount of money spent on lobbying by the associations is used. Based on these two measurements, a determination will be made of whether the state of Texas is more likely to require licensing for occupations that pose a higher risk to the public, occupations with politically active professional organizations, or both.

Finally, Chapter 3 also describes statistical testing that will be used to determine if there is any correlation between whether or not an occupation requires licensing in different states and characteristics specific to those states. Young points out that while all states have some type of occupational regulations in place, the type and extent vary widely across states (1989, 4). For the purpose of attempting to show correlation between licensing and state-specific characteristics, the occupation of behavior analysts is studied. This occupation was not licensed in any state prior to 2009, but it now has licensure requirements in 24 states. Texas recently considered legislation to require licensing for behavior analysts, but it did not pass. Statistical methods are used to show whether there is a correlation between political organization of groups who are supportive of licensing and other factors and the enactment of licensing requirements by states.

Chapter 4 will present the results of the case studies and the statistical tests.

Results of the case studies will be described after records relevant to the legislation are reviewed, hours of committee hearings and House and Senate floor sessions were reviewed, and other relevant information was considered. Also, Chapter 4 will present the results of the statistical tests along with an explanation of whether or not occupational licensing policies in Texas tend to be directed at occupations that pose the greatest risk to the public and whether the political power of professional associations is correlated with licensing requirements for their occupations. Finally, Chapter 4 will present the results of statistical tests in order to determine correlation in regards to an occupation having licensing requirements in some states but not others.

Chapter 5 will conclude with a discussion of the results and recommendations for Texas policymakers as they consider future changes to existing occupational licensing requirements or the imposition of new requirements.

Overall, this dissertation aims to study the political economy of occupational licensing, explain factors that may determine why some occupations require licensing and others do not within the state of Texas, and study social and political characteristics of states that may explain why a specific occupation has required licensing in some states, but not others. Also, by the use of case studies, this dissertation aims to provide an indepth look at the policymaking process where occupational licensing proposals are considered in Texas.

Chapter II

LITERATURE REVIEW

Public Interest Justifications for Occupational Licensing

Throughout the literature, three public interest justifications are often invoked to support the enactment of occupational licensing policies. It is often said that consumers may not have enough information to make informed decisions about a service, so it is a necessary public policy choice for the state governments to enact licensing requirements to deal with this problem. Licensing laws are also often adopted due to the government's desire to correct negative externalities that take place if an incompetent or corrupt practitioner in an occupation does something that is harmful to the public. It is also a public policy method by which individuals are prevented from choosing lower quality service providers when the state feels that it would not be in their best interest to do so. Lack of Information

While practitioners in an occupation know whether or not they are producing an acceptable quality of service, consumers may not know this, especially if they are in the position of needing services with which they are totally unfamiliar. Cox and Foster acknowledge that the potential for abuse could also lead to calls for regulations when a professional performs the tasks of both diagnosis and treatment. This is because a professional could provide a diagnosis that requires more treatment than what is truly necessary due to financial incentives to gain more for their services (11). The authors believe that this is most problematic when there are third party payers, the pricing structure is based on the amount of services provided or hours worked, or the service in

question is technically complicated and purchases are infrequent (12). Occupations related to health care are often thought of as needing licensing for this reason, as many people do not need specific medical services, may not be totally informed about what all is truly necessary and, with insurance, third party payers are often involved.

Even according to individuals who support less regulation and a free market approach, information is definitely necessary for markets to function properly. However, it is often stated that this alone is not a compelling reason to enact occupational licensing policies. If the reason for occupational licensing is information alone, then a program of voluntary registration or certification would likely be just as beneficial to the majority of consumers who were simply in search of information. The least restrictive form of occupational regulation is registration, where individuals file their names, addresses, and qualifications with a government agency before practicing an occupation. They may have to pay a fee or post a bond. Certification is another form of regulation and usually allows anyone to perform the occupation, but the government administers an exam, determines qualifications, and certifies those who meet the requirements (Kleiner 2011, 3-4). Such voluntary programs would allow easy access to information, but would not prohibit other individuals choosing not to register or become certified from working in occupations and consumers would have the option of choosing other services.

Slivinski (2015) believes that a system of registration or certification could be accomplished with very little involvement from the government. In the model he discusses, promoted by the Goldwater Institute, the state would establish minimal requirements for professional associations to register with the state so that policymakers could determine that the organizations were legitimate. Once that is done, the

associations could develop private certification requirements and when these requirements were met, individuals could use the word "certified" in front of their professional title. Slivinski acknowledges that in some occupations, there would be a possibility of competing certifiers, but he believes that competition would be good because any group involved would have a vested interest in maintaining as many certified members as possible, while maintaining the integrity of their organization and profession. Under such a system, individuals who chose not to affiliate and become certified with a private organization would not be prohibited from working, but could be sued or prosecuted under criminal statutes if they claimed to be certified and were not (15-18).

In addition to programs of registration and certification, Cox and Foster believe that many market failures can also be reduced by third party providers of information, such as Consumer Reports, the Better Business Bureau, AAA's Approved Auto Repair Services Program, or internet rating and online review web sites which are easily accessible by the public (1990, 8-9). Hottot agrees, stating that more information is available to consumers than ever before, especially since the Internet and the use of social media has magnified the power of word of mouth (2009, 52). Katsuyama believes that, while licensing may provide information as to who offers a minimum quality of services, reputations are much more effective when it comes to finding services of modest or high quality or when consumers are seeking specialty features. He believes that reputations are dynamic and can change as the quality of services rises and falls or as better competitors emerge. On the other hand, he believes that licenses typically only offer a periodic assessment of quality and that licensing boards tend to take action related to product or service quality only for egregious violations and not for other things that may

concern consumers (2010, 579). Because information about service providers and the quality of services can be garnered in so many ways, it does not appear that access to information is a strong benefit of mandatory occupational licensing policies, so information will not be factored into the methodology of this study.

Externalities

Occupational licensing is often justified, as supporters of such policies indicate that they may correct market failures in occupations in which there are negative externalities from incompetent or dishonest practitioners who harm the public. Cox and Foster (1990) mention possible scenarios that are cause for concern, such as a voluntary transaction between two individuals where poor work later harms others not involved in the transaction (10). Someone looking for low cost electrical work to be performed may not think about the possibility of fires in the future that could harm someone else's neighboring property. A foundation repair contractor who does poor work could cause problems for future owners of a property, even if the problem does not develop for the individual who hired the contractor. In these examples and others, many people see the potential quality of service as too low to be acceptable to society, which justifies government involvement and public policies to correct the potential for externalities. Occupational licensing is one such remedy found in the public policy process and, if narrowly tailored, would be designed with the focus of weeding out only practitioners who would cause these problems.

States Acting to Protect Individuals

Even when ample information is available to individuals, some people may be unwilling or unable to rationally use the information when choosing a service provider

and, therefore, could cause negative externalities. This may happen for a variety of reasons, including the fact that individuals may underestimate their personal risk in choosing a lower quality service or because they may not be able to afford higher quality services. While many people believe that freedom includes the freedom to take risks, there is a legitimate public policy question as to whether the role of government should include protecting individuals from themselves and their own decision making.

All three justifications commonly used to promote occupational licensing requirements seem to have an end goal of protecting individuals from hurting themselves or others. Since this is often a stated reason for occupational licensure, states should be more likely to license occupations that potentially present higher levels of danger to the public.

Economic Costs of Occupational Licensing

Once it is known that enactment of occupational licensing policies can drastically change who works in a given occupation as well as the costs of entering that occupation, it becomes clear that such policies have implications on how the labor market changes.

Beyond the costs of entry, it is often argued that less competition within industries leads to higher prices for consumers. However, other market and societal inefficiencies can be found with occupational licensing that are not discussed as often as the cost of services.

Reciprocity and Labor Force Mobility

Since occupational licensing policies are enacted at the state level of government, they restrict the movement of individuals working in licensed occupations between states. Kleiner discusses how even the executive branch of the federal government through the U.S. Department of the Treasury and the U.S. Department of Defense have raised

concerns about occupational licensing policies. These agencies view the fragmented requirements across states as difficult for military personnel and their families, as well as others who may move frequently. At a minimum, there is a call for policymakers to allow more reciprocity to recognize other states' licenses or military training and experience (2013, 222-223). While some states do offer reciprocity for license holders, this does not even help all workers. While one state that licenses auctioneers may grant reciprocity for license holders from other states, this does not help an auctioneer who has been successfully working in a state that does not require licensing for auctioneers. Regardless of whether an auctioneer in such a situation could show proof of employment as an auctioneer, there would be no license for which reciprocity could be granted. While there may be an assumption that reciprocity policies apply to everyone within a given occupation, that is not necessarily true. During an April 15, 2015 hearing of the Texas House Committee on Veterans Affairs, a public hearing was held on House Bill 2012, which would have expanded reciprocity for veterans and military personnel and their spouses who move between states as long as they held a license for an occupation "substantially similar" to the occupation in which they were wishing to work in Texas. It is usually up to each specific licensing board or agency to determine what "substantially similar" means. During testimony offered by a representative of the Texas Department of Licensing and Regulation (TDLR), State Representative Matt Schaefer asked the TDLR representative to define "substantially similar." Schaefer further provided the witness with an example: Texas requires 1500 hours of training for cosmetology licenses, and Massachusetts requires only 1000 hours. Schaefer then asked the witness to consider the hypothetical example of a military spouse who had recently completed cosmetology

school in Massachusetts and moved to Texas with very little actual work experience, and whether or not the occupations would be considered "substantially similar." The witness responded that in such a case, reciprocity probably would not be granted as there were fewer training hours and the person had not yet worked for long enough to make up the difference between training hours (*Texas House Committee on Defense and Veterans Affairs: April 15, 2015 Public Hearing* 2015). This is just one example of how an individual might assume eligibility for reciprocity, only to later find out otherwise.

Military families may be the most likely to be affected by occupational licensing policies that limit worker mobility. Approximately 35 percent of military spouses work in occupations that require licensure or certification in at least one state. Also, military spouses are 10 times more likely to have moved between states in any given year than are civilian license holders. Military spouses may be out of work for an extended period of time when they are forced to acquire a new license due to moving or if they have to meet different licensing requirements from those of their previous state (White House 2015).

While many states, as well as licensing boards and agencies, have recently engaged in policy discussions and have even passed legislation regarding reciprocity, another restriction on worker mobility due to occupational licensing remains largely ignored. This is a mobility restriction that inhibits individuals' ability to work in similar occupations, due to the prevalence of narrow and restrictive licenses. In Texas, someone with a full cosmetology or barber license may perform a range of services including cutting hair, shampooing hair, administering manicures and pedicures, administering skin care treatments, and more. However, each of those specialty areas has its own licensure for individuals who may not desire to become or be able to afford the time or tuition costs

that are necessary to become a barber or cosmetologist. If an individual obtains a manicurist license, that individual would be prohibited from working as a skin care specialist, despite the fact that the two occupations are very similar. This would prohibit an individual from responding to changing consumer demand for services and if the individual wanted to start administering skin care treatments, he or she would have to either obtain an additional license as a skin care specialist or as a barber or cosmetologist. Due to a lack of information on this type of narrow, specialty licensing found in the literature, future study would be helpful.

Economic Costs of Training

Since requirements for occupational licensing are determined by a public policy process and not the market, the market-based determination of a balance between the quality demanded by the public and what that correlates to in terms of training is absent. Even if a licensing proposal somehow starts out with a market-determined level of training, it could be greatly changed by the time it moved through the process to become law. Different policymakers who consider legislation at different stages have varying political considerations and varying ideas about the proper role of government, so it is unusual for most legislation to pass exactly in the form it was filed. Most likely, as a function of public administration, policymakers are somewhat arbitrarily choosing an acceptable level of quality and some training of education, work experience, and other factors that they believe will lead to such a level of quality. Under voluntary registration or certification models as described earlier, the market would dictate the level of training as consumers would weigh in on what was necessary by how often they chose a registered or certified practitioner as opposed to someone else. Through the political

process, policymakers rarely think about whether the public is more willing to pay a premium for a cosmetologist who went to school for nine months as opposed to a cosmetologist who learned by being an apprentice in a small shop for three months. In a voluntary system, if an organization was registering or certifying cosmetologists with at least nine months of training and most consumers were willing to use other cosmetologists, such activity would send a signal that it would not be profitable for most cosmetologists to invest so much time and money into training. Therefore, to be competitive, registering or certifying organizations would likely adjust downward their minimum standards to match the level of quality expected by the public. Without such a system, policymakers more or less guess at consumer demand for a given service and come up with a system to achieve the level of quality that is demanded. Even if the policymakers hear testimony from lobbyists or people who are generally active in the political process, their desires may not be greatly aligned with consumer demand.

Many authors comment on deadweight economic costs due to the lack of correlation between occupational licensing policies and consumer demand. Kleiner believes that economic costs of occupational licensing result in deadweight losses to United States society of between \$34.8 billion and \$41.7 billion per year. This is because licensing can represent a barrier for others to enter regulated markets and, therefore, will limit competition and the choices available to consumers. The losses to society occur because prices rise over time when there is less competition (2006, 115). As Cox and Foster point out, the benefits and costs of regulation depend on the particular service market in the particular location in question, so it is important to consider the costs and

benefits of any licensing proposal on a case by case basis (1990, 1). Yet, this rarely seems to be done.

Not Only Incompetent Practitioners are Screened Out

Literature on occupational licensing does not thoroughly describe the intricacies of the licensing process and the difference in outcomes for occupations that require a relatively concise exam as opposed to those that require months or years of training. However, the difficulty, time, and costs associated with such requirements seem to have a significant impact on who enters various occupations. Complicated mandatory training requirements, especially for individuals who tend to be very productive workers, could cause fewer people to even attempt entry into an occupation. If these individuals are productive workers and already have a good paying or enjoyable job but simply want to explore other occupations or do part-time work on the side, their opportunity cost of completing complicated training would be very high. Larsen found that stricter occupational licensing requirements for teachers actually drove away highly qualified teacher candidates (2013, 20). A similar study by Wiswall found the same results. Wiswall feels that these individuals have higher levels of general skills and are more likely to receive higher wage offers for other occupations, leading them to leave the education field due to the high opportunity cost of becoming a teacher (2013, 2). An example would be an auto mechanic who was interested in teaching an auto shop class for high school students. Assuming that the individual had a good work record as an auto mechanic, the opportunity costs of, at the least, spending several months and several thousand dollars obtaining a teaching certification would be very high. In many states, if the auto mechanic did not have a baccalaureate degree to begin with, he or she would

have to obtain a degree and a teaching certification in order to be eligible to work as a shop teacher.

The requirements for passing written exams, especially those of a standardized nature, also tend to impact who is able to enter an occupation, regardless of the person's level of skill at actually performing their service. It is commonly thought that such exams often disqualify minority candidates or poor people with low levels of formal education, despite the fact that these individuals might be very skilled in their chosen trade. Summers believes that licensed workers spend time and money to learn and take exams over skills that are not relevant to the work they will actually be doing. This is time that he believes could be better spent learning a variety of skills that, while important, may not be covered on a licensing exam as testing standards often deviate from practical knowledge (2007, 11). Williams also discusses potentially discriminatory effects of licensing examinations. While some licensing applicants have enough practical skills to effectively work in certain trades. Williams sees problems with exams for people who have a limited writing or reading ability or whose native language is not English. Even license applicants who do well on practical exams often fail these other exam requirements (75). Williams (2011, 78) and other authors such as Carpenter and Ross (2009) and Carpenter et al. (2011) discuss African hairbraiding, a form of natural styling that does not use chemicals or harsh procedures. As the technique became popular and many entrepreneurs began offering hairbraiding services, many states required the practitioners to obtain cosmetology licenses, which can cover as much as 1,600 clock hours of training at a tuition cost of at least \$5000 before someone is even allowed to take a licensing exam. Yet, most cosmetology curriculum contains little to no information

about African hairbraiding (Williams 2011, 78). This is due to the fact that although new legislation is passed through the policymaking process and new administrative rules often follow, policymakers do not always require approved educational institutions to adjust their curriculum in accordance. When cosmetology licensing requirements for hairbraiding changed to a modest registration requirement, Carpenter et al. found that 300 new braiders registered across the state of Mississippi, suggesting that policymakers should strongly consider the level of regulation appropriate for specific types of cosmetology services (2011, 13). Again, Williams and others see this type of licensing as discriminating against minorities who do not practice traditional cosmetology services. While this unusually heavy burden on minorities may not be intended, evidence suggests that at one time, it was very much intended. Among comments that occupational licensing tends to be anti-competitive, many scholars feel that licensing policies have disproportionally negative effects for minorities and poor people. Harfoush feels that the Fourteenth Amendment's Privileges or Immunities clause was created to protect a right to earn a living, free from unreasonable interference (2012, 138). Neily agrees, stating that protecting economic liberties appears to have been among the chief concerns of those who framed and ratified the Fourteenth Amendment (2013, 156-157). Harfoush believes this is because there were many occupational licensing laws enacted during the time period of Reconstruction, after the Civil War. Harfoush feels that such laws were aimed to keep freed slaves from earning a good living which would ultimately lead to fewer of them owning property. As the country went through immigration waves, Harfoush also felt that occupational licensing laws were encouraged by the politically powerful at the expense of politically disenfranchised groups including Irish immigrants, European Jews,

Catholics, Asians, and women (2012, 138). Apparently, many practitioners of various occupations felt that new groups entering the workplace would be eager to earn a living and would work for cheaper wages, thereby increasing competition for established service providers. Later, Harfoush believes, many Jim Crow era occupational licensing laws were again designed to keep African Americans from earning an honest living in the profession of their choice (140).

Significant policy questions arise when it comes to the regulation of interior designers, because only four states fully regulate the occupation. As a function of federalism, many other states and localities enact certain restrictions on interior design while stopping short of full licensure. Harrington and Treber found that states who stringently enforced licensing regulations on who may advertise or practice as an interior designer will have a reduction in the number of African Americans and Hispanics who practice as interior designers. The authors also believe the regulations to be discriminatory against older workers who may want to enter the interior design occupation after another career. This is because older workers are less likely to have the time, flexibility, and resources to return to school and get the necessary training to become licensed interior designers (2009, 9).

The example of Mississippi switching to a registration system for hair braiders illustrates another way that voluntary systems of registration and certification offer information on service quality that is not offered by required occupational licensing. The market will not reward a hair braider who bears the cost of preparing for and passing a cosmetology exam that involves questions on cutting hair and using chemicals, as it is not valid to the job performance of the individual once he or she enters an occupation.

However, a first aid course that is commonly required of nurses is probably valuable to most consumers

High Quality Services versus Cutting Out Some Services Completely

Many questions are asked, and consequently much information is provided in regards to whether occupational licensing increases the quality of services. However, even if there is an increase in the quality of services, there may be unintended negative consequences that arise when policymakers determine a minimum level of legally allowable quality in a specific occupation. If the minimum level is set at a higher level than what the market would likely demand, consumers are artificially restricted in their choice of quality levels. If someone gets paid for poor work, that person enjoys a private marginal benefit while, if the work causes harm to a third party, society sees a lower social marginal benefit in having that person practice an occupation. However, at some quality point, the private marginal benefit of the practitioner of an occupation will be equal to the social marginal benefit of the service that the practitioner provides. For many licensed commonly licensed occupations, any possible harm would likely affect only the person choosing the services and not third parties. If there was a perfect way to enact an occupational licensing restriction, it would serve to protect the public in the instances where harm could be perpetrated on third parties.

When the legal minimum of quality is set at a higher level than what the market demands, consumers become artificially restricted in their choice of services, which can lead to other negative consequences for society. While some people praise licensing because it can eliminate substandard work, Summers believes that some people would be willing to sacrifice a certain amount of quality if they could receive services at a more

affordable price. When people are unable or unwilling to pay the costs associated with stronger licensing requirements, they are more likely to attempt to do work on their own. Summers cites statistics showing that in areas with tougher licensing restrictions on plumbers, retail sales of plumbing equipment are higher. This would lead one to believe that more people are attempting their own plumbing work due to the higher costs or being unable to find a service provider because so few can legally operate. In areas with stricter electrical licensing requirements, researchers have found higher incidents of electrocution, suggesting that more consumers risk doing their own electrical work (2007, 12). Finally, Summers believes that while occupational licensing laws are often touted to reduce problems caused by charlatans and scammers, the opposite can occur. This is because, when costs are high and there are very few legal service providers, some workers and consumers may choose to ignore strong licensing standards and operate outside the law, where transactions are harder to enforce and unsavory practitioners can prey on victims who will be less likely to report problems due to a fear of being caught breaking the law (13). Williams uses the example of licenses that are required for taxi operators in New York City. Many would-be minority taxi operators cannot afford the cost of licensing and associated regulations, and according to Williams, they turn to the black market and operate illegal cabs. Williams believes the operation of illegal cabs by so many minority entrepreneurs is a direct response to the failure of the licensed taxi industry to provide adequate services to minority neighborhoods in New York City where demand is high (2011, 63). Licensed operators often avoid working in areas with high crime rates and other areas which are less economically profitable than the central business district (64). Yet, those who would work in the area are unable to afford the

cost of licensing so they tend to operate illegally, which does not ensure that minority neighborhoods receive the best level of services. If people cannot afford the available services in some areas, they may forego them altogether and if needed things such as plumbing or electrical work are foregone, society may eventually bear a cost.

Effects on Individuals with Criminal Records

In approximately half of all states, individuals can be denied various occupational licenses due to the presence of a criminal record, regardless of what type of crime was committed, when the conviction occurred, or whether it is relevant to the type of license sought. Exclusions of individuals with criminal records may affect anywhere from 70 million to 100 million individuals across the United States who have criminal records of some type (White House 2015). What is concerning to many authors such as Neily et. al. is that such exclusions disproportionately affect African American and Hispanic workers, who find themselves barred from many licensed occupations at increasing rates (2014). Also, in many instances, occupational licensing authorities consider arrests that never even led to charges or convictions when making a decision on issuing licenses. Even in cases where licenses are issued to individuals with criminal records, licensing boards routinely take months to reach a decision and issue the license (White House 2015).

Rent Seeking by Groups Wishing to Be Licensed

Economic theory, as well as a great deal of the literature on occupational licensing, suggests that many licensing requirements have the effect of creating rents for existing practitioners in licensed occupations. If a given state tends to routinely adopt new occupational licensing policies, such as Texas, where over 500 different occupations are regulated, additional occupations likely become even more inclined to seek licensure.

This leads to many different scenarios from industry groups spending resources to hire lobbyists to work through the licensing process to committee chairs and other influential policymakers being accused of favoritism by quickly moving licensing requirements for certain occupations and not others. Just like with any other public policy issue, interest groups and lobbyists will be likely to manipulate the process to benefit their own interests if they have a chance to do so.

Political Economy of Occupational Licensing

Aside from protecting the health and safety of the public, an alternative explanation for the prevalence of occupational licensing is related to a theory of regulation in general that has evolved over time. This is where industries and professional associations request regulation, draft potential legislation, support it as it moves through the political process, and tries to make sure it is operated for the benefit of the industry or groups. Friedman (1965) discussed this phenomenon in terms of the earlier mentioned time period of 1890-1910 when occupational licensing began to expand more rapidly in the United States. He believes that, during this time period, "friendly licensing" grew at an exceptionally rapid rate. He describes friendly licensing as that which was suggested and drafted by groups within the affected occupation (497). According to Friedman, the success of licensing policies usually depended on the absence of a strong and coherent group working together to oppose licensing (500). Friedman identified farriers, barbers, real estate agents, undertakers, embalmers, and funeral directors as well organized groups that became licensed at various places in the United States during this time period, usually through friendly licensing legislation (505). This seems to be in line with other theories of interest groups which state that the best

organized interest groups tend to be the most successful in the public policy process. Much in the way that Friedman (1965) described friendly licensing, Rottenberg described occupational licensing as a system where pleas are made to legislatures by new licensing statutes or stronger requirements by practitioners of the trade in question, not by the consumers (1962, 4). For example, Rottenberg wrote about a single session of the New Jersey legislature where practitioners requested licensing requirements for bait fishing boats, beauty shops, chain stores, florists, insurance adjusters, photographers, and master painters. In addition, Rottenberg stated that the draft proposals usually included grandfather clauses which exempted incumbent practitioners from requirements, making it likely that they would realize significant economic rents from the restrictions (6). Kleiner also recognizes that there is typically a once-and-for-all income gain that accrues to current members of an occupation who are grandfathered in and do not have to meet the newly established licensing standards (2000, 192). It stands to reason that any group who could successfully get a grandfather clause enacted for themselves in occupational licensing legislation would have an economic incentive to continually push for higher standards of entry for the occupation. Schlomach (2012) also discusses grandfather clauses, pointing to such policies as evidence that licensing advocates know they are overstating the importance of public safety. He believes that if there is enough danger to health and safety from unlicensed practice of occupations to justify the enactment of licensing policies, that it does not make sense to exempt anyone, including current practitioners, from the requirements. Not only may costs for required training and meeting other required standards affect who may enter a profession, but practitioners must pay fees anytime an occupational license is due for renewal and, in many

occupations, must complete continuing education requirements. These costs are not only potentially burdensome to individuals seeking to enter an occupation, but may also be burdensome to current practitioners who must renew licenses while operating on small profit margins. In a 2006 study, Kleiner stated that no branches of government have a strong incentive to oppose occupational licensing. This is because the fees generated from licensing and regulating an occupation are generally much higher than the costs of operating the licensing program. Many states use the excess funds to help balance the budget or for small projects to earn favor of constituents that would not otherwise be possible without raising taxes, something that is often politically unpopular (18). Kleiner also refers to increased licensing fees as a potential source of hidden taxes since states and localities can raise costs associated with licensing processes without widespread public backlash (2013, 220). There may not even be backlash from current practitioners in an occupation who face increased fees. If they can afford the fees and truly wish to erect higher barriers to entry to limit the ability of new competitors to enter the market, they will likely not challenge increased fees.

Curiously enough, occupational licensing policies can sometimes lead to price fixing schemes where regulated occupations are forced to offer subsidies to certain classes of consumers. While it may seem reasonable to believe that practitioners would not like limits on what they can charge for services, there may be more to consider. For instance, many municipal governments around the United States enact occupational licensing requirements for taxi drivers and, more recently, for newer ride sharing services that have developed in recent years. In some states, such as Texas, this type of licensing policy goes back for nearly a century. As Steen explains, some city councils around the

state as early as the 1920s passed ordinances specifying licensing requirements for individuals who operated taxis (2012, 135). Also, in some instances, city governments placed a cap on fees charged by taxi drivers to take passengers to certain destinations, and it was known that non-compliance with the fee caps could result in the loss of a license (142). By the 1940s, some municipalities also had passed ordinances requiring licenses for chauffeurs within their corporate limits (360). In cases like this, occupational licensing policies operate as a cross-subsidy. A fixed price for taxi services might mean that even when there may be a high demand for taxi services and a low supply, individuals would not pay a different price than they would at any other time. For instance, in the market, a midnight taxi ride when only one company was operating and weather conditions were icy might command a higher price and a higher value to a consumer than a mid-day ride during nice weather when multiple companies were operating. However, a price fixing scheme would not allow that market adjustment to happen. In that way, the cross subsidy comes by enacting a fee cap, or hidden tax, on taxi licensees which is allocated as a subsidy to individuals who would otherwise pay more for taxi rides. While it may seem unusual that taxi operators would be supportive of having their fees cap, they are less concerned if policymakers are limiting market entry for other taxi services. Incumbent practitioners would often rather have more guaranteed business at a lower price than be able to charge higher prices but, in doing so, be forced to compete with more operators. In this example, policymakers may be maximizing their own utility as they may be supported by the taxi industry for erecting barriers to entry but may also remind their constituents that taxi services are affordable due to legislation that

they passed. Therefore, economic gains and losses may be distributed in a way that will be of maximum political benefit to policymakers.

Existing Empirical Studies

Some empirical work has been conducted to study the cost of licensing in relation to the price of services paid by consumers. A review of empirical studies indicates that licensing and other occupational regulations tend to raise the cost of service in a wide range of professions (Herrington and Treber 2009; Kleiner and Kurdle 2000). Also, various studies have found increases in practitioner incomes associated with occupational licensing (Herrington and Treber 2009; Kleiner 2013; Kleiner and Park 2011). Other studies of occupational licensing, especially policies enacted at the local government level, do not find the same association. However, local and state licensing requirements combined to tend to lead to increases in practitioner incomes (Kleiner 2013). It is also common for practitioner wages to increase when demand for a service is inelastic (Kleiner and Park 2011). Table 1, on the next page, summarizes the findings of nine different existing empirical studies on practitioner incomes and the prices of services.

Table 1: Occupational Licensing, Practitioner Incomes, and Prices of Services

Study	Occupation	Finding
Kleiner and Kurdle	Dental Hygienists	Independent practice authority for dental hygienists is associated with a -26% employment growth rate for dentists and a 10% increase in the earnings of hygienists. States with stricter licensing requirements that do not allow autonomy for dental hygienists reallocate \$1.34 billion per year from hygienists to dentists.
Kleiner and Kurdle (2000)	Dentists	Stricter licensing requirements are associated with a slower growth in the amount of dentists practicing and there are higher prices for services and higher hourly earnings for dentists.
Herrington and Treber (2009)	Interior Designers	Licensing laws diminish low cost competitors and remaining firms and designers tend to charge higher prices. Licensing raises the earnings of full-time interior designers by \$1600 per year and interior design firms earned \$72,000 per year more per 10,000 people in states with licensing requirements.
Kleiner and Park (2011)	Electricians	Demand tends to be inelastic, and stricter licensing requirements tend to increase wages.
Kleiner (2013)	Barbers	Licensing requirements were found to increase wages by as much as 22%.
Kleiner (2013)	Electricians	Local licensing requirements in addition to state licensing requirements increase practitioner incomes by as much as 12%.
Kleiner (2013)	Massage Therapists	Licensing requirements were found to increase hourly earnings by 16% and to reduce the amount of practitioners per capita.
Kleiner (2013)	Radiologic Technologists	In states with licensing requirements, earnings were about 6.9% greater than in states without licensing.
Kleiner (2013)	Real Estate Professionals	Stricter licensing requirements in Massachusetts were found to reduce the number of active agents and increase the incomes of the remainder by up to 17%.

Other literature has examined the effect of occupational licensing requirements on overall incomes in licensed occupations, without looking at specific occupations. As competition diminishes and costs to consumers rise, Kleiner (2011) found that average practitioner income, regardless of the occupation, tends to rise with licensing

requirements. In fact, he estimates that licensing at the state level is associated with an earnings growth of 17 percent over similar unlicensed occupations. Also, state licensing requirements which are combined with some type of local or federal business regulation in the same occupation are associated with an earnings growth of 25 percent (19).

Another valid question concerning occupational licensing policies is whether they lead to better quality. Since eliminating poor quality service providers is often a justification for enacting licensing policies, it stands to reason that policies that have good outcomes would lead to better quality services. Kleiner surmised that licensing can raise quality within an industry by restrictive entry requirements tend to diminish the number of less qualified or less motivated individuals who could enter the occupation. This increases the average quality of workers' skills in an occupation (2011, 7). Larsen (2013) and Shapiro (1986) examined the quality of teachers when stricter licensing requirements were enacted. He found that some requirements for licensing, such as a the requirement to pass a test in the subject matter an individual sought to teach, did improve teacher quality. However, there was not a statistically significant impact on the average teacher input quality when more restrictive licensing requirements were implemented. Stricter licensing requirements were found to be associated with an increase in teacher qualifications, but only at the wealthiest school districts, measured by those with a lower percentage of students qualifying for a free lunch. The effect of higher qualifications decreases as income decreases and in the poorest districts, stronger regulations are associated with a statistically insignificant decrease in teacher qualifications (Larsen 2013, 27-28). Larsen's work found support for a prediction by Shapiro which stated that stronger licensing requirements would improve quality for higher income areas but not

lower income areas (1986, 30). Since stronger licensing requirements have been known to restrict supply and increase wages, Larsen believes the poorest school districts still find ways to substitute away from licensed professionals, which would lead to lower quality services (31). Lower income schools are also less likely to retain teachers during supply shortages, which could lead them to increase class sizes or hire emergency certified teachers who have not yet met all licensing requirements (32). This is consistent with Larsen's hypothesis that stronger licensing requirements can lead to larger class sizes in order to have enough qualified professionals (36). Wiswall touches on this matter, noting that about 15 percent of new teachers are working without having met some or all licensing requirements (2013, 4). Overall, Wiswall believes that higher licensing costs reduce teacher labor supply, reduce average teacher quality, and increase the average length of teaching careers (7). This is because stronger licensing requirements reduce the proportion of the population choosing to teach (21) but many people in this category would have likely not taught for their entire careers. Without licensing, people might be more likely to leave teaching for another occupation or begin teaching later in their career after working in another profession. Wiswall feels that if states wish to recruit teachers with high levels of general skills in addition to subject area knowledge, they should relax licensing requirements. This, he feels, is one of the few ways to improve average teacher quality without large pay raises, which also tend to bring in more qualified candidates (49). While there is evidence to suggest that licensing does increase the lower tail of teacher quality, stated public policy goals usually have nothing to do with only the lower tail of quality.

Kleiner and Park studied occupational licensing for electricians, who were licensed by 45 states at the time of their paper (2011, 5). Much like the work of Larsen (2013) with teacher licensing requirements, Kleiner and Park believe that stronger licensing requirements could eliminate the lower part of the quality distribution for electricians (2011, 8). Despite their belief that lower quality workers might not enter the profession under stronger restrictions, the two authors found that the impact of occupational regulation for death and injuries in this potentially hazardous occupation is statistically insignificant (19), possibly pointing to the fact that tougher licensing laws do not always fulfill their intended purpose. At the very least, this finding may point to the fact that some issues that truly involve health and safety of the public are so extreme in nature that causes and effects are outside the scope of the stated protections of occupational licensing.

Carpenter (2011) conducted a field experiment on the influence of the licensing of florists on the quality of floral arrangements. At the time of his study, Louisiana was the only state with full licensing requirements for florists. Experts from that state assessed the quality of floral arrangements and found that licensed florists did not produce better quality work that non-licensed florists in Texas, where the same products had a lower cost. Summers (2007) found that states with stricter dental licensing laws had the highest incidence of poor dental hygiene and states with stricter optometry licensing laws reported higher rates of blindness and other uncorrected vision problems. Williams (2011) found negative effects on the quality of services provided to minorities in the public.

Shown below, Table 2 summarizes eight different studies which focus on the relationship between occupational licensing and service quality.

Table 2: Occupational Licensing and Service Quality

Study	Occupation	Finding
Shapiro (1986)	Teachers	Stricter licensing requirements improve quality for higher income schools, but not for lower income schools.
Summers (2007)	Dentists	States with stricter licensing laws had the highest incidence of poor dental hygiene.
Summers (2007)	Optometrists	States with stricter licensing laws had the highest incidence of blindness and uncorrected vision problems.
Carpenter (2011)	Florists	Licensed florists did not produce a better quality product than non-licensed florists.
Kleiner and Park (2011)	Electricians	Licensing requirements had a statistically insignificant impact on the amount of deaths and injuries associated with electrical work.
Williams (2011)	Taxi Drivers	Despite high demand, the licensed taxi drivers in New York City provide poor service to low income areas and areas with high minority populations.
Larsen (2013)	Teachers	Licensing requirements for passing a subject matter test improved the input quality of teachers. Other restrictive licensing requirements did not produce a statistically significant effect on teacher quality.
Wiswall (2013)	Teachers	Stricter licensing retirements reduce the supply of teachers, reduce the quality of teachers, and lengthen teaching careers.

This dissertation seeks to examine the political economy of occupational licensing, specifically the reasons that determine which licensing proposals become law and the extent to which industry interest groups work through the political process to support such proposals. There are some existing studies for this area of occupational licensing, and even some court decisions that found licensing requirements were enacted to the benefit of a specific group without helping the greater interest of society. In *Wyeth v. Thomas*, Benjamin Wyeth had been an undertaker for 46 years when a regulatory board in Massachusetts passed a rule requiring all undertakers to be licensed embalmers. The

court saw no good reason for such a rule and stated that it "did not carry...strong presumptions of constitutionality" (Friedman 1965, 512). A similar law was passed in New York in 1905 and was challenged in the case of *People v. Ringe*. The New York Court of appeals recognized the state's regulatory power, but felt that it went too far by requiring that the jobs of undertaker and embalmer be done by only one person. The court believed that "...the act in question was conceived and promulgated in the interest of those engaged in the undertaking business..." The court also stated that the provisions interfered with the "common-law right to engage in a lawful business," and considered the requirement an unnecessary and unwarranted interference with constitutional rights (513). In 1901, the decision in Bessette v. People struck down an Illinois law with licensing requirements for farriers. The court stated that it was impossible to understand how the law promoted the health, safety, or welfare of a society. Without aims to those ends, the court stated that no law regulating any occupation could be sustained. The court felt that if such an act was valid, the legislature would be free to regulate the employment of any citizen in any occupation simply by implementing licensing requirements (517).

Wallace finds that interest groups seeking licensing requirements usually field legislators to be friendly or without an opinion, and that the only threat during the legislative process would come from another professional group which feels that a bill threatens their interests (1972, 47). In other words, licensing requirements do not draw much scrutiny from those outside the profession unless a "turf war" of sorts might be sensed by practitioners in another occupation. Harrington and Treber studied the effects of occupational licensing requirements on the earnings of interior designers, an

occupation where stricter regulations are normally pushed by the American Society of Interior Designers, or ASID. ASID representatives and other proponents of stricter regulations for the interior design professions often say the laws are necessary to protect vulnerable consumers from unqualified designers (2009, 2). ASID's endorsement of stronger regulation in its industry has been taking place for over 30 years (Carpenter et al. 2011, 29) despite the fact that since 1907, only 52 lawsuits have been filed against interior designers in the entire United States, the majority of which involved contract disputes and not damages that represented a menace to public health or safety (Texas House Committee on Government Reform 2009, 50). State representatives in Texas opposing a 2013 proposal for deregulation of interior designers used various arguments including their observation that many licensed practitioners want licensing laws to remain in place. Despite a recommendation from the Texas Sunset Commission to deregulate the occupation, the 2013 legislative session actually ended with more regulations in place for an interior design license. In addition to the initial requirements, individuals now must submit a complete set of fingerprints and have a background check before becoming being approved for licensure. Also, the grandfather clause was removed (Texas Legislative Council, 2013).

Sometimes, it seems that policymakers and the public are largely indifferent to licensing proposals. Wallace states that the general public is usually not even interested enough to participate in the process, so the legislative process ends up being only a minor barrier to the enactment of new licensing requirements (1972, 48). Buchholz believes that policymakers do not necessarily see all licensing restrictions that are passed as a good thing, but they feel that they might as well give in to industries if the public does

not care enough to provide input (1989, 253). Summers found that regulatory boards, often at least partly made up of practitioners may have a desire to use the licensing system to help incumbent practitioners while levying punishments on those who work without a license (2007, 11).

The Texas House Committee on Government Reform's 2009 report notes that other industries, such as landscape irrigators have sought to enhance their own regulation (48). Also, at the time the committee was holding hearings on the interim charge of studying occupational licensing, 15 landscape architects appeared to testify at a hearing to defend and promote the continued regulation of their industry (53). Carpenter et al. explain that practitioners are just as likely to oppose deregulation as they are to request friendly regulation. In 2011, Florida considered legislation to end licensing for 20 occupations including auctioneers, talent agents, television picture tube salesmen, ballroom dance teachers, interior designers, and hair braiders. However, the bill failed partially due to strong industry resistance (30).

While the findings previously discussed to explain many important things about the political economy of occupational licensing, they do not explain the exact things for which this dissertation is intended, as this dissertation focuses on why some occupations become licensed and others do not. The previously mentioned work largely discusses occupations either seek licensing which ultimately passes or that are working to keep licensing requirements that are already in place. It does not address licensing proposals for other occupations that fail to become law. Carpenter et al. touch on this notion, stating that the fact that occupations proposed for licensing in one state that might be unlicensed elsewhere should suggest to state policymakers that stated health and safety

risks are not truly present or that other market-related mechanisms can work effectively (2011, 34). However, Carpenter's work does not follow any specific occupation in this category through the process of proposed licensure to determine why certain ones will become licensed. There is some mention of the fact that occupations posing more of a health and safety threat to the public are more likely to become licensed, but there appears to be a lack of empirical study showing whether or not that is true. There are, however, findings that suggest that whether or not the risk level of the public is the initial reason for licensure, higher risk does not necessarily translate into stronger licensing standards once an occupation becomes licensed. Carpenter et al. surmise that the difficulty of entering an occupation often does not line up with the public health risk it poses. They studied 66 occupations such as interior designers, barbers, cosmetologists, manicurists, and many contractor designations and found that all had more burdensome requirements than emergency medical technicians (EMTs). The authors found that the average cosmetologist throughout the United States was required to spend 372 days in training to qualify for a license, while the average EMT needed only 33 days (2011, 29). Katsuyama also studied similar issues, concluding that he found no reason that barbers should routinely require more training than paramedics, who deal with life and death situations (2010, 570).

Other work has focused on multiple occupations, but those that were closely related such as Graddy's (1991a) study of health-related occupations where she measured characteristics of several occupations and the political effectiveness of related professional associations. In Graddy's work, both public interest and political effectiveness of professional associations were significant in explaining occupational

licensing. Liability insurance premiums were used by Graddy as an indicator of the level of risk to the public that a given occupation poses. However, Graddy only presented findings for a few closely related occupations.

While there are many studies that deal with various facets of occupational licensing, there do not seem to be any that have examined a wide range of occupations in a single state by following both successful and unsuccessful licensing proposals through the policymaking process. To expand on studies in this area of public administration, this dissertation aims to study a wider range of occupations in Texas that have seen both success and failure with licensing proposals. There is also a great deal of speculation about the effects of occupational licensing on both the professionals in a given industry and on consumers. Much of the speculation does not appear to have been studied academically or empirically, despite the fact that occupational licensing affects the employment of nearly 30 percent of the labor force in the United States and may impact virtually all consumers at some point or another. This dissertation will present research that expands on this topic.

Chapter III

METHODOLOGY

Part 1: Case Studies on Occupational Licensing in Texas: Anesthesiology Assistants, Associate Auctioneers, Forensic Analysts, Foundation Repair Contractors, Roofing Contractors, and Veterinary Technicians

For the first portion of this study on occupational licensing, information will be used from six case studies on occupational licensing proposals that have been considered in Texas over the past four years. Legislation requiring occupational licensing ultimately passed for three of these occupations: associate auctioneers, forensic analysts, and veterinary technicians. Legislation was not successful to license anesthesiology assistants, foundation repair contractors, or roofing contractors. These six case studies should provide valuable information on how politics is intertwined in the process of occupational licensing. While six case studies may not provide conclusive evidence on how the licensing process always works, by selecting a wide range of occupations as well as those with both successful and unsuccessful licensing proposals, they should present significant information on how the process works- something that could be expanded upon in future studies. Although various interested parties often discuss occupational licensing in terms of the political forces involved, there is very little, if any, work to describe the process in a specific state. The Texas House Committee on Government Reform did, in 2009, put out a report on occupational licensing in the state. At that time, the committee was chaired by now retired State Representative Bill Callegari, a frequent

and vocal critic of occupational licensing polices. The report provides some insight to various proposals considered in the state around that time, but it was more concerned with the merits of existing licensing requirements as opposed to also considering tracing failed proposals through the process and comparing them to successful proposals.

The case studies are also intended to provide some context to statistical methods that are also used, which examine the degree to which political participation by interest groups is associated with the likelihood of successful licensing proposals for associated occupations. The case studies suggest that participation should be studied over several legislative sessions, as many similar proposals have been made multiple times before passing or, before even coming to a vote.

These six case studies have been formulated from official information kept in the records of the Texas Legislature. The Texas Legislature maintains official records such as when legislation was considered for committee hearings, how far the legislation moved in the process, and lists of individuals and groups registered to support or oppose the legislation. These items were studied, as were video archives of each committee hearing and floor debate on the legislation being studied. Direct quotations from these individuals have been properly attributed, and other source information is listed in the bibliography. The Institutional Research Board (IRB) determined that this research protocol was exempt from their oversight, since human research participants were not used. The IRB protocol exemption report is included as an appendix to this dissertation. Part 2: Empirical Study of Occupational Licensing in Texas

The competing theories of regulation (public interest and regulatory capture), discussed earlier in this work, suggest that an empirical analysis can be conducted. If

policymakers do indeed regulate occupations for the protection of the public, then occupations that pose a greater risk to a member of the public utilizing the service or to an uninvolved third party should be the most likely to have licensing requirements. However, if occupational licensing is beneficial mainly to current practitioners in an occupation, then the likelihood of occupational licensing requirements in a given occupation should be a function of the level to which related interest groups are politically organized. The theories could both be true, and complimentary of each other, as the public may benefit from protection of health and safety, while practitioners in licensed occupations also benefit by being able to protect their interests.

The literature review suggests that occupational licensing proposals are unpopular by groups who see themselves as being negatively affected. It stands to reason that if occupational licensing raises the cost of service, then anyone who is likely to hire individuals in the occupation in question may oppose licensing requirements. According to Graddy (1991b), occupations where many practitioners work for large firms are less likely to face licensing requirements since large firms can organize more easily than consumers in order to oppose licensing proposals. This is somewhat illustrated in the case studies presented in this dissertation, as most groups registering in support of the occupational licensing legislation that was the subject of this study were interest groups, not businesses or firms that actually hired practitioners in the occupations. Because of this, the likelihood of an occupation facing licensing requirements should vary inversely with the level at which opponents are organized.

This study is driven by the following research question: Does occupational licensing serve to protect both the public and the interest of practitioners in licensed occupations?

H1o- There is no relationship between occupational licensing requirements and the risk posed to the public by individuals engaging in the occupation.

H1a- Occupations that pose a risk to the public are more likely to have occupational licensing requirements.

H2o- There is no relationship between occupational licensing requirements and the interests of practitioners.

H2a- There is a relationship between occupational licensing requirements and the interests of practitioners.

H3o- There is no relationship between licensing requirements found for occupations in other states and the likelihood of the same occupation requiring licensing in Texas.

H3a- The more states that require licensing in a specific occupation, the more likely the occupation is to be licensed in Texas.

H4o- There is no relationship between the organizational structure in which practitioners work and whether occupational licensing is required.

H4a- Firms are more likely than individuals to oppose licensing requirements for their employees, therefore, practitioners in fields employed mainly by firms are less likely to be licensed.

These hypotheses are supported theoretically by several authors who suggest that licensing can serve a dual purpose and empirically by Graddy (1991a, 1991b). Therefore, the likelihood that an occupation will be licensed can be modeled in the following way:

L = L(R,S,O,N,T)

Where:

L = the likelihood that an occupation has licensing requirements;

R = the risk posed to the public by individuals engaging in the occupation;

S = the political influence of the groups supporting licensing requirements; and

O = the political influence of the groups opposing licensing requirements.

N = number of states requiring licensing for the occupation.

T = Organizational structure of occupation (employed as individuals, employed by firms, or a mixture).

Methodology used in this dissertation tests the above model using data from the State of Texas. It will help answer the question of how the observed patterns associated with occupational licensing are correlated.

Dependent Variable: Licensing Requirement

An occupation either has licensing requirements in Texas, or it does not. A data set of 43 occupations has been compiled, of which 28 are licensed by the State of Texas according to the 2008 publication, *Occupational Regulation in Texas: Occupational Licenses and Statutory Penalties for Violations Relating to Occupational Licenses*. As a supplement to determining which of the 43 occupations require licensing in Texas, information from legislative sources has been added on occupations that became licensed since 2008. This dataset was compiled based on occupations studied nationwide by the Institute of Justice in their publication *License to Work*. The 43 occupations were selected from the publication in order to represent a variety of occupation types. Having a variety of occupation types represented in the dataset is important to this study in order

to study factors that might lead to occupational licensing, regardless of the occupation type. In addition, with some of the occupations requiring licensing in Texas and others not requiring licensing, meaningful analysis can be made among the occupations. The selected occupations also have a range of reported accident rates. Lobbying expenditures also vary greatly, as some of the selected occupations had no groups spending money on lobbying while groups representing other occupations spent as much as \$310,000 during a legislative session. Individuals working in some of the occupations tend to be self-employed, individuals in other occupations selected tend to be employed by firms, while the final set of occupations represents those where individuals tend to be employed both for themselves and by firms. Having a variety of organizational structures for occupations is also important to this study. Table 3, shown below, lists the occupations that were selected for this study and the current licensing status of the occupations in Texas.

Table 3: List of Occupations in Dataset and Current Licensure Status in Texas

Occupation	Licensing	Occupation	Licensing
*	Requirement	•	Requirement
Air conditioning contractors	Yes	Locksmiths	Yes
Anesthesiology assistants	No	Makeup artists	No
Animal breeders	Yes	Massage therapists	Yes
Animal trainers	Yes	Milk samplers	Yes
Athletic coaches	Yes	Mobile home installers	Yes
Athletic trainers	Yes	Opticians	Yes
Auctioneers	Yes	Painters	No
Bartenders	No	Plumbers	Yes
Behavior analysts	No	Process servers	Yes
Carpenters	No	Radiology assistants	No
Child care workers	Yes	Roofing contractors	No
Construction contractors	No	Salvage vehicle dealers	Yes
Crane operators	No	Security alarm installers	Yes
Door repair contractors	Yes	Security guards (private)	Yes
Drywall installation contractors	No	Shampooers	Yes
Electricians	Yes	Speech language pathologists	Yes
Fishers (commercial)	Yes	Taxi drivers	No
Forensic analysts	Yes	Taxidermists	No
Foundation repair contractors	No	Travel guides	Yes
Hair braiders	No	Veterinary assistants	Yes
Interior designers	Yes	Water well drillers	Yes
Landscape architects	Yes		

Risk to the Public Posed by the Occupation

If everything else is equal, the occupations presenting the highest risks to the public should be the most likely to have licensing requirements. However, it is hard to measure public "danger" posed by an occupation, just like it is difficult to measure service "quality" when attempting to determine whether occupational licensing improves quality. This study, slightly different from Graddy's (1991a) use of liability insurance premiums, uses what should be the most accurate and up to date measure possible for "danger:" the rate of reported accidents for individuals in selected occupations within Texas.

Political Influence

According to literature found on occupational regulation, interest groups often use the political and policymaking processes to advance their goals of obtaining licensure in their occupations. In most cases, the literature does not detail the methods by which groups seek to influence public policy. However, the the literature generally indicates that groups seeking licensing requirements in an occupation choose to exert political influence through state-level professional associations. The literature does mention union influence in the process, but since Texas is a right-to-work state and the unions that do exist are very weak, this study will focus on professional associations. Therefore, information has been collected in regards to the professional associations representing each of the associations in this sample: the amount of money spent on lobbying by these associations. It is expected that the amount of money spent will be related to the group's ability to engage in activities to support occupational licensing legislation.

Some literature suggests that one proxy for political influence of interest groups could be overall levels of campaign contributions distributed by a group, or at least contributions distributed to key legislators who serve on committees with jurisdiction over occupational licensing legislation. However, campaign contributions were not used in this study because interest groups representing businesses or workers may have other reasons for contributing as well such as influencing particular types of tax policies, economic development policies, and other things of interest in the business community. Therefore, it would be virtually impossible to point to a campaign contribution with the intended purpose of encouraging a legislator to support occupational licensing policies as opposed to some other type of policy supported by the group offering the contribution. Money spent directly on lobbying is a better measure of political strength because lobbying focuses on specific issues whereas campaign contributions may be given regardless of a legislator's stance on specific issues.

Data regarding spending on lobbying were gathered by using a survey of Texas professional organizations. The survey worked in the following way:

- 1. The Encyclopedia of Associations was studied in order to find Texas organizations representing the occupations in the data set.
- An Internet search was conducted to search for any professional associations that might have been missed.
- 3. All of the professional associations that were identified in the two searches were searched in an online database containing official records maintained by the Texas Ethics Commission. Organizations are required to report all funds spent on lobbying to the Texas Ethics Commission for each legislative session. In instances where a

professional organization was not located in either search, the spending of the organization was described as zero. With the methods of searching for organizations that were utilized, it is possible that some professional organizations were missed. That should, however, have a limited effect on the study, as groups that couldn't be located either in the Encyclopedia of Associations or by an internet search likely spends very little on lobbying and has very little political influence.

Number of Other States Requiring Licensing in the Occupation

One thing that is noteworthy in much of the literature regarding occupational licensure is that several hundred occupations have licensing requirements in at least one state, but very few occupations have licensing requirements in all states. For each occupation in this study, the *Career One* Stop web site, sponsored by the United States Department of Labor, was used to determine which states require licensing. A summary of the licensure status of the occupations in the dataset is presented below in Table 4.

Table 4: Licensure of Occupations in the Data Set

Occupations licensed by 50 states and DC	0
Occupations licensed by 41 to 50 states	6
Occupations licensed by 31 to 40 states	11
Occupations licensed by 21 to 30 states	7
Occupations licensed by 11 to 20 states	9
Occupations licensed by 2 to 10 states	9
Occupations licensed by only 1 state	0
Occupations not licensed in any state	1

This dissertation uses a methodology introduced by Graddy (1991a, 1991b), which classifies practitioners of occupations into one of three categories of organizational

structure, depending on how they are most likely to be employed. An occupation is classified in group 1 if most of the practitioners are employed by individual members of the general public. An occupation is classified in group 2 if practitioners tend to work for a mixture of individual members of the general public and firms. Occupations are classified in group 3 if most of the practitioners work for firms. As Table 5 shows, the occupations in the dataset are divided in the following manner:

Table 5: Organizational Structure of Occupations

Organizational Structure	Frequency	Percent
1	24	55.8
2	8	18.7
3	11	25.5

Organizational Structure of Occupations

Graddy's belief, which is also shared in this dissertation, is that firms will be more likely than individual members of the public in organizing to oppose the enactment of occupational licensing legislation. From the public interest theory of occupational licensing, it might be said that practitioners who are employed by firms are less likely to have licensing requirements because firms are more effective than consumers at learning information and determining the quality of service a worker is providing. If this was the case, also keeping with the public interest theory, it could be said that there is less of a risk to the public when a practitioner is employed by a firm (since the firm would be better at gathering information and determining service quality), therefore, the occupation would be less likely to have licensing requirements. While this may seem reasonable, it is unlikely. For this to be true, the main purpose of occupational licensing requirements

would be to provide information to the public, a notion that is not supported in this dissertation. The literature clearly shows that any benefits of occupational licensing in regards to information could be gained through other, less restrictive regulatory programs such as certification, registration, or even private programs operated by trade associations. Under one of these alternate policies, practitioners in an occupation would meet requirements similar to what they meet for occupational licensing requirements, but the difference in using certification or registration would be that some would likely choose to meet the requirements and some would not. An individual or firm hiring a practitioner in an occupation could then choose whether they wanted the information provided by a certification or registration and if they did, they would be able to make the choice and, if applicable, pay the premium associated with their choice. In this alternate model, everyone involved would be no worse off and some would be better off because they might have a choice of more service providers, more price ranges, and other things upon which consumers routinely make decisions.

Also, the case studies presented in this dissertation do not provide any support for the assumption that individual members of the public demand occupational licensing requirements in order to be able to obtain better information. In fact, individual members of the public and groups representing consumers did not play a major role in any of the instances of occupational licensing reviewed in the case studies. In the few instances where consumer groups were involved, they were far from the most active supporters of licensing requirements and provided very general support as opposed to specific examples of consumer harm and how harm could be alleviated by information provided in occupational licensing programs. Therefore, this dissertation proceeds with the

position that the main difference between individual members of the public and firms when it comes to occupational licensing is their level of political organization.

Table 6, shown below, summarizes the independent variables for the statistical tests of occupations in Texas and shows the sources of the data.

Table 6: Independent Variables and Data Sources

Variable	Data Source
Funds spent on lobbying by trade association	Texas Ethics Commission
Accident rates	Bureau of Labor Statistics
Number of states licensing the occupation	Career One Stop web site, sponsored by the United
	States Department of Labor
Organizational structure of the occupation	Assigned Values (1, 2, 3)
(1 = employed by individual members of the public,	
2 = mixed, $3 = employed$ by firms)	

Part Three: Empirical Analysis of Occupational Licensing Across the United States

It is widely acknowledged in the literature that most occupations with licensing requirements do not have such requirements in all 50 states. Therefore, many occupations with very strict requirements in one state may be freely entered by practitioners who meet no specific legal requirements in other states. This part of the analysis singles out a specific occupation, behavior analysts, in seeking to explain why an occupation has licensing requirements in some states but not in others. The economic theory of regulation suggests that behavior analysts will organize at the state level to seek occupational licensing requirements for their profession. At the same time, groups opposed to occupational licensing requirements, (such as psychological associations and counseling associations in Texas) will organize to oppose licensing requirements. This section will seek to determine the organized political strength of behavior analysts at the state level compared to the organized political strength of psychological associations and

counseling associations in conjunction with whether or not occupational licensing legislation is passed.

Behavior analysts were chosen for the analysis in this chapter for several reasons. First, licensing requirements for behavior analysts are relatively new, with the first legislation being passed in 2009 in Nevada and Oklahoma, so it should be relatively easy to find recent data for this occupation. The distribution of new occupational licensing laws since that time has been spread relatively evenly over the past six years. The most recent states to pass occupational licensing legislation for behavior analysts were Hawaii, Mississippi, and Utah, Vermont, and Washington, which all passed their requirements in their 2015 legislative sessions. Table 7, on the next page, lists the states with licensing requirements for behavior analysts, along with the year in which the requirement was first enacted for each state. As of August 2015, behavior analysts have occupational licensing requirements in just less than half of all states (24), so it should be possible to compare states with licensing requirements to those without. Secondly, with groups active across the United States both in support of licensure for behavior analysts and in opposition to the licensing proposals, it seems that policymakers are hearing from people on both sides of the issue and are not making decisions solely based on one side. Finally, the occupation of behavior analysts is not different from one geographic area to the next, nor is there any part of the United States where behavior analysts do not tend to work. While the demand for the services of behavior analysts may differ slightly from state to state, there are a number of practitioners available in every state. Although behavior analysts were not the subject of Texas case studies presented in this dissertation, there

was a recent attempt for occupational licensing in Texas which failed, and provided some insight into who the likely supporters and opponents were for such legislation.

Table 7: Year that Occupational Licensing Laws Were Passed for Behavior Analysts

Alabama	2014	Nevada	2009
Alaska	2014	New York	2014
Arizona	2010	Ohio	2013
Hawaii	2015	Oklahoma	2009
Kansas	2014	Oregon	2013
Kentucky	2010	Rhode Island	2012
Louisiana	2013	Tennessee	2014
Maryland	2014	Utah	2015
Massachusetts	2014	Virginia	2012
Missouri	2010	Vermont	2015
Mississippi	2015	Washington	2015
North Dakota	2011	Wisconsin	2010

The statistical model driving this chapter is much the same as the previous statistical model studying various occupations in Texas, but a vector of state-specific variables has been added that may help explain why a state legislature chooses to require occupational licensing for behavior analysts. This section of the chapter is driven by the hypothesis H2a that the outcome of whether or not behavior analysts are licensed reflects the political organization of a state's behavior analysts, the political organization of psychologists in the state, the political organization of counselors in the state, and also certain political preferences that vary across states. For example, some states are wealthier, larger, or more politically conservative or liberal than other states. These are all things which are likely to be reflected in the outcomes of many different public policy decisions, and it stands to reason that these factors would affect the state's likeliness to regulate an occupation.

Therefore, the statistical model for this section is:

$$L = L(S,O,V)$$

Where:

L = the likelihood that an occupation has licensing requirements;

S = the political influence of the groups supporting licensing requirements; and

O = the political influence of the groups opposing licensing requirements.

V = vector of state-specific characteristics that may explain the state's likelihood of licensing an occupation. These characteristics include demographic and political features of states that may be correlated with the likelihood of licensing requirements.

To proceed with this work, the assumption is made that unlicensed behavior analysts would pose the same risk to the public in all states. It is also possible that the desire to pass occupational licensing legislation is driven by acts of incompetence that are publicized in a given state. For example, House Bill 2703 was proposed in Texas to license behavior analysts in the 2015 legislative session, but it did not pass. State Representative Matt Schaefer questioned the bill's author, State Representative Ron Simmons, as to whether there were examples of harm caused by unlicensed behavior analysts. Representative Simmons responded with an example of a school employee who was doing behavioral work with a child and unintentionally caused an injury to the child (*Texas House of Representatives: May 14, 2015 Floor Session 2015*). Regardless of incidents like this that may generate attention, it seems to be reasonable to believe that unlicensed behavior analysts are no more dangerous in Texas than they would be in Arkansas or Wisconsin.

The question addressed in this section is best approached using a multinomial logit regression model. In order to examine why behavior analysts have occupational licensing requirements in some states and not others, the following variables will be used:

Licensing Requirements

The enactment of occupational licensing requirements at the state level is the outcome of interest. These data were compiled by the Association of Professional Behavior Analysts, a national group which, among other things, follows legal issues that affect its members. As of August 2015, behavior analysts were licensed in 24 states. Risk Posed to the Public by the Occupation

As mentioned previously in this chapter, this model assumes that non-licensed behavior analysts present an equal danger to the public in each state. Therefore, the model does not contain a variable that measures specific risk by state for behavior analysts. While this data in regards to incompetence shown by unlicensed behavior analysts would be very helpful, it would be extremely difficult to collect since detailed public records on performance are not usually collected until an occupation has licensing requirements and until a state legislature directs a licensing authority to collect such information.

Political Influence and Organization

This model uses the number of behavior analysts in the state who were members of the Association of Professional Behavior Analysts in 2008 as a measure of political organization. On the next page, Table 8 shows that every state was represented with at least six members in the Association of Professional Behavior Analysts. Since the Association of Professional Behavior Analysts is a national association, a better measure would likely be to have data on the membership of each state's organization of behavior analysts in 2008. However, it seems reasonable that the state-level membership in the Association of Professional Behavior Analysts would be highly correlated with the

number of practitioners who also belong to their state professional association. The hypothesis is that the level of political organization will be positively correlated with the licensure of behavior analysts in each state.

Table 8: Association of Professional Behavior Analysts Membership

	Mean	Maximum	Minimum
Association of	360	3239 (California)	6 (Wyoming)
Professional Behavior			
Analysts, members in			
state			
Association of	0.050886438	0.211699574	0.007341856
Professional Behavior		(Massachusetts)	(Idaho)
Analysts, members per		·	
1000 residents in state			

Political Opposition to Occupational Licensing

As previously discussed, legislative records indicate that the Texas Psychological Association and the Texas Counseling Association were the primary opposition groups for the occupational licensing proposal for behavior analysts in Texas. For both groups, the prospect of licensing for behavior analysts creates a "turf war" of sorts. Counselors and psychologists routinely deal with matters regarding the behavior of individuals, and both groups were concerned that occupational licensing would place some of their work under the exclusive practice of behavior analysts. At that point, counselors and psychologists would either have to cease doing some of the work, which may be intertwined with their other work, or they would face the possibility of having to obtain a second license in order to continue practicing to the fullest extent of their training. Just as these concerns were stated by individual practitioners, firms that employ counselors and psychologists also had concerns because their flexibility in staffing would be limited. A behavioral health unit at a hospital, for instance, might have concerns as licensing for behavior analysts would prevent one employee, such as a counselor or psychologist, from

doing everything needed to serve a patient. If such facilities had to either hire licensed behavior analysts or contract with them in addition to their existing employees, it could have the effect of driving up the cost of services.

As a measure of political opposition to occupational licensing for behavior analysts, the number of individuals in the state that belonged to the American Psychological Association and the American Counseling Association in 2008 will be used. Just like with behavior analysts, data from each individual state organization would be the most helpful, but collecting information that is seven years old from 50 states (100 total organizations) would not be feasible. Therefore, the membership by state in the American Counseling Association plus the membership by state of the American Psychological Association will be used, as it should be highly correlated with membership in the state level associations for these two professions. The political strength of these two groups in each state should be negatively correlated with occupational licensing for behavior analysts.

State-Specific Characteristics

Some characteristics specific to each state may explain why some states require occupational licensing for behavior analysts and others do not. All data is from 2008, the year immediately before the first legislation affecting behavior analysts was passed.

1. Per capita income of each state: The per-capita income of a state could affect is likeliness to require occupational licensing not just for behavior analysts, but for many other occupations as well. As the literature commonly mentioned, low income individuals may be disproportionately harmed by occupational licensing as it reduces the supply of lower-cost service providers. At the same time, one of the benefits stated by

supporters of occupational licensing is the making of information available to the consumer. If people use this information to select service providers, higher income individuals may benefit because they may have a higher opportunity cost of time in the total cost of searching for a service provider. Therefore, it seems reasonable to believe that higher income levels are positively correlated with occupational licensing for behavior analysts.

- 2. Population: Population is included in the model as a method of control since the numbers for membership in the Association of Professional Behavior Analysts are provided in raw numbers, without consideration for each state's size. It seems reasonable to believe that 100 behavior analysts in Texas would be less politically powerful than 100 behavior analysts in Wyoming.
- 3. Nature of population: The percentage of each state's population that lives in urban areas is another variable that may shine some light on the likelihood of licensing requirements in occupations. One concern expressed in the literature and found to be a concern in the six case studies is that occupational licensing tends to limit the supply of service providers. In urban areas, this may not be as concerning because the overall pool of service providers may still be large, even after some practitioners are screened out. For instance, Houston is the largest city in Texas and likely has a number of practicing behavior analysts. Eliminating a few of those due to a licensing requirement would probably affect consumers much less than eliminating the only behavior analyst who practices in Borger, Texas, as Borger has a population of approximately 13,000 and any large city is several hours away. Also, consumers in urban areas may be better able to find substitutes for behavior analysts. If counselors or psychologists can do similar work,

it seems reasonable to believe that large cities will have a number of these practitioners that could be substituted for behavior analysts. However, small, rural towns are also not likely to have a large supply of practicing counselors or psychologists. Therefore, the nature of the population (urban vs. rural) is important to this model.

- 4. Population density of states: Each state is affected by occupational licensing requirements in neighboring states. Small states may be affected the most because it is much easier to move or commute into the next state if occupational licensing laws change compared to larger states. For example, practitioners in Delaware could easily, depending on their location in the state, commute to either Maryland or New Jersey to work if licensing requirements became burdensome in Delaware. If such changes caused service provision to decline in Delaware, consumers could easily drive to neighboring states as well. In contrast, a practitioner or consumer in Central Texas would be hundreds of miles from the nearest state in any direction. Therefore, small states may have the most significant concerns about incompetent practitioners working within their borders to avoid occupational licensing requirements in other nearby states. A variable for each state's size in square miles is included in the model.
- 5. Ideology of states: One potential explanation for whether or not an occupation is licensed from state to state is that populations of each state have different attitudes towards government regulation in general. Overall, it is common knowledge that individuals who identify as "conservatives" do not favor high levels of government regulation, while individuals who identify as "liberals" tend to support higher levels of regulation. In 2008, Gallup created an index of state ideology for the 50 states and Washington, D.C. by interviewing a random sample of adults who were 18 years of age

or older throughout the year. The results of were reported by Gallup and listed each state with a percentage of "conservative" residents, a percentage of "liberal" residents, and a percentage of "moderate" residents. This chapter will use the percentage of each state's residents identifying as "conservative," which ranges from 23 percent in Washington, D.C. to 49 percent in Alabama, and will proceed with the assumption that conservatism is negatively associated with occupational licensing for behavior analysts.

- 6. Political party identification by state: Gallup has created an index reflecting how each state's residents identify in terms of political party affiliation. It used the same survey group of adults who were 18 years of age or older during a time period of the year 2008. Political affiliations were summarized by state as the percentage "Democratic/Leans Democratic" and the percentage "Republican/Leans Republican." The "Democratic/Leans Democratic" measure ranges from 84.1 percent in Washington, D.C. to 32.4 percent in Utah. This study assumes that states with the highest percentage of self-proclaimed Democrats will be the most likely to have occupational licensing requirements for behavior analysts. This is based on the fact that Democratic Party platforms tend to support more government regulations, while Republican Party platforms tend to oppose them. Political party identification and self-identified ideology do not necessarily correlate for some individuals, which is why both variables are included in this study.
- 7. Paternalistic nature of state governments: As discussed earlier in this work, occupational licensing contains at least some paternalistic aspects. States that tend to adopt policies that are designed to "help" people are more paternalistic in nature than those who don't. This was discussed in noting that voluntary, or even private

certification programs would serve the information-providing function that is often promoted by supporters of occupational licensing requirements. While such a certification system would allow consumers to choose and pay for someone meeting certification requirements, occupational licensing does not allow this decision to be made. Therefore, it seems reasonable to believe that the paternalistic nature of a state's government will be positively associated with occupational licensing requirements for behavior analysts. It is difficult to specifically measure paternalism in an empirical sense, but it is possible to use a proxy. The proxy that will be used in this study will be whether or not a state has expanded Medicaid after the passage of the Affordable Care Act. Expansions, passed in 31 states as of July 2015, are designed to help lower income families in accessing more medical care. Other alternative means of health care provision for lower income nature are available, but since Medicaid expansion relies on government control, these states can be seen as being more paternalistic.

8. Overall number of licensed occupations by state: Summers (2007) published a list of states, ranked by the number of licensed job categories. This is not an exact measure of the number of licensing requirements, as some job categories could contain more than one occupational license. Without thoroughly reading all state laws of each state related to occupational licensing, however, it is one of the better measures available in regards to the licensing activity of states. At the time of the study, shortly before licensing requirements were first passed for behavior analysts, the average state required occupational licensing in 92 job categories. California had the highest level of occupational licensing, with requirements in 177 job categories, and Missouri had the lowest level of occupational licensing, with requirements in 41 job categories. The

number of occupations licensed by each state is expected to be positively correlated with occupational licensing requirements for behavior analysts.

9. Geographic region of states: The model includes variables for regions of the country to test for two effects. One is that many professional associations may operate on a regional level, as might other political forces supporting or opposing occupational licensing requirements. It stands to reason that behavior analysts in New Hampshire and Vermont are more likely to share information and work together than practitioners in either state would share information with their counterparts in California. Also, as discussed earlier, states may enact occupational licensing requirements if neighboring states have done so and they do not want to face the possibility of incompetent practitioners crossing state lines to work in their state. Also, state governments sometimes enter regional associations such as the Southern Legislative Conference, which might share public policy ideas with one another. Variables used in this model correspond to the Census Bureau's regional classification system of Northeast, Midwest, South, and West.

Aside from Hypothesis H2a, the following hypotheses also drive the work for this section of the chapter.

H5o- There is no relationship between per-capita income of a state and licensing requirements for behavior analysts.

H5a- States with higher per-capita incomes are more likely to have occupational licensing requirements for behavior analysts.

H6o- There is no relationship between the population of a state and licensing requirements for behavior analysts.

H6a- States with larger populations are more likely to have occupational licensing requirements for behavior analysts.

H7o- There is no relationship between the nature of a state's population and licensing requirements for behavior analysts.

H7a- States with a higher percentage of their populations residing in urban areas are more likely to have occupational licensing requirements for behavior analysts.

H8o- There is no relationship between a state's population density and licensing requirements for behavior analysts.

H8a- The higher a state's population density, the more likely the state is to require occupational licensing for behavior analysts.

H9o- There is no relationship between the ideology of a majority of state's citizens and licensing requirements for behavior analysts.

H9a- The more a state's population identifies with the liberal ideology, the more likely the state is to have occupational licensing requirements for behavior analysts.

H10o- There is no relationship between the most common political party affiliation in a state and licensing requirements for behavior analysts.

H10a- The more a state's population identifies with the Democratic Party, the more likely the state is to have occupational licensing requirements for behavior analysts.

H11o- There is no relationship between the paternalistic nature of state governments and licensing requirements for behavior analysts.

H11a- States that take actions that could be described as paternalistic, such as expanding their Medicaid programs, are more likely to require occupational licensing for behavior analysts.

H12o- There is no relationship between the total number of occupations licensed by a state and licensing requirements for behavior analysts in that state.

H12a- The more total occupations that require licensing in a state, the more likely the state is to require occupational licensing for behavior analysts.

H13o- There is no relationship between the geographic region of a state and licensing requirements for behavior analysts.

H13a- States will be more likely to require occupational licensing for behvavior analysts if other states in their geographic region do so.

Table 9, found on the next page, summarizes the independent variables used for the empirical study on the occupation of behavior analysts, along with the sources of data and the expected impact of each independent variable. Table 9 also summarizes which hypothesis is connected with each expected impact.

Table 9: Explanatory Variables, Expected Signs, and Data Sources

licensing for behavior analysts in the state (Yes/ No) Independent Variables Political Organization Number of behavior analysts in the state who belong to the Association of Professional Behavior Analysts Number of - H2a American Counseling Association,	Variable	Expected Sign	Hypothesis to Support Expected Sign	Data Source
Icensing for behavior analysts in the state (Yes/ No)				
Variables Political Organization Number of behavior analysts in the state who belong to the Association of Professional Behavior Analysts Number of Professional Behavior Analysts Number of practitioners in the state who belong to the American Counseling Association, practitioners in the state who belong to the American Counseling Association plus the number of practitioners in the state who belong to the American Psychological Association State Characteristics Per capita income +/- Population +/- Percentage living in the states and statistical Abstract of the United States Population Percentage living in the states and statistical Abstract of the United States Population Percentage living in the states and statistical Abstract of the United States Population the states and statistical Abstract of the United States Population the states and statistical Abstract of the United States Population density H8a Statistical Abstract of the United States States State Gallup Political H10a Gallup	licensing for behavior analysts in the state (Yes/ No)			Data from Association of Professional Behavior Analysts and state licensing authorities.
Organization Number of behavior analysts in the state who belong to the Association of Professional Behavior Analysts H2a	Variables			
analysts in the state who belong to the Association of Professional Behavior Analysts Number of practitioners in the state who belong to the American Counseling Association plus the number of practitioners in the state who belong to the American Counseling Association plus the number of practitioners in the state who belong to the American Psychological Association State Characteristics Per capita income +/- H5a Statistical Abstract of the United States Population +/- H6a Statistical Abstract of the United States Percentage living in urban areas Population density - H8a Statistical Abstract of the United States States States States Statistical Abstract of the United States Population density - H8a Statistical Abstract of the United States States Gallup Political H10a Gallup	Organization			
Number of practitioners in the state who belong to the American Counseling Association American Psychological Association American Psychological Association Psychological Association Practitioners in the state who belong to the American Psychological Association State Characteristics Per capita income +/- H5a Statistical Abstract of the United States Population +/- H6a Statistical Abstract of the United States Percentage living in urban areas Population density - H8a Statistical Abstract of the United States State ideology - H9a Gallup Political + H10a Gallup	analysts in the state who belong to the Association of Professional	+	H2a	
Per capita income +/- H5a Statistical Abstract of the United States Population +/- H6a Statistical Abstract of the United States Percentage living in urban areas	Number of practitioners in the state who belong to the American Counseling Association plus the number of practitioners in the state who belong to the American Psychological Association	-	H2a	American Counseling Association, American Psychological Association
Population +/- H6a Statistical Abstract of the United States Percentage living in urban areas +/- H7a Statistical Abstract of the United States Population density - H8a Statistical Abstract of the United States State ideology - H9a Gallup Political + H10a Gallup		+/-	H5a	
Percentage living in urban areas H7a Statistical Abstract of the United States Population density - H8a Statistical Abstract of the United States State ideology - H9a Gallup Political + H10a Gallup	Population	+/-	Н6а	Statistical Abstract of the United
State ideology - H9a Gallup Political + H10a Gallup		+/-	H7a	Statistical Abstract of the United
Political + H10a Gallup	Population density	-	Н8а	
Political + H10a Gallup	State ideology	-	Н9а	Gallup
identification	Political	+	H10a	
Paternalism- measured by passage of Medicaid expansion + H11a National Conference of State Legislatures	Paternalism- measured by passage of Medicaid	+	H11a	
Number of licensed + H12a Reason publication occupations	Number of licensed	+	H12a	Reason publication
Regional location +/- H13a United States Census Bureau		+/-	H13a	United States Census Bureau

Chapter IV

FINDINGS

Part One: Results of Case Studies

In order to conduct the case studies, official legislative records were reviewed for the following occupational licensing proposals during the 2013 and 2015 sessions of the Texas Legislature: anesthesiology assistants, associate auctioneers, forensic analyysts, foundation repair contractors, roofing contractors, and veterinary technicians. The case studies included reviewing all video archives of committee hearings and House and Senate floor debates that were relevant to each of the six licensing proposals, along with official records describing the legislation and the registered supporters and opponents. The case studies show that the occupational licensing process in Texas, at least in these six instances, is not unlike the general economic theory of regulation. In all six cases, the affected occupation and related industry groups were supporters of enacting licensing requirements, all claiming that licensing requirements would improve service quality or protect the interest of the public. In the three of the six cases where licensing legislation failed, other organized interests opposed the legislation. Among others, the Texas Nurses Association and the Texas Association of Nurse Anesthetists strongly opposed occupational licensing for anesthesiology assistants. Most opposition to licensing for foundation repair contractors came from individual practitioners, as opposed to organized lobby groups, however, two influential Texas conservative think tanks, the Texas Public Policy Foundation and the Texas Conservative Coalition, both opposed the legislation.

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Many members of the Republican majority in the state legislature are closely associated with both groups. Attempts to license roofing contractors have been ongoing through several legislative sessions, and legislation in 2013 moved further into the legislative process than other proposals. Several trade associations representing small businesses and minority contractors opposed the legislation, as did the Texas Public Policy Foundation. Texans for Fiscal Responsibility, a conservative non-profit group closely aligned with many legislators, also opposed the measure. Only in one instance did a licensing measure support from a group representing consumers when the Coalition for Patient Safety registered in support of the bill to license anesthesiology assistants. There was no testimony presented from individual consumers who had suffered any kind of harm from current practitioners in the occupations. Through these six case studies, there was no evidence of the public interest theory of occupational licensing, as no consumers sought regulations to help them determine quality or to protect their interests. There is also no evidence that legislators who authored and supported the legislation were working solely in the best interest of society in general, as they did not ever speak of cost-benefit analyses or question the overall effects of the licensing proposals. Instead, certain individuals spoke of regulation being needed in their occupation. Opponents either mentioned increased costs or the increased scope of government without offering evidence to support their claims, and the outcome was largely determined by the size and political influence of the groups involved.

Despite the lack of clear information being presented on the costs and benefits of licensing, this alone does not suggest that the decision to require occupational licensing is a bad public policy decision. Also, it is not clear whether the licensing proposals would

have even been present on the legislative agenda, let alone had any chance of passing, if influential industry groups had not been supportive. In the six case studies, it seemed that influential groups were supporting all six licensing proposals. However, in the three that failed, other influential groups opposed the proposals. For the three that passed, there was less controversy and less organized opposition.

Out of the six case studies, four of the occupations represented could pose harm beyond the individual practitioner and the person requesting the services. Poor quality work done by foundation repair contractors or roofing contractors could later have negative effects for future owners of the properties where the work was performed. This argument was rarely made in testimony on the legislation, and no statistical evidence to show whether licensing requirements would alleviate such concerns was introduced. Poor quality work by forensic analysts could conceivably cause problems in having a fair trial, and although this was discussed, nothing was ever stated to directly link incompetent forensic analysts with wrongful convictions. Poor quality work by anesthesiology assistants could potentially cause harm to patients, but no examples of this were offered. In fact, it was said by some supporters of occupational licensing that they thought safety in operating rooms throughout Texas was very high.

On the next page, Table 10 provides a summary of the findings from each case study. Table 10 lists the organizations that officially registered their support or opposition to each item of legislation along with the outcome of the last vote that was taken on the issue. Finally, Table 10 lists the total amount of states with licensing requirements for each of the six occupations.

Table 10: Summary of Texas Occupational Licensing Case Studies

Legislation	Registered supporters	Registered opponents	Result	# of states requiring occupational licensing
Anesthesiology Assistants	Texas Society of Anesthesiologists Texas Academy of Anesthesiology Assistants Children's Medical Center Coalition for Patient Safety Texas Medical Association	Texas Nurses Association Texas Nurse Practitioners Texas Association of Nurse Anesthetists Nursing Legislative Agenda Coalition	Failed by a House vote of 61-67. A motion to reconsider failed by a vote of 62-75.	15
Associate Auctioneers	Texas Public Policy Foundation Texas Wholesale Automobile Auction Association Texas Association of Realtors. Texas Auctioneers Association		Passed by a House vote of 134-9 and a Senate vote of 30-1.	6
Forensic Analysts	Texas Association of Crime Lab Directors Innocence Project of Texas		Passed by a House vote of 74-72 and a Senate vote of 29-2	3
Foundation Repair Contractors	Homeowners for Better Building Foundation Repair Association Texas Mortgage Bankers Association Texas Association of Realtors	Texas Public Policy Foundation Texas Conservative Coalition	Failed by a House vote of 62-73.	3 (2 are licensed as construction contractors)
Roofing Contractors	North Texas Roofing Contractors Association Insurance Claim Recovery Support Texas Association of Realtors Professional Roofing Standards Council Roofing Contractors Association of Texas Texas Association of Business Building Officials Association of Texas Independent Insurance Agents of Texas National Association of Mutual Insurance Companies Texas Association of Public Insurance Adjusters	Texas Independent Roofing Contractors Association U.S. Hispanic Contractors Association Independent Roofing Contractors Association Texas Public Policy Foundation Hispanic Contractors Association of Texas Texans for Fiscal Responsibility	Passed House Licensing Committee on Administrative Procedures by vote of 6- 1. Failed when it was not set on a calendar before the deadline.	21
Veterinary Technicians	Texas Veterinary Medical Association Texas Association of Registered Veterinary Technicians Texas Farm Bureau Texas Association of Dairymen Texas Cattle Feeders Association Texas Poultry Federation	Texans for Fiscal Responsibility	Passed by Senate vote of 30-0 and House vote of 82-50.	39

Anesthesiology Assistants

In three recent sessions of the Texas legislature, legislation has been filed that would require an occupational license to practice as an anesthesiology assistant. In the

2007 and 2009 sessions, two bills were filed each time. In both instances, one of the two bills received a committee hearing and did not move further in the process while the second bill was not heard. In 2015, the idea was once again before the Texas House of Representatives in the form of House Bill 2267. This bill advanced from the House Committee on Public Health to a floor vote. Supporters of the legislation stated that occupational licensing would protect the public from bad actors who might work as anesthesiology assistants, that it would lead to higher levels of patient safety in operating rooms, and that it would bring about better accountability and transparency in the healthcare system. A bill analysis provided by the legislative office of the author, Representative Sarah Davis, noted that the bill's purpose was "to provide access to safe anesthesia care while maintaining the role of an anesthesiologist assistant on a patient's care team." The Texas Medical Association, known to be a powerful force in healthcare policy in Texas, was supportive of the legislation. Other supportive groups included organizations for anesthesiology assistants and educational programs for anesthesiology assistants, as well as the Coalition for Patient Safety. Opponents included some smaller healthcare associations, such as those for nurses, nurse practitioners, and nurse anesthetists. In the end, the nursing associations became the lobbying force for most of the opposition, and the bill failed.

This latest attempt to license anesthesiology assistants was, to some extent, a competition between organized political interests. The debate over the legislation included virtually no evidence that occupational licensing would be helpful in this case, while slight evidence was presented that it was unnecessary. Despite the power of the Texas Medical Association, it seems likely that the bill was defeated due to the fact that

opposing interests organized and lobbied more strongly than those in favor. With nursing groups opposed to the bill, it is likely that most legislators had multiple nurses in their districts who were members of one or more of these associations and were opposed to the bill. The lack of debate about the effects of the legislation on the occupation, costs, and quality of services was very noticeable.

House Bill 2267 called for licensing of anesthesiology assistants and would have largely left licensing application requirements and continuing education requirements to the Texas Medical Board, to be adopted through administrative rules. Key components of the bill included:

- The Texas Medical Board would establish requirements to obtain an anesthesiology assistant license, including education and training requirements, in addition to basic requirements outlined in the legislation including proof of completion of a graduate level training program, the passage of a certifying exam, and being of good moral character.
- The Texas Medical Board would establish examination requirements for an anesthesiology assistant.
- The legislation required the Texas Medical Board to adopt rules on requirements and limitations of services by an anesthesiology assistant, determined by the board to be in the best interests of patient health and safety.
- The legislation included a requirement that an anesthesiology assistant would be supervised by a licensed anesthesiologist who was actively engaged in clinical practice and available on-site.
- The use of the title "anesthesiologist assistant" would have become restricted to license holders only, with violators subject to an administrative penalty.
- Students in anesthesiology assistant training programs would be restricted from using terminology that could be construed to mean they held a license.
- Unlicensed practice or any other violations of licensing provisions would have subjected the violator to an administrative penalty (Texas Legislature 2015).

Representative Davis, a Republican who authored the legislation, has previously been active in healthcare policy and is a member of the House Committee on Public Health. Davis represents portions of Harris County, the largest county in the state, which is home to many medical professionals as well as one of the graduate level anesthesiology assistant training programs. The measure had no joint authors or coauthors.

The most outspoken opposition to the licensing of anesthesiology assistants came from the Texas Association of Nurse Anesthetists. That association is supportive of the current structure where anesthesiologists delegate responsibility and, by doing so, are responsible for the services of an anesthesiology assistant. Juan Quintana, representing the association, stated in a public hearing that "licensing won't change how they work," and described the bill as "a solution looking for a problem." Gary Brydges testified that in the case of bad actors, there were national databases known as the Focused Provider Practice Evaluation (FPPE) and the Ongoing Provider Practice Evaluation (OPPE) that could be used to record problems with any healthcare professional and could be used by future potential employers to protect against bad actors. Therefore, Brydges concluded, occupational licensing would provide no information to help patient safety that could not already be provided. At the conclusion of the hearing, Representative Davis noted that she was not aware of any complaints or allegations of malpractice against anesthesiology assistants in Texas. Various other points were made against an occupational licensing requirement:

• Job opportunities, educational opportunities, and an understanding of the expectations that come with the job are available and well utilized without a licensing system.

- Anesthesiologists and anesthesiology assistants are the only two groups that would stand to benefit from a licensing requirement.
- Adding a licensing requirement expands government and adds more bureaucracy in a way that could be burdensome to employers. (*Texas House Committee on Public Health: April 7, 2015 Public Hearing* 2015).

The bill was voted favorably out of the Committee on Public Health, with only one committee member opposed. The bill then advanced through the House Committee on Calendars, which schedules legislation for a floor vote. By the time that the bill moved towards the House floor, the groups against the legislation included the Texas Association of Nurse Anesthetists, the Texas Nurses Association, the Texas Nurse Practitioners Association, and the Nursing Legislative Agenda Coalition (Texas Legislature 2015). Opponents in the House included members who typically oppose new regulations, including occupational licensing and were joined by other members who were not usually as outspoken on regulatory issues.

Representative Davis provided very little evidence to support her case that the licensing bill would be beneficial to public safety. In fact, her case might have been harmed by her admission in the public hearing that she was not aware of any problems with the work of unlicensed anesthesiology assistants. The opposing side was able to substantiate a few of their points. For instance, they pointed to specific industry databases where bad actors could be tracked in the healthcare field, supporting their argument that there was already a way to make sure only the best people in the field were provided with employment opportunities. No legislator ever publicly asked for even an estimate of the costs compared to the benefits of such legislation. Supporters of the bill mentioned other states where licensure is required, but no one even attempted to show that those states had better quality work from anesthesiology assistants than those in

Texas. No legislators publicly asked about comparisons to other states. While the bill was being debated on the House floor, two legislators, one supporter of the bill and one opponent, asked Representative Davis some specific questions about the intent of the bill and the type of work that anesthesiology assistants were doing when the bill came to a vote on the House floor. During this debate, Representative Davis deferred to Representative John Zerwas, who is an anesthesiologist, to stand with her and answer the questions that were posed. Again, Representative Zerwas may not have helped his case when he was asked if the licensing proposal would make operating rooms safer. "There is a high level of safety that already exists...," Zerwas responded, "but if we can enhance public safety, we should do it." Ultimately, the bill failed by a vote of 61 in favor and 67 against (Texas House of Representatives: May 1, 2015 Floor Session 2015). On the next legislative day, a motion was made to reconsider the vote. Upon reconsideration, the bill failed by a vote of 62 in favor and 75 against, showing that most legislators who were absent during the first vote were opponents of the bill (*Texas House of Representatives*: *May 2, 2015 Floor Session* 2015).

Anesthesiology assistants are currently licensed in 15 states. Some of the other states do not allow this type of work to be done at all by someone other than a physician, and other states such as Texas allow it under supervision without a license. It is unknown why anesthesiology assistants have become licensed in some states and not others, but the arguments about the need to improve patient safety may be compelling in many states, regardless of whether anyone actually checks to see if there is a problem. Since this type of licensing has been promoted since 2007, it would not be unlikely for the legislation to return in a future legislative session.

Associate Auctioneers

Auctioneers in Texas have had licensing requirements since the 1999 legislative session. In the 2015 session, two bills were introduced to establish licensing for associate auctioneers. One of those, House Bill 2481, was passed and signed into law by the governor. HB 2481 was authored by Representative Wayne Smith, the chairman of the House Committee on Licensing and Administrative Procedures. The licensing requirement was virtually uncontested. The Texas Auctioneer's Association opposed the bill but upon listening to their representative, Brent Graves, testify in a public hearing in the House Committee on Licensing and Administrative Procedures, he was concerned about a separate provision of the bill dealing with motor vehicle auctions and did not mention the licensing of associate auctioneers at all in his testimony. Two other individuals testified against the bill, but also did not mention the associate auctioneer licensing at all (Texas House Committee on Licensing and Administrative Procedures: March 30, 2015 Public Hearing 2015). In fact, in a hearing on House Bill 2494, which also would have imposed a license on associate auctioneers without changing regulations for motor vehicle auctions, another representative from the Texas Auctioneers Association testified in support of the bill (Texas House Committee on Licensing and Administrative Procedures: April 6, 2015 Public Hearing 2015). The bill ultimately passed the House by a vote of 134-9 and passed the Senate by a vote of 30-1.

The bill defined an associate auctioneer to be an individual who, for compensation, is employed by and under the direct supervision of a licensed auctioneer to sell or offer to sell property at an auction. An individual is eligible for an associate auctioneer license if he or she is a citizen or legal resident of the United States and

employed under the direct supervision of an auctioneer. Prior to the passage of House Bill 2481, only four other states had licensing requirements for assistant or associate auctioneers. Texas auctioneers were able to hire non-auctioneer employees to work for them or their auction companies as long as non-licensed employees did not use the title of "auctioneer" or act as an auctioneer. Another provision in the legislation lets associate auctioneers become eligible for an auctioneer license in lieu of passing an exam if they show proof of employment as an associate auctioneer by a licensed auctioneer for at least two years and participation in at least 10 auctions. Therefore, becoming a licensed associate auctioneer will allow an auctioneer licensing applicant to be exempt from the exam, but it will not waive any requirements pertaining to their education level, their criminal record, or 80 hours of required classroom instruction (Texas Legislature 2015). Greg Glod of the Texas Public Policy Foundation, an influential conservative think-tank, testified in support of the legislation as he stated that the Texas auctioneer exam only had about a 75 percent pass rate, which created a barrier to entry in the occupation which he called "overregulated." He stated his belief that this would allow capable employees who had completed the training requirement an alternative way to enter the profession. No members of the Licensing and Administrative Procedures Committee questioned Glod's statistics, nor was there any discussion by Glod or others as to whether it would be workable to allow a person to show proof of employment for two years and participation in 10 auctions without creating a new occupational license. This represented the only discussion of the merits of an associate auctioneer license in the public hearing. Representative Charlie Geren, a member of the Licensing committee, noted that most licensing requirements and other regulations of auctioneers had been placed into law at

the request of the industry (*Texas House Committee on Licensing and Administrative Procedures: March 30, 2015 Public Hearing* 2015).

After House Bill 2481 passed unanimously out of the House Committee on Licensing and Administrative Procedures and was scheduled for a floor vote, Representative Smith introduced his bill on the floor as an "auctioneer clean-up bill." He briefly discussed some features of the bill, but did not mention the provision on associate auctioneers at all and no other representatives asked questions or spoke for or against the bill. It passed with only nine representatives opposed (*Texas House of Representatives*: April 20, 2015 Floor Session 2015). In the Senate, the bill was introduced in a hearing of the Senate Business and Commerce committee with Committee Chair and Senate author Kevin Eltife saying that the bill corrected some issues that have impacted the auction industry, and that the associate auctioneer provision was to allow auction experience in lieu of an examination to satisfy auctioneer licensing requirements. Again, no one asked Senator Eltife if this was possible without creating a new license (*Texas Senate* Committee on Business and Commerce: April 14, 2015 Public Hearing 2015). On the Senate floor, Eltife introduced the bill without mentioning the associate auctioneer provision, and there was no discussion at all from other senators. The bill passed with only one senator opposed (Texas Senate: May 22, 2015 Floor Session 2015).

Associate auctioneers, also known sometimes as apprentice auctioneers or assistant auctioneers, are currently licensed in six states. Other states with auctioneer regulations allow auctioneers to employ non-licensed individuals as long as those individuals are not conducting auctions. In 20 states, there are no licensing requirements for any auction employees, including auctioneers. In one additional state, there is only a

voluntary registration program operated by the state. With so many states not regulating auctioneers at all, it is unknown what prompted Texas and five other states to begin the regulation of associate auctioneers. As Representative Geren noted in the House committee hearing, the auction industry was supportive of the bill, as well as other licensing requirements implemented in their industry in the past, and the lack of influential groups opposing the licensing requirement seemed to translate into a lack of opposition among legislators.

Forensic Analysts

In the 2015 legislative session, Senate Bill 1287 was proposed to require licensing of forensic analysts. As opposed to law enforcement officers who work crime scenes, who are already regulated, the bill was designed to apply to crime lab employees, both in the private and public sectors. A licensing proposal for this occupation had never been introduced in Texas prior to 2015. As with the case of associate auctioneers, it seems that the most likely reason that Senate Bill 1287 passed, although narrowly, is due to the lack of organized opposition. At no point did any member of the legislature ask which other states require licensing for forensic analysts and whether or not such requirements helped with the issue of wrongful convictions. At no time did any member of the legislature ask any questions regarding the costs and benefits of the legislation. The only group in favor of the bill actually representing the general public did not offer any examples of how the bill would actually be helpful to the public. No explanations were offered by the bill sponsors, and no other questions were asked.

The first public discussion on the bill took place on April 7, 2015 when the bill was considered in a public hearing before the Senate Committee on Criminal Justice. In

the hearing, Senator Juan Hinojosa, the bill sponsor, introduced the bill by saying that the forensic analyst industry currently depended on private certification, something he did not see as consistent. He stated his belief that the state had no legal mechanism to prevent bad actors from moving to other crime laboratories after being fired or asked to resign at previous places of employment. Senate Bill 1287 established an advisory committee, which was designed to establish qualifications for licenses required by the bill. Hinojosa stated his belief that Texas was taking a step in solving a national problem that would serve as a model to other states. In his presentation of the bill, Hinojosa also said that many people have wrongly convicted people of crimes and that doing away with "junk science" would be a step towards solving the problem with wrongful convictions. Although Hinojosa did not directly blame wrongful convictions on poor quality work done by forensic analysts, such was the implication of his comments (*Texas Senate Committee on Criminal Justice: April 7, 2015 Public Hearing* 2015).

At the Senate committee hearing, five people registered in favor of Senate Bill 1287. Three were associated with crime laboratories, one represented a large county government agency, and one represented an advocacy group known as the Innocence Project of Texas. Bill Gibbons, president of the Crime Lab Association of Texas, addressed the committee in support of the bill stating that the bill was derived from a position paper that his organization had published about a year beforehand. He stated his belief that a licensing requirement would be beneficial in holding forensic analysts accountable for their actions. Linda Johnson, director of a regional crime laboratory in Beaumont, Texas echoed comments made by Gibbons and said that she believed some type of licensure or certification requirements for all forensic practitioners was inevitable.

Nick Vilbas spoke in favor of the bill on behalf of the Innocence Project of Texas, stating that he wanted to see the best science being put forth in Texas courtrooms. Despite the fact that the association represented by Vilbas represents individuals who feel they have been wrongfully accused and convicted, Vilbas did not offer any comments as to whether the licensure of forensic analysts would help improve the issue of wrongful convictions. No senators on the committee questioned Vilbas about this issue (*Texas Senate Committee on Criminal Justice: April 7, 2015 Public Hearing* 2015).

On April 16, 2015, Senate Bill 1287 came to a vote before the full Senate. Hinojosa briefly explained that he was sponsoring the bill to require licensing for individuals who were "highly trained to do important work in forensic testing." He also again pointed out that "bad science can lead to a wrongful conviction," but once again failed to point to any specific instances of this happening. There was very little discussion on the legislation aside from questions that were asked which had nothing to do with the creation of an occupational licensing requirement. The bill passed the Senate by a vote of 29-2 (*Texas Senate: April 16, 2015 Floor Session* 2015).

No additional public discussion took place concerning Senate Bill 1287 until the final few weeks of the 2015 legislative session when the bill was heard in a public hearing of the House Committee on Licensing and Administrative Procedures.

Representative Charlie Geren, House sponsor, took less than one minute to describe the bill's purpose in his layout. Two members of the public, one representing crime laboratories and another representing a large county government agency registered in favor of the bill and no one registered against. Bill Gibbons, president of the Crime Lab Association of Texas, addressed the committee in support of the bill much as he had done

with the Senate committee. He again stated that his organization had recommended licensing requirements and that the bill developed due to work published by his organization. No committee members asked any questions regarding the bill, and it was unanimously voted out of committee (*Texas House Committee on Licensing and Administrative Procedures: May 18, 2015 Public Hearing* 2015).

On May 25, 2015, the bill was before the full House for consideration. Just as he had done in committee, Geren took less than one minute to explain the bill and it was passed on second reading by a vote of 83-53. No legislators asked any questions of Geren, nor did anyone speak in favor of the bill or in opposition (Texas House of Representatives: May 25, 2015 Floor Session 2015). The next day, the bill was considered on third reading, or final passage, and it passed by a vote of 74-72, showing that a number of representatives had changed their minds from the previous day. Whether it was due to more closely studying the legislation or whether there was a last minute lobbying effort against the bill is unknown as, once again, no one asked any questions about the bill and no one spoke in opposition to the bill or in support. At the end of the day, three representatives recorded statements in the House Journal stating that they were shown voting in favor of Senate Bill 1287, but had intended to vote against it. Had they voted accordingly on the floor, the bill would have failed by a vote of 75-71 (Texas House of Representatives: May 26, 2015 Floor Session 2015). Based on this detail, at least one representative who was opposed to the bill contacted the office of Governor Greg Abbott and asked that the bill be vetoed. However, Abbott signed the bill into law on June 20, 2015. In addition to Texas, only two other states require licensing for forensic analysts.

Foundation Repair Contactors

In three recent sessions of the Texas legislature, a total of five bills have been filed which ultimately would have required occupational licensing for foundation repair contractors. The first attempt came in 2009 with House Bill 3629, which had the original purpose of requiring licensing for builders. As it moved through the process, it was amended to include foundation repair contractors and several other occupations. The bill stalled after a committee hearing, never reaching a vote. In 2011, Senate Bill 1399 and House Bill 2530 were both filed to address the licensing of foundation repair contractors. Both bills stalled after committee hearings without receiving a vote. In 2013, House Bill 613 and Senate Bill 802 were filed with the same purpose. In this year, supporters of licensing for foundation repair contractors made the most progress by getting House Bill 613 to a vote. Ultimately, it was voted down by a House vote of 62-73. No attempt was made during the 2015 legislative session to file legislation to license foundation repair contractors.

This latest attempt to license foundation repair contractors was, to some extent, a competition between organized political interests. While the larger groups that supported licensure might have had more power in terms of membership size, it is clear that the smaller companies and individual workers who opposed the legislation were effective in getting their message across to legislators who were willing to oppose the bill. The debate over the legislation included virtually no evidence that occupational licensing would be helpful in this case. Any stated reasons for supporting the bill were largely hypothetical. Some opponents of the bill raised concerns about barriers to entry, costs, availability of services if the bill passed, and similar licensing requirements in other

states. Supporters of the bill did not directly address those issues. The failure of supporters to produce any kind of data supporting their case was very noticeable.

In 2013, House Bill 613, known as the Foundation Repair Contractors' Act, would have established a new advisory board as a part of the Texas Department of Licensing and Regulation (TDLR). The bill defined the terms "foundation," "foundation repair company," "foundation repair contracting," "foundation repair work," as well as other terms related to the occupation. A background and purpose statement issued by State Representative Rob Orr, the bill author, said that "unqualified and unscrupulous people...perform foundation repairs, often with disastrous results for people's homes." House Bill 613 would have established several levels of licensure for foundation repair contractors including foundation repair company, master, journeyman, and estimator. The 22 page bill established eligibility requirements for each level of licensure. Under the bill, an applicant for any level of license would have had to consent to a criminal history background check, pay fees, meet certain levels of education and work experience requirements, pass examinations required by TDLR, and obtain specific amounts of liability insurance coverage. Licenses issued under the legislation would have been good for one year, then foundation repair practitioners would have had to renew the license by paying another fee and showing that they completed continuing education requirements. The bill defined types of work that would be illegal to perform without a foundation repair license, and made any violation subject to both administrative penalties levied by TDLR and criminal penalties. Criminal penalties would have been used in the event someone violated licensing requirements or employed individuals to do foundation repair work who were not licensed. Upon criminal conviction, a fine of up to \$500 per offense

could have been levied. The bill did not apply to foundation work performed as part of new construction, but only to work performed during repairs (Texas Legislature 2013).

House Bill 613 was first discussed in public during a March 26, 2013 hearing of the House Committee on Licensing and Administrative Procedures. Prior to the lengthy hearing, 11 people registered their support for the bill, and six people registered their opposition. Supporters included representatives of large interest groups dealing with foundation repair, home loans, and realtors. Opponents included representatives of small construction companies and small foundation repair companies as well as two influential conservative think tanks in Texas (*Texas House Committee on Licensing and Administrative Procedures: March 26, 2013 Public Hearing* 2013).

Representative Orr opened the hearing by noting his desire to clean up the foundation repair industry and protect Texas homeowners. Though Orr said he generally supported less regulation, he explained that he was "personally seeing devastation that bad foundation repairs cause." He indicated that plumbers and electricians were required to be licensed in the state, and he thought foundations were just as important as plumbing and electricity, if not more important. Although Orr did not describe examples of specific individuals who were harmed by the industry, he cautioned that if people owed money on a home loan, then had to spend additional money for foundation repair work that turned out to be poor quality, their only option might be to let the home go into foreclosure. According to Orr, the bill contained a grandfather clause for anyone already in the foundation repair business, and those individuals would have been able to obtain a license without meeting any of the requirements (*Texas House Committee on Licensing and Administrative Procedures: March 26, 2013 Public Hearing 2013*).

Jim Dutton, of the Foundation Repair Association, spoke in favor of the bill. Dutton said that his industry had changed over the years, and that now many companies do as much as \$30 million worth of work in a single year. He stated that licensing was necessary to have some strength in the rules because, "right now, the only recourse a homeowner has is to go back and sue that contractor," noting that many people in this situation might not be able to afford an attorney. Dutton also hosts a statewide home improvement radio show and stated that when he brought up the issue of House Bill 613 on his show, many people called in to support the licensing requirements with only two people calling in opposition. Paul Wolf, also of the Foundation Repair Association, echoed Dutton's comments and said that he saw the bill as an attempt to raise the bar and the standards in his industry. Janet Ahmad, representing Homeowners for Better Building, described the occupation of foundation repair as an industry that "has gotten out of hand," because some people will try to fix anything and prey on consumers. Ahmad stated that the bill should go further and regulate homebuilders as well (*Texas* House Committee on Licensing and Administrative Procedures: March 26, 2013 Public *Hearing* 2013).

Opponents to House Bill 613 were very vocal in their testimony. Susan Bryan, representing SA Structural Repair Solutions, noted that less than 500 companies made up the foundation repair industry in Texas. According to Bryan, House Bill 613 would have been a "big piece of regulation" for what is a very small industry. Bryan stated that she had 15 years of experience in the construction industry and saw occupational licensing requirements as burdensome red tape for small businesses and as something that drove costs up for the consumer and limited competition, which does nothing to help

consumers. Mike DeShazer, of Brown Foundation Repair, spoke against the bill and noted that what might appear to be shoddy work performed by foundation repair contractors could be due to poor quality foundations to begin with. DeShazer noted that his industry already faced regulatory scrutiny, as he was registered with the state and also had to follow a multitude of municipal regulations imposed by some cities in which he worked which included insurance requirements and permitting. Like Bryan, DeShazer stated that licensing would likely raise the cost of foundation repair for Texans or possibly put it out of reach. DeShazer noted his belief in free enterprise, saying that competition has improved his industry and made it better, but he doubted that licensing would have the same effect. Daniel Jaggers, a self-employed contractor with over 40 years of experience in the industry, also testified against the bill saying that most foundation repair companies began as small start-up operations and that regulations would be burdensome for such companies. Jaggers also stated that industry training and certifications were already available, which were likely to be more beneficial than a license issued by the state. Mike Archer, of CL Support Services, spoke against the bill and noted that his organization operated 18 companies in 16 states and that none of his foundation repair work was regulated aside from in two states where it was regulated under general contracting. Archer believed the bill was not about consumer safety issues, as he stated that plenty of information was already available about contractors and their reputations. He stated that a license doesn't equal quality and that in his business, he worried more about getting sued by a customer than he would worry about a fine from licensing violations. Vikrant Reddy, of the Texas Public Policy Foundation, spoke against the bill and offered comments on occupational licensing in general, saying that

small businesses would be likely to suffer while large companies would benefit. Reddy stated that there was inadequate evidence that licensing would improve quality, and he believed that the state's tort system handled any problems more than adequately (*Texas House Committee on Licensing and Administrative Procedures: March 26, 2013 Public Hearing* 2013).

House Bill 613 first came up for debate before the full House on May 6, 2013. Orr introduced the bill by noting that in general, he believed that regulations should be less and described himself as a "free market guy." However, he indicated that because of the nature of the work, foundation repair was different from other industries that could be facing regulation. He mentioned that his bill was supported by large industry groups including the Foundation Repair Association, Texas Realtors Association, and the Texas Mortgage Bankers Association. Orr was questioned by State Representative Bill Callegari, a longtime vocal critic of occupational licensing policies. Callegari noted that licensing was not required for most of the construction industry in Texas and that he believed that requiring licensure for foundation repair contractors would "open the door to license a lot of things that don't need to be licensed." Callegari also explained his belief that while a licensing requirement would enact burdens for honest foundation repair contractors, the bad actors would not be burdened as they don't feel bound by legal requirements and would continue operating by breaking the law. Callegari also stated that in small communities, contractors who work for themselves or in very small business might not do enough business to make licensure worthwhile, which would take away important services from these communities. Callegari closed by saying that for 12 years, he had been working to eliminate licensing barriers and that occupational licensing

requirements in Texas already affected over 500 occupations as well as one-third of all workers in the state. Callegari stated that in his extensive study of the state's licensing requirements, he found that they tended to keep potential workers out of industries, but didn't actually work at achieving the stated objectives (*Texas House of Representatives: May 6, 2013 Floor Session 2013*).

Also speaking against the bill were State Representatives Steve Toth and Matt Schaefer. According to Toth, four years prior, before he was a legislator, licensing requirements had been enacted for his industry. Combined with an economic downturn in the state around 2009, Toth said coming into compliance with the new regulations nearly put him out of business and that, similarly, the proposed licensing requirement for foundation repair contractors "puts an incredible burden on small businesspeople." Schaefer criticized the lack of consistency with the legislation. It "won't require the very people who build the foundation" to be licensed, he stated, saying that such an exemption did not make sense and was inconsistent with the stated goals of protecting consumers from bad actors who may work on foundations. Despite Orr's assertion that major stakeholders supported the bill, Schaefer pointed to the opposition of smaller contractors saying, "this bill did not have unanimous consent in the industry." Furthermore, Schaefer noted that "handymen" might perform some of the minor repairs specified in the legislation without considering themselves foundation repair contractors and that he did not see a need to make these repairs performed by handymen a "criminal act." He said that many workers who would potentially be affected might not even know the legislation was being considered until it passed and they found themselves accused of committing a crime just for working in their occupation. Schaefer also noted that requiring the passage

of a criminal background check prior to obtaining a license might negatively affect people who had a conviction related to drugs or some other non-violent offense but had since stayed out of trouble and wanted a chance to work and support themselves. "We continue to add layer upon layer of regulation to our economy," Schaefer said in closing. "This bill is bad for low income people" (*Texas House of Representatives: May 6, 2013 Floor Session* 2013).

After the strong opposition mounted by Callegari, Toth, and Schaefer, Orr decided to postpone consideration of the bill and work on some changes. Three days later, House Bill 613 was again before the House for consideration. The bill, once 22 pages, had been cut to seven pages and a voluntary registration program. To be voluntarily registered, a foundation repair contractor would have needed five years of experience, the passage of a criminal background check, to pay the registration fees, to pass an examination, and to keep the registration active would have been required to meet continuing education requirements. The revised bill language would not have penalized anyone for working in the industry without a registration. Orr stated that the revised bill would allow people to be distinguished from their competition without harming other practitioners in the industry. State Representatives Roland Gutierrez, Larry Gonzales, Poncho Nevarez, and Jason Villalba all expressed their support for the revised version of the bill, with Gutierrez noting that the barriers to entry, which had concerned some people in the original bill, were now gone. However, Callegari and Schaefer still opposed the bill, adding to their concerns expressed days earlier. Schaefer stated his belief that while it would be perfectly legal for foundation repair contractors to work without participating in a voluntary registration program, consumers might not

understand that it was voluntary and that individuals who choose not to participate would be at a disadvantage. Since some municipalities already regulate construction, Schaefer said, the regulation would be duplicative and the state might been seen as making lists of good businesses and bad businesses. Schaefer said that just because there was risk to the consumer did not mean that licensure was necessary, as he mentioned automobile mechanics who are not licensed in Texas, but who are trusted to keep cars traveling at fast speeds safe on the roadways. Finally, Schaefer said he believed supporters of the original bill would not stop at enacting a voluntary registration if it was passed. "I do believe this is going to lead to full blown licensure," he said. "This is not good economic freedom." Callegari agreed with Schaefer, saying that he had seen voluntary registration programs in the past that quickly became mandatory, and said then it would add to the proliferation of licenses. He said that trade associations could and did perform registration functions without the state's involvement (*Texas House of Representatives: May 9, 2013 Floor Session 2013*).

Foundation repair contractors are currently licensed in three states, two of which regulate them only under statutes regulating general construction. It is unknown why foundation repair contractors have become licensed in such few states and not others, but the arguments about the need to protect property owners may be compelling in many states, regardless of whether anyone actually checks to see if there is a problem. Since this type of licensing has been promoted since 2009, it would not be unlikely for the legislation to return in a future legislative session.

Roofing Contractors

Legislation with the aim of requiring occupational licensing for roofing contractors has been filed in every biennial legislative session in Texas since 1997, with the exception of the 2007 session. Table 11, shown below, summarizes the outcome of each legislative attempt during that time period to require occupational licensing for roofing contractors. In both 1997 and 2003, the legislation passed the Senate, but not the House. No other attempts have advanced as far as a floor vote in either chamber.

Table 11: History of Occupational Licensing Legislation for Roofing Contractors in Texas

Year	Legislation	Outcome	
1997	Senate Bill 259	Passed the Senate, defeated on a	
		procedural technicality in the	
		House.	
1999	House Bill 2044	No action taken.	
2001	House Bill 2849	No action taken.	
2003	Senate Bill 1176	Passed the Senate, no action taken	
		in the House.	
2005	House Bill 3304	Considered at a public hearing in	
		the House, no action taken.	
2009	House Bill 1854	Considered at a public hearing in	
		the House, no action taken.	
2011	Senate Bill 1274	Considered at a public hearing in	
		the Senate, no action taken.	
2013	Senate Bill 311	Considered at a public hearing in	
		the Senate, no action taken.	
2013	House Bill 888	No action taken.	
2013	House Bill 2693	Voted out of House committee by	
		6-1 vote. No action taken in	
		Calendars committee.	
2015	House Bill 1488	No action taken.	
2015	House Bill 2734	Considered at a public hearing in	
		the House, no action taken.	

Each attempt at licensing roofing contractors has ultimately failed. In 1997, the proposal passed the Senate and was considered in the House until it was defeated on a procedural move. The bills have been sponsored by a variety of Republican legislators over the past 18 years, and in the 2005 and 2009 sessions were sponsored by

Representative John Davis, who owned a roofing company. Since 2003, when legislation to license roofing contractors passed in the Senate but did not move in the House, the most progress that has been made by proponents of the issue was in 2013. With three licensure bills for roofing contractors filed that year, House Bill 2693 was voted favorably out of the House Committee on Licensing and Administrative Procedures by a vote of 6-1. The bill next moved to the House Committee on Calendars, which schedules bills for votes by the full House where no action was ultimately taken on the bill.

This latest attempt to license roofing contractors was, to some extent, a competition between organized political interests. While the larger groups that supported licensure might have had more power in terms of membership size, it is clear that the smaller companies and individual workers who opposed the legislation were effective in getting their message across to legislators who were willing to oppose the bill. Also, the fact that two influential conservative think tanks both registered opposition of the bill might have been a factor in its eventual stalling. The debate over the legislation brought up some numbers of complaints regarding roofing contractors and increased costs in states with licensing requirements that served to bolster the comments made by several individuals opposing regulation. On the other hand, any stated reasons for supporting the bill were largely hypothetical, as no facts and figures were offered that would help make the case. The lack of questioning by the committee members, other than questions by Representative Boris Miles, who noted that he supported the bill, was noticeable.

House Bill 2693, as filed in 2013 by Representative Kenneth Sheets, defined a roofing contractor as follows:

• An owner, officer, or director of a roofing business;

- Someone who possesses direct or indirect control of at least 10 percent of the voting securities of a roofing business that is a corporation;
- Someone who owns or possesses direct or indirect control of at least \$25,000 of the fair market value of a roofing business;
- Someone who directly or indirectly possesses the power to direct or cause the direction of the management of policies of a roofing business; or
- Someone who has a direct or indirect interest in at least 10 percent of the profits, proceeds, or capital gains of a roofing business.

The bill was designed to impose a licensing requirement on anyone acting or offering to act in these capacities. Licenses would have been valid for one year, and license holders would have been required to display their business name and license number on every vehicle owned by the contractor and used in providing roofing services. Specific requirements would have been imposed as to the type of lettering that was used and where on the vehicles it was displayed. The Texas Department of Licensing and Regulation (TDLR) would have been granted the authority to implement the provisions of the legislation, and anyone violating rules, whether or not they were a license holder, would have been subject to administrative penalties issued by TDLR. If anyone violated licensing requirements of the legislation or performed roofing services without the required licensing, they could have faced criminal charges leading to a fine of up to \$500 and a suspension of their roofing license, if applicable (Texas Legislature 2013).

By the time that House Bill 2693 received a public hearing on April 9, 2013 before the House Committee on Licensing and Administrative Procedures, the bill had significantly changed to make the licensing requirement a voluntary registration program, much like what happened with the previously described legislation pertaining to foundation repair contractors. Criminal penalties had been changed to pertain only to anyone who represents to the public that they were a registered roofing contractor when

they were not registered with the state. Sheets opened the hearing by saying that catastrophic events that do significant damage to roofs often lead to an influx of roofing contractors seeking work in affected areas. According to Sheets, many of these people are looking to make money quickly and may be inexperienced, untrained, or unwilling to provide a high quality of work. Sheets also explained that roofing contractors in this situation may not be bonded or insured. According to Sheets, homeowners victimized by such problems would be left without recourse and the possibility of even further damage to homes, more insurance claims to make additional repairs, and because of this, would face higher insurance rates (*Texas House Committee on Licensing and Administrative Procedures: April 9, 2013 Public Hearing* 2013).

Representative Boris Miles, then a member of the Committee on Licensing and Administrative Procedures, questioned Sheets about why a licensing program would be voluntary. Sheets responded that the program would be voluntary in order to get it passed. He further expressed his thoughts that his bill would have a very minimal impact on the marketplace and his assumption that good actors would register with the state, but bad ones won't. Miles then asked Sheets how rogue roofers who did not participate would be stopped from falsely representing to the public that they were registered under the program. Sheets pointed to the criminal penalty in the bill for someone falsely representing themselves as a registered roofer and suggested that, if the bill was passed, additional penalties could be included in the rulemaking process. Representative Four Price, also a member of the committee, questioned whether the Class C misdemeanor penalty in the bill (the lowest level of criminal penalty under Texas law) would be strong

enough to be effective (*Texas House Committee on Licensing and Administrative Procedures: April 9, 2013 Public Hearing* 2013).

During the public hearing, 20 people registered in support of the bill. Most of those in favor of the bill were affiliated with large roofing organizations such as the Roofing Contractors Association of Texas, Professional Roofing Standards Council, and Metal Roofs of Texas. Others registering in support of the bill were affiliated with other influential groups such as the Texas Association of Realtors, the Texas Association of Business, the Independent Insurance Agents of Texas, and some individual insurance companies. Registering in opposition to the bill during the hearing were 21 individuals, many representing themselves as "handymen" or as owners of small companies and others representing smaller roofing companies through the Texas Independent Roofing Contractors Association and the U.S. Hispanic Contractors Association. The Texas Public Policy Foundation and Texans for Fiscal Responsibility, two influential conservative think tanks, also registered opposition to the bill (*Texas House Committee on Licensing and Administrative Procedures: April 9, 2013 Public Hearing* 2013).

Chris Crutcher, representing Outback Roofing Company, spoke in favor of the bill stating that his experience in the roofing industry led him to believe that the roofing industry lacked accountability to protect against bag actors. He stated that the parameters of the bill would lead to a clear understanding of available options in the marketplace without overregulation, and that a voluntary registration program would allow good roofing contractors to validate what they already try to do for consumers. Dave Custable, representing the North Texas Roofing Contractors Association, testified that the bill would be a win for consumers because he believed that legitimate contractors could not

reasonably compete against the unethical sales approach and poor workmanship exhibited by bad actors. Al Jurado, of the Texas Association of Realtors, indicated his support of the legislation, saying that his association often hears complaints about bad actors. However, Jurado did not mention any specific examples nor did any members of the committee ask him for examples. Edis Oliver, of the Professional Roofing Standards Council, stated his support for the bill and his belief that the legislation would not raise the cost of doing business or penalize smaller contractors or legitimate contractors who chose not to register. According to Joe Parks, of Metal Roofs of Texas, the legislation was needed so consumers would have a factual system to check and see whether companies are legitimate. Parks stated his belief that other resources such as the Better Business Bureau and Angie's List were not necessary factual and that it was very hard for large companies with higher costs to compete with smaller operators working from their tailgates (*Texas House Committee on Licensing and Administrative Procedures: April 9*, 2013 Public Hearing 2013).

Carl Isett, a former state legislator representing the Texas Independent Roofing Contractors Association, stated that his organization's opposition to the bill had not changed even when the legislation was revised from a mandatory licensing program to a voluntary registration program. According to Isett, small communities all over Texas could be miles away from large roofing companies, and people who did the best work in these communities were often "just a guy with a truck and a ladder" who were willing to work at a reasonable cost and had a good reputation. Acknowledging that such roofers could choose not to register, Isett explained his fear that that if some contractors registered and others chose not to, those choosing not to would be seen as bad actors

regardless of whether they had done anything wrong. According to Isett, such a system would be like the state "saying there are good guys and bad guys." Furthermore, Isett pointed out that private industry certifications already existed in addition to information that can be found through sources such as the Better Business Bureau, Yelp, and Angie's List. "You can get this information without the government doing anything," Isett said. Tom Bigger, an independent roofing contractor, spoke against the bill, stating that the roofing industry had thrived in Texas since 1836 with no regulation. According to Bigger, registration would imply to the consumer that someone had been checked out and was qualified, which was not necessarily true, since there were no defined qualifications in the legislation to become a roofer. Bigger said consumer education in general was important, and that his work depended on his reputation and recommendations from previous customers. Bigger also stated that he is willing to provide liability insurance if the consumers are willing to cover the cost. Therefore, the extra cost would be at the discretion of customers as opposed to everyone being faced with extra costs in the form of regulatory requirements.

Keith Carson, the owner of Perfect Pitch Roofing, also testified against the legislation. According to Carson, regulations would push costs up for everyone. If some companies closed, he believed the lack of competition would push costs up even further, which would limit the financial capability of consumers to purchase roofing services. Carson also stated that he felt any similar legislation should have a sunset provision where it would be reviewed to make sure it did not have unintended consequences after taking effect. Carson also stated that if the registration was voluntary and he continued working without registering, his customers probably would not care since he had

previously done good work, implying that the lack of caring on the part of customers would lead to less effectiveness from the proposed registration program. Frank Fuentes of the U.S. Hispanic Contractors Association also testified against the legislation. Due to the original draft of the legislation being a requirement for mandatory licensure, Fuentes stated his belief that if the voluntary registration program passed, it would become mandatory over time. In response to questioning from Representative Boris Miles about what happens when bad actors steal from consumers and rip them off, Fuentes questioned Miles about whether he knew how many roofing complaints were submitted to the Better Business Bureaus around the state. According to Fuentes, in a year, there are about 1,500 complaints submitted in regards to roofing contractors, some of which turn out to be legitimate while others do not. Fuentes further stated that the number of legitimate complaints equaled a very small percentage of the amount of roofs installed in a given year in Texas. Fuentes expressed surprise that the committee did not know the amount of complaints compared to the total number of roof installations saying, "We need to know that in considering legislation."

Tex Gilner testified against the legislation, stating that he had been in the roofing business since 1974. He said that he had attended hearings on licensing legislation for several legislative sessions and asked why big roofing companies and insurance companies were so interested in making business unaffordable for smaller contractors. According to Gilner, consumer education was important as well as reminding consumers to check with local suppliers and friends and neighbors in their community who had roofing work performed. He also expressed his opinion that regulation by the Texas Department of Insurance, as specified in the bill would be putting the "fox in charge of

the henhouse." Representative Miles questioned Gilner about what he thought about instances where insurance checks might be turned over to the roofer in advance, but the roofer never returns to do the work. Gilner stated that he did not take advance payments on any of his work but if that was a problem, he believed simple legislation to prohibit roofers from requiring any payments in advance would solve the problem. In testifying against the legislation, Patrick Moran of the Austin Roofing Contractors Association echoed Gilner's concerns about the Texas Department of Insurance (TDI) being the regulatory authority, saying that as long as TDI was in charge, he believed insurance companies would benefit far more than roofers or consumers. Moran also echoed earlier comments made by Fuentes, saying that the percentage of roofing jobs that turn out to be problematic due to faulty work is very small. Moran said that liability insurance was cost prohibitive, as it could cost the contractor as much as 20 percent gross revenue. Like Bigger stated earlier, Moran said that liability insurance could be helpful if the consumer wanted it, but that is why contractors offer different prices to consumer. When questioning Moran about insurance figures, Representative Miles stated his belief that it was "atrocious" that a roofing contractor would charge extra for providing liability insurance. Finally, Moran stated that he felt the legislation contained too much room for future regulatory expansion and that the idea he had heard regarding removing all bad actors from the industry was not realistic. "Crooks are going to be in any business to some extent, no matter what," he said.

David Kettler, a roofing contractor with 42 years of experience, testified against the legislation, stating that private sector ratings such as those from the Better Business Bureau could accomplish everything intended by the legislation. Kettler also stated that

since most homeowners have property and casualty insurance, carrying liability insurance protects the roofers more than the homeowners. Kettler also addressed the issue of regulatory costs being passed on to consumers, stating that out of the 50 states and Washington, D.C., 30 locations do not require licensing while 21 do. According to Kettler, his research showed that the 21 locations regulating the roofing industry had an average roofing job cost of 8 percent more than in states without licensing restrictions. Furthermore, comparing Gulf Coast states that had regulations to Texas and others who did not, he estimated that licensing raised prices by 15 percent in those areas. Kettler also expressed concerns that the legislation, if passed, might lead to a further expansion of regulation. Stacy Pearson, a roofing contractor with 27 years of experience, also testified against the bill. Pearson said he owned only one truck, three ladders, carried no liability insurance, and made a living by going door to door to leave business cards as consumers would often keep his cards and call him when they needed roofing work done. Over his career, Pearson said he had completed over 15,000 jobs in that manner. Pearson further stated that he felt that large companies with more overhead were not able to compete with services such as his on prices, so they had been lobbying in favor of regulations, something that showed that the goal of passing the legislation would eventually be to increase the regulatory burden. He also indicated that any roofers who steal or commit fraud can be prosecuted under existing criminal statutes. Hector Uribe, of the Hispanic Contractors Association de Tejas echoed these comments, saying that problems can be dealt with in criminal courts without asking the legislature "to fix every problem that every individual has." In response to earlier comments from Representative Miles about the need to take a first step towards correcting problems in the roofing industry, Uribe

indicated that it would be "better to take no steps than the wrong step." Daniel Simon, a self-employed roofing contractor, opposed the bill and in his testimony, discussed a few municipalities that had regulations in place. According to Simon, his cost of doing business had already increased in those areas but said he believed the problem that supporters of the legislation were trying to address was "microscopic" and that most complaints could be resolved without the legal system. Leo Wadley, a retired roofing contractor, also testified against the bill. Wadley pointed out that although the bill was described as being for consumer protection, it did not cover homebuilders and remodelers. According to Wadley, the likelihood of having bad actors in those areas of work is just as high as it would be for roofers (*Texas House Committee on Licensing and Administrative Procedures: April 9, 2013 Public Hearing* 2013).

House Bill 2693 was voted favorably out of the Committee on Licensing and Administrative Procedures by a vote of 6-1 and sent to the Committee on Calendars, which sets legislation for a floor vote. The bill never moved forward in the Committee on Calendars.

Roofing contractors are currently licensed in 21 states. It is unknown why they have become licensed in some states and not others, but the arguments about the need to protect property owners may be compelling in many states, regardless of whether anyone actually checks to see if there is a problem. Since this type of licensing has been promoted since 1997, it would not be unlikely for the legislation to return in a future legislative session.

Veterinary Technicians

During the 2013 session of the Texas Legislature, Senate Bill 1312 was filed to require licensure of veterinary technicians by the Texas Board of Veterinary Medical Examiners. This legislation, which had not been filed in previous sessions, established a new advisory committee to develop an exam for potential veterinary technicians.

The lack of any organized opposition is noteworthy in the case of this legislation. Despite a comment made by Senator Charles Schwertner about the possibility for punitive regulatory action to be helpful, no senator or representative ever questioned whether there were problems in the previous system of veterinary technicians not being regulated by the state. No one ever raised questions as to whether technicians had ever been accused of engaging in unethical behavior or whether licensure requirements would represent a significant barrier to individuals seeking to enter the occupation. It was said several times that most practitioners already working in the field supported licensure and they had every reason to do so, concerning the legislation grandfathered them into the requirements regardless of whether they would meet the new qualifications while new potential competitors in the job market would have to go through the entire licensing process. It is also noteworthy that the House sponsor of the legislation, as well as another member of the committee initially considering the legislation in the House, were both retired veterinarians who likely worked with their industry to facilitate the bill's passage. The fact that the industry was supportive of the bill and the lack of influential groups opposing the licensing requirement seemed to translate into a lack of opposition among legislators.

Senate Bill 1312 set forth requirements that in order to become licensed, an individual must meet the following qualifications:

- Passage of a jurisprudence examination as determined by the Texas Board of Veterinary Medical Examiners:
- Being at least 18 years of age;
- Graduation from a program accredited by the American Veterinary Medical Association;
- Passage of the Veterinary Technician National Examination;
- Passage of a criminal background check

The legislation also contained requirements for displaying a veterinary technician's license in the workplace and for the continuing education. The legislation set forth the scope of practice for a veterinary technician, and described actions that could lead to license denial or disciplinary action (Texas Legislature 2013).

The first public hearing on Senate Bill 1312 was held on April 8, 2013 in the Senate Committee on Agriculture, Rural Affairs, and Homeland Security. Nine people, mostly associated with organized veterinary-related interests, registered in favor of the bill. The Texas Farm Bureau, which is very influential, especially with rural legislators, also registered in favor of the legislation. There was no registered opposition. Senator Charles Schwertner, author of the legislation, stated that at the time, many technicians chose to register in a private credentialing program through the Texas Veterinary Medical Association. Schwertner also said that practitioners in the field wanted the regulatory requirement to be put in place, and stated his belief that licensing was better than a private credentialing program because under licensing, punitive action could be taken if necessary. Senator Carlos Uresti, a member of the committee considering the legislation, questioned Schwertner about whether professionals already working in the occupation that had passed the private credentialing exam would have to take another exam in order

to become licensed. Schwertner replied that current practitioners would be grandfathered into licensing and would not have to meet additional requirements. David Sessum, a veterinary technician and a member of the Texas Association of Registered Veterinary Technicians, testified in favor of the bill and compared the licensing regime to the professional pathway for medical professionals. Cynthia Dittmar, also a veterinary technician with the same association, testified that the requirements for licensure would help people understand who would be taking care of their pets and what their credentials were (*Texas Senate Committee on Agriculture, Rural Affairs, and Homeland Security: April 8, 2013 Public Hearing* 2013).

A hearing on an identical bill requiring the licensure of veterinary technicians, House Bill 1621, took place in the House Committee on Agriculture and Livestock on April 3, 2013. Representative Jimmie Don Aycock, a retired veterinarian and the author of the House bill, introduced the legislation by saying that licensure was important because veterinary technicians would be clearly regulated on what they could do and what degree of supervision by a licensed veterinarian was necessary (*Texas House Committee on Agriculture and Livestock: April 3, 2013 Public Hearing* 2013).

Dr. Tracy Colvin, president of the Texas Veterinary Medical Association, testified in favor of the bill stating that 84 percent of technicians choosing to register in private certification programs wanted to become licensed. She stated that these individuals had, at minimum, graduated with an associate's degree, passed a registration exam, and maintained continuing education requirements. According to Dr. Colvin, 38 other states were licensing veterinary technicians at the time and it would be helpful to veterinarians to have licensure for their technicians. Representative Charles Anderson, a member of

the committee considering the legislation and also a retired veterinarian, pointed out that veterinarians were not required to hire technicians, and those who chose not to would not be subject to the regulations in the legislation. Dittmar, who had previously testified in the Senate committee hearing, also testified in support of the House bill, saying that licensure would be a way to make sure that people without training or education were not hired by veterinarians and that it would be a way to make sure a professional atmosphere was maintained. Sessum also testified in the House hearing, saying that licensure would add value to someone's education in the field. He pointed out that, if the bill passed, unlicensed individuals could still work for veterinarians, but just would have limits on what they could do in order to keep them from performing tasks requiring a license (*Texas House Committee on Agriculture and Livestock: April 3, 2013 Public Hearing* 2013).

When Senate Bill 1312 was considered on the floor of the Senate, no questions were asked of Senator Schwertner and the bill passed unanimously. On May 3, 2013, the bill was introduced to the full House and won its final passage on May 4, 2013 by a vote of 82-50 (*Texas House of Representatives: May 4, 2013 Floor Session* 2013). The fact that 50 representatives voted against the bill was unusual, considering the fact that there was no organized opposition to the bill and that no House members questioned Representative Aycock on the floor. The legislation was signed into law by Governor Rick Perry on June 4, 2013.

Texas became the 39th state to license veterinary technicians. Other states leave the specific credentialing requirements to the veterinarians who hire technicians, and a number of private certification programs exist in those areas.

Part Two: Results of Empirical Study on Texas Occupations

A linear probability model was used to test the degree to which the independent variables predict whether or not an occupation is licensed by the state of Texas. Table 12, shown on Page 106, summarizes the results using this model. The r-square figure shows that almost 32 percent of the variation in the dependent variable can be explained by one or more of the independent variables. The significance of F shows that the model is a good fit and that for every unit of increase in the number of states requiring licensing, the dependent variable increases by 0.0163. Therefore, the likelihood of licensure in Texas increases by 1.63 percent as each additional state has a licensing requirement for an occupation. With a p-value of 0.01401, the results suggest that the amount of other states requiring occupational licenses for a given occupation is a significant predictor of whether or not the occupation is licensed in Texas. This is similar to what was found in the case studies, where legislative testimony indicated a contagion effect. Licensing requirements in other states are often used as a reason for licensing an occupation in Texas. Therefore, for the variable of the number of states that require licensing in an occupation, the null hypothesis can be rejected, even at the one percent level of significance. Slightly significant as a predictor of whether occupational licensing is required in Texas is the accident rate for an occupation, although the impact is slightly negative. While it might seem more likely for the impact to be positive, the case studies help give context to this. In the six examples from case studies, it is suggested that health and safety concerns, such as accident rates, are scarcely considered. While it is unlikely that these results demonstrate that Texas policymakers are deliberately requiring

licensing for less dangerous occupations as opposed to more dangerous occupations, it does likely demonstrate that level of danger is not usually seriously considered.

Table 12: Results of Empirical Study on Texas Occupations

Dependent variable = Occupational licensing requirement	Coefficient (Standard error)	P-value		
# of states requiring licensing	0.0163 (0.005)	**		
Accident rates	-0.028 (0.016)	*		
Budget	-7.457 (8.473)			
Organizational Structure of Occupation Type 1	0.059 (0.169)			
Type 2	0.116 (0.215)			

 $R^2 = 0.319$

Based on other p-values, it is not possible to know if the other independent variables (lobbying budget for the occupation and the organizational structure of the occupation) are a predictor of whether or not occupational licensing will be required in the occupation. Therefore, the null hypotheses for these variables cannot be rejected.

Part Three: Results of Empirical Study of Occupational Licensing Across the United States

A probit regression model was used to test the degree to which the independent variables predict whether or not the occupation of behavior analysts is licensed in each of

N = 43

^{*} p < 0.10

^{**} p < 0.05

^{***} p < 0.01

the 50 states and in the District of Columbia. The occupation of behavior analysts was chosen for this test because licensing is required in almost half of all states, but not in the remainder. Also, proposals for licensing behavior analysts have been offered in states where licensing is not required in recent years, but they have not passed. These situations suggest that current factors of some sort are driving the licensing process in certain states while causing licensing requirements to fail in other states. Shown below in Table 13, the probability of Chi-square shows that the model is significant.

Table 13: Probit Regression

licenseanalysts	Coef.	Std. Err.	Z	P> z	P> z [95% Conf. Interval]		
membershipsper1000population	-2.38194	9.854406	-0.24	0.809	-21.69622	16.93234	
membershipoper1000population	-10.82676	3.628054	-2.98	0.003	-17.93761	-3.715903	
percapitaincome	.0000202	.0000553	0.37	0.715	0000882	.0001287	
urban	.0395301	.0323754	1.22	0.222	0239246	.1029848	
populationdensity	0013765	.00181	-0.76	0.447	004924	.002171	
conservatism	0779716	.1036699	-0.75	0.452	2811609	.1252177	
democrats	.0711012	.0706414	1.01	0.314	0673534	.2095558	
numberlicocc	0240136	.0120575	-1.99	0.046	0476458	0003814	
paternalism	8264449	.6556035	-1.26	0.207	-2.111404	.4585144	
geo1	4955923	1.181408	-0.42	0.675	-2.81111	1.819926	
geo2	9695851	.7512076	-1.29	0.197	-2.441925	.5027547	
geo3	1550752	1.08484	-0.14	0.886	-2.281322	1.971172	
_cons	1.828664	8.054069	0.23	0.820	-13.95702	17.61435	
Number of obs = 51							
LR chi2(13) = 21.96							
Prob > chi2 = 0.0559							
$Log likelihood = -24.280618 \qquad Pseudo R2 = 0.3114$							

The independent variable that has the greatest impact on the dependent variable is the number of members of groups opposing occupational licensing requirements for behavior analysts. At -10.82676, a strong negative impact is shown which means with higher levels of membership in opposing groups, the result is pushed towards no licensing requirements. This result is similar to what was observed in the case studies where well organized political interests opposing licensing tended to have success as the proposals that they opposed did not pass. It is also suggested in the literature that strong group

opposition to licensing requirements can have an effect on whether licensing proposals become law. At -0.0240136, the number of licensed occupations in the state has a very small negative impact on whether the occupation of behavior analysts will have licensing requirements. While it may seem logical to think that states already requiring licensing in many other occupations would be likely to license behavior analysts, pushback against licensing too many occupations may also occur, as shown in the case studies. If that is the case in other states, then legislators may prefer to approach new licensing requirements with caution.

Table 14, shown below, summarizes the marginal effects from the probit model.

Table 14: Marginal Effects After Probit

variable	dy/dx	Std. Err.	Z	P> z	[95% Conf. Interval]		X
membershipsper1000population	909194	3.76883	-0.24	0.809	-8.29597	6.47758	.050886
membershipoper1000population	-4.132608	1.42692	-2.90	0.004	-6.92932	-1.3359	.150647
percapitaincome	7.72e-06	.00002	0.36	0.716	000034	.000049	40411.9
urban	.0150888	.01141	1.32	0.186	00727	.037448	74.0998
populationdensity	0005254	.00064	-0.82	0.415	001788	.000737	378.338
conservatism	0779716	.03961	-0.75	0.452	107395	.047871	38.5882
democrats	.0271396	.02749	0.99	0.323	026734	.081013	49.6333
numberlicocc	0091661	.0047	-1.95	0.051	018369	.000037	92.8824
paternalism	3140677	.24706	-1.27	0.204	798303	.170168	.607843
geo1	1796026	.38696	-0.46	0.643	938023	.578818	.254902
geo2	3229803	.19448	-1.66	0.097	704163	.058202	.235294
geo3	0581919	.402	-0.14	0.885	846094	.729711	.176471
(*) dy/dx is for discrete change of dummy variable from 0 to 1							

y = Pr(licenseanalysts) (predict) = .3831447

Chapter V

DISCUSSION

Part One: Conclusions- Case Studies

As noted earlier in this work, six cases are not necessarily conclusive about occupational licensing in the state of Texas. However, the case studies do present some important information about the process of occupational licensing in the state, as well as its effects. Some of the insights gained from the case studies support the existing literature, and others add to it, especially considering that only a small amount of information has been written about occupational licensing as a result of the policymaking process. The following conclusions are based on observations that were noticeable in all six case studies

1 In each of the case studies, many members of the occupation for which licensing requirements were being considered were strongly supportive of licensing legislation. In the case studies, licensing was never proposed without strong support from at least some practitioners in the industry. When an industry was not unanimous in its support for licensing, which was the case for anesthesiology assistants, foundation repair contractors, and roofing contractors, the opposition was generated by competing organized interests who were afraid that higher costs or increased regulatory burdens would harm their ability to work in their occupation. Very rarely did an organized interest actually represent consumers and even in the few instances of consumer groups

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registering in support of legislation, no specific examples were offered of consumers suffering harm because of unregulated practitioners in the occupations in question.

2 In each case study, very little in the way of factual data was presented on the costs or benefits of licensure. Supporters of occupational licensing, both legislators and members of the public who registered in support of licensing legislation, presented hypothetical situations of danger that might exist and insisted that licensing would reduce the level of danger to the public. With the exception of some roofing contractors who were opposed to licensing requirements in their industry and cited data that showed that problems with the occupation in its unregulated state were minimal while costs were significantly higher in states with licensing, no one supporting or opposing licensing legislation really attempted to justify their claims. Also, during questioning in committee hearings and on the House and Senate floors, no legislators ever asked for this information. In the case of associate auctioneers and veterinary technicians, supporters of the legislation never even claimed that there were bad actors in the industry or that licensing would lead to better outcomes. No legislators even asked for such basic details on those two pieces of legislation. This leads to two possible thoughts about legislators involved in the occupational licensing process. First of all, those who author legislation may not anticipate questions about costs and benefits being asked, which is why they do not work such information into the layout of their legislation. It would also indicate that their past experience tells them that they are not likely to be asked. As to why other legislators do not ask for information, it is possible that since politics often determines their support or opposition, they are really sometimes not in search of details necessary to make an informed decision on the issue.

- 3. Literature suggests that occupational licensing may benefit existing practitioners in an occupation, but the case studies show that it may create or expand demand for licensed services at the expense of related service providers. Legislative debates over occupational licensing seem to often focus on exclusivity of who gets to perform certain work or, as it was referred to in one public hearing, "turf wars." For example, nursing groups opposed licensure for anesthesiology assistants, because they wanted people from their occupation, such as registered nurse anesthesiologists, to be allowed to do the work without additional regulatory barriers. Similarly, general "handymen" contractors tended to oppose licensure for foundation repair contractors and roofing contractors. Even if these individuals did not do much work that would have fallen under the licensure, they would have either had to become licensed or just focus on other work, running the risk that competing handymen might become licensed and end up getting more other work as well just because of the convenience of hiring one contractor who would be able to do everything necessary in a renovation project, for example. Therefore, rent seeking may not only be successful if barriers to entry are erected, but it may also be successful due to the legal right to do more than related service providers without licensure can do.
- 4. Legislative debates over occupational licensing do not occur and then fade away, resolved by either support of or opposition to licensure. Instead, it is likely that interest groups will be very persistent in anticipation of being able to take advantage of a changing legislative atmosphere, new committee chairmen or members, getting legislation routed to a totally different committee, or some other political development that leaves them with hope after previously suffering a defeat. In the case studies

examined in this work, this was evident as roofing contractors have been seeking licensure requirements for 18 years. Anesthesiology assistants have now sought licensing requirements for eight years, while foundation repair contractors have supported licensing legislation for six years. It is very likely that the question of whether or not to require licensing for individuals in these occupations will be back in front of the legislature in the near future.

- 5. Supporters of occupational licensing requirements seem to catch momentum based on what is happening in similar occupations or in other states. One of the most commonly discussed reasons for occupational licensing is that some other occupation, which is usually said to pose an equal or lesser danger to the public, already has licensing requirements. Many supporters of licensing requirements for anesthesiology assistants made this argument in regards to other operating room employees who were required to hold occupational licenses. They also argued that they should be licensed because some other states required licensure in their occupation, an argument also heard from the veterinary technicians who wished to be licensed. Supporters of occupational licensing for foundation repair contractors often mentioned that other home repair-related occupations were licensed including plumbers and electricians. Based on these observations, it seems likely that occupational licensing, at least to a certain extent, is self-sustaining and this may also explain part of the quick increase in the number of licensed occupations in recent years.
- 6. Interest groups and practitioners seem to seek occupational licensing not just because of financial interests, but also because they gain additional utility from the status of being a license holder. In the case studies of anesthesiology assistants and

veterinary technicians, it was implied that licensing was deserved due to the education and training that unlicensed practitioners still had to complete. Also, licensing often allows practitioners to use specific titles such as "licensed veterinary technician" that other unlicensed people doing almost identical work would not be able to use. In the cases of foundation repair contractors and roofing contractors, even after the proposals were changed to create voluntary registration programs, it can be assumed that practitioners choosing to register and be on an official listing maintained by the state would derive utility from such a system, especially compared to competitors who chose not to register. This may partly explain why interest groups seek licensing requirements for their occupations regardless of whether they would be likely to see a wage increase.

7. In all six case studies, certain practitioners were strongly supportive of occupational licensing legislation for their occupations. However, the level of organized opposition seemed to be the main difference when considering which legislation passed and which did not pass. For associate auctioneers, forensic analysts, and veterinary technicians, there was no organized opposition, very few questions were asked by legislators, and the bills easily passed. Organized opposition seemed to bring a different result. In the case of anesthesiology assistants, foundation repair contractors, and roofing contractors, there was organized opposition, extensive testimony from witnesses, and the bills were ultimately defeated. In the case of roofing contractors, the bill never made it through the House Committee on Calendars to be considered by the full House, which could be an indication that, once the bill left the House Committee on Licensing and Administrative Procedures, opposing individuals and groups concentrated on lobbying members of the Calendars committee.

Part Two: Conclusions on Empirical Study of Texas Occupations

In Texas, it is somewhat difficult to predict the factors regarding why a specific occupation would or would not require licensing. Since policymakers often act to establish or change requirements with very little information presented, there are few indicators as to what might predict the success of a specific proposal. The best predictor of whether or not an occupation will be licensed in Texas is the number of other states in which the occupation is licensed. In both the literature and the case studies presented earlier in this dissertation, it became obvious that individuals and groups supporting licensing requirements often pointed to the number of other states with similar requirements as justification for their proposal. The literature suggests that occupational licensing is somewhat self-perpetuating, which seems to be indicated by the fact that as more states license an occupation, it becomes more likely that the same occupation will require licensing in Texas.

Despite the fact that health and safety concerns are one of the most commonly stated reasons for individuals and groups to support occupational licensing requirements, occupations with higher accident rates are not a significant factor in whether or not an occupation is licensed in Texas. This statement is not intended to suggest that policymakers deliberately require licensing for exceptionally safe occupations, while ignoring problematic occupations. Instead, it is just one more thing that points to the lack of attention given to this issue. The six Texas case studies demonstrated that information is rarely presented showing whether or not an occupation being considered for licensing has important public health or safety concerns. Legislators who offer proposals rarely mention any type of specific concerns, other than hypothetical situations that could occur

without regulations. Also, their colleagues rarely ever ask them for any information. Virtually no debate takes place regarding the overall costs and benefits of specific licensing legislation. As the case studies demonstrate, if no members of the public are present to testify for or against legislation, committee hearings sometimes only take a few minutes and floor debate sometimes only consists of the bill author using a few sentences to describe key features of the legislation, no questions being asked, and a vote taken immediately afterward. Although some legislators are probably doing research on their own and casting informed votes on licensing legislation, the lack of information being discussed on the record seems to show an overall lower level of interest in determining the costs and benefits of such legislation when compared to other types of legislation that may be debated for hours. Therefore, the fact that legislators are not requiring licensing in areas that have more documented safety concerns comes as no surprise.

Lobbying and political influence by groups is undoubtedly helpful to whatever causes they champion, including the passage of legislation requiring occupational licensing in their field. However, when looking at 45 different occupations, the amount of money spent on lobbying was not significant. This is likely due to one reason. Out of the occupations studied, some of them have had licensing requirements that have been established for years. Since bills to deregulate occupations or reduce occupational licensing requirements rarely even advance as far as a public hearing in the Texas Legislature, it seems likely that groups supporting established requirements do not need to spend as much on lobbying in order to maintain their requirements. It is likely that groups who are just beginning to push for licensing requirements or those who have relatively new requirements are going to use more resources in order to build good

requirements. It also stands to reason that some groups who begin spending heavily on lobbying during a given session may not even have a current occupational licensing proposal, but may be laying groundwork to bring something forward in the future.

Therefore, there may be a correlation between amounts spent on lobbying and success in a licensing proposal being passed at some point, but the timing is different for each occupation, which is why the level of spending on lobbying is not significant.

Part Three: Conclusions on Empirical Study of Occupational Licensing Across the United States

1. Out of the variables tested, the most significant variable in determining which of the 50 states will require occupational licensing for behavior analysts is the per capita membership numbers in groups who oppose occupational licensing requirements for behavior analysts. This is a finding that is supported by both the literature and the case studies detailed in this dissertation, as it suggests that the decision of whether or not to require occupational licensing in a specific occupation is often the result of a battle between organized political interests, with the interests that are the most well organized winning the battle. Furthermore, if it is a battle between organized political interests, it stands to reason that larger numbers in groups opposing licensure would be significant in determining whether or not licensing requirements were enacted. This, too, was supported by the case studies as licensing proposals opposed by vocal, well organized groups often failed while those with little or no opposition often passed.

2. The number of licensed occupations in the state has a very small negative impact on whether the occupation of behavior analysts will have licensing requirements. While it may seem logical to think that states already requiring licensing in many other occupations would be likely to license behavior analysts, pushback against licensing too many occupations may also occur, as shown in the case studies. Whether or not there is a certain "tipping point" after which more licensing requirements lead to stricter scrutiny for the need for licensing would be a valid question for another study.

Part Four: Policy Recommendations

Based on the literature review and the results of the case studies and the statistical tests, several recommendations have been developed that will assist Texas legislators and regulatory authorities in the state as they consider future changes to existing occupational licensing requirements or newly proposed requirements.

- 1. Lawmakers should work to make sure that licensing requirements have a clear purpose in protecting public health and safety and that requirements are not overly broad or burdensome. If there is no clear purpose in protecting health and safety, lawmakers should question the value of licensing requirements. In other cases, alternative forms of occupational regulation exist that would meet the stated policy goals of licensing without some of the burdensome restrictions imposed by licensing.
 - Certification would allow practitioners in an occupation the option of getting the training or experience necessary to achieve a high standard, but would not force them to do so. Therefore, consumers who valued the information function of occupational licensing would be able to choose a certified practitioner and, if applicable, pay the premium that came with higher standards while other consumers would not be restricted from hiring non-certified individuals who chose to work in the occupation. Certification could be designed in many ways, and could even be achieved outside of a government agency. The Goldwater Institute has promoted a model of private certification,

which would let education and training providers for an occupation certify their members in lieu of government licensing (Slivinski 2015). The state legislature, if it chose, could require the state to publish lists of certified providers if policymakers were concerned about the public's ability to access information. Indiana is currently a state that has a system which publishes lists of privately certified individuals (Slivinski 2015). While it is a fairly new system, policymakers in Texas should observe it and consider adopting such a system if it benefits the public while reducing burdens associated with occupational regulation by the government. In either a government operated system of certification or a private system, the certification could be revoked if a practitioner no longer met higher standards or chose not to complete required continuing education requirements.

- Registration is used to simply maintain a list of practitioners in a given occupation who choose to register, publish certain information on qualifications, and pay a fee. This is a system that is not very burdensome and, if operated in a voluntary manner, would allow consumers to access information if they chose without restricting who could work in an occupation. Also, registration programs could be operated by private industry groups for practitioners who meet their standards. In this case, lawmakers could choose to require the state to publish the information if they saw a need to do so.
- Insurance or bonding requirements, in some cases, might be a good way to address concerns with risk to the public. Bonding would work where companies or practitioners would be required to maintain a fund against which claims could be made. Insurance requirements would simply require companies or individuals to purchase insurance with the necessary amount of coverage. For instance, bonding or insurance requirements would go quite far in addressing stated concerns for taxi drivers and people who offer "ride sharing" services such as through Uber and Lyft, an industry where licensing is said to be very burdensome and there are many current discussions about the extent to which occupational licensing is necessary.
- Regulating businesses for basic health and safety requirements could be an alternative to requiring licenses for individual workers. In fact, if a business was subject to regular health and safety inspections, it is likely that more health and safety concerns would be quickly addressed as opposed to waiting on a consumer complaint to work its way through the procedures of a licensing authority. This is very similar to the way that most restaurants are regulated. Individual employees are not required to hold licenses, but health departments conduct regular inspections and may order corrective action if they find violations. This would work best in an occupation where health

and safety concerns are possible, but have little to do with individual practitioners. For instance, health and safety concerns with barber shops usually center on things such as the cleanliness of the shop and the sanitization of the equipment. Therefore, as an alternative to licensing individual barbers and imposing burdensome licensing requirements, policymakers could simply choose to regulate barber shops through periodic health and safety inspections.

As lawmakers seek to determine what type of occupational regulation, if any, is necessary in a given situation, they should also determine how the regulations will be enforced. As licensing comes to have more requirements, it is likely that more resources will be needed to operate a licensing program and conduct enforcement. Lawmakers should attempt to determine whether enough resources will be available in the budget to administer and enforce regulations and if the availability of resources is in question, they should look to other alternatives.

2. If lawmakers determine that occupational licensing is necessary for a given occupation, they should narrowly tailor requirements to only address the specific public health and safety concerns relevant to the work that will be performed. The literature, along with the case studies conducted earlier in this dissertation, suggests that existing practitioners in many occupations seek to raise their own standards. Despite whatever their stated reasons for doing so may be, legislators should not be quick to adopt higher standards if they are not tailored to specific health and safety concerns. Also, if lawmakers believe there is a genuine concern that should be addressed by way of occupational licensing, they should seek to determine what other states require occupational licensing in the given profession. Then, they should study whether or not other states have benefited from the proposals and let the requirements of the state that

uses the least restrictive practices necessary to meet its goals guide them in their own licensing proposal.

- 3. If occupational licensing is required in a given occupation, legislators should make sure that practitioners are legally allowed to practice to the greatest extent of their education and training. In reviewing the literature, it became apparent that "scope of practice" issues often became turf wars for practitioners who provided similar or overlapping services. By restricting individuals from practicing to the full extent of their training, legislators are causing one or more groups to benefit from reduced competition at the expense of those who are restricted from practicing. In Texas, many people feel that highly educated and trained workers such as medical assistants, physical therapists, nurse practitioners, and dental hygienists are not allowed to work to the full scope of their training. While it would be helpful to people working in the occupations, it would also be helpful in providing more access to services that might be currently restricted to doctors and dentists, who are fewer in supply. Also, with more people providing services, costs would likely decrease, something that would be good for consumers trying to stretch health care dollars.
- 4. Texas policymakers should consider cutting back on restrictions for workers with criminal records who are trying to obtain an occupational license. In some cases, licensing statutes in Texas specify that individuals with certain convictions may not obtain licenses. In most cases, however, it is left to each licensing agency to determine through administrative rules. Some adopt regulations that refer broadly to things such as "good moral character" being necessary to obtain and keep a license. In practice, this sometimes means that individuals with any criminal record whatsoever are

banned from working in the occupation. It makes sense that lawmakers would not want someone convicted of crimes affecting children to be able to teach or coach in a public school. What is less clear, however, is why people with convictions unrelated to public health, safety, or the work that they will be doing may face blanket ineligibility for a license or why people who had a misdemeanor criminal conviction decades ago could not work in some fields. While a barber shop, a plumbing business, or any other establishment might not want to hire a worker with a criminal record and would have a right not to do so, it seems that others might want to give someone a chance. A particularly good example of why this type of policy needs reform is the case of Jama'ar Brown, a barber from San Antonio, Texas. Brown had worked as a licensed barber in Texas for approximately five years when he went to prison on drug charges. While in prison, Brown was assigned to cut and style other inmates' hair due to his qualifications in his line of work. Upon his release, he found an employer who was willing to hire him, but could not get the Texas Department of Licensing and Regulation to reinstate his barber license. Not only did Brown's conviction have nothing to do with his job, but there is no apparent reason that the state should let him perform barbering services for other inmates, but not for the public upon his release from confinement. In other documented cases in Texas, licenses for nurses and teachers were revoked at the mere accusation of wrongdoing, despite the fact that the individuals were ultimately never charged with or convicted of a crime. At a very minimum, lawmakers should consider revising the law in a way that was proposed in House Bill 551, authored by State Representative Eric Johnson, during the 2015 legislative session. Johnson's bill would have prohibited a licensing authority from suspending, revoking, or denying an

occupational license on the grounds of a criminal conviction without first giving the person a chance to appear at a formal meeting of the authority and present their testimony and evidence in favor of themselves holding a license. House Bill 551 was referred to the House Committee on Licensing and Administrative Procedures, but never received a public hearing. Since almost four percent of Texas adults are currently in jail or prison or on parole or probation and as many as one-third of all adults have at least some type of misdemeanor criminal conviction, failure to reform this part of the law could lead to extremely high rates of unemployment among individuals with criminal records as well as the lack of well-trained practitioners to work in many different types of jobs. The lack of jobs for individuals with criminal records is commonly tied to recidivism and other social problems, about which policymakers should be concerned.

5. Even if lawmakers determine that licensing is necessary due to health and safety concerns, they should consider tailoring their policies in a way that does not criminalize work itself. The literature raised many questions about the punishments for unlicensed practice in various occupations. Most people likely understand why an unqualified individual impersonating a medical doctor could be charged as a criminal and how that would carry a risk to the public's health and safety. Fewer people, however, are likely to understand why someone could be charged as a criminal for working as an unlicensed barber or for using the title "registered interior designer" without the proper certification. Both of these are examples of criminal penalties that workers may face in Texas and such penalties could carry fines, jail time, or both. These criminal statutes are enforced, as the case of Texas auctioneer Drake King illustrates. After another auctioneer complained that King was working as an unlicensed auctioneer, he was

arrested by the Texas Department of Public Safety on the charge of working without a license. He spent six days in jail and pleaded guilty to a Class B misdemeanor which, in Texas, equates his offense of working as an auctioneer without a license to being convicted of driving while intoxicated, assault causing bodily injury, or any number of other Class B misdemeanor crimes in Texas. King would likely now face a hard time obtaining many Texas licenses, due to the fact that he now has a criminal record.

Practitioners who would commit crimes against the public could already be prosecuted for those crimes under existing criminal statutes. Licensing authorities have the power to write administrative rules and determine administrative fines for those violating the rules, including working without a license. Therefore, the ability to convict someone as a criminal just for the offense of working without a license does not appear to serve much purpose in regards to the well-being of the public. Legislators should consider repealing any statutes that only act to criminalize work.

6. Legislators should study the manner in which fees for new licenses, renewals, and other purposes are set. Ideally, programs for state required licensing, registration, or certification would be revenue neutral. However, it is often suggested that such programs often generate more revenue than the cost of operating the programs, which means that lawmakers often have the ability to use money for other areas in the state budget. A discussion of this occurred on April 22, 2013 as the Texas House of Representatives debated the merits of requiring licensing for interior designers and now-retired State Representative Jim Pitts, who then served as chairman of the budget-writing House Appropriations Committee, noted during the debate that the fees paid in through the licensing program generated \$1 million in extra revenue that helped fund public

education. This does not seem appropriate, as it puts a larger burden of paying for general state government on workers in certain occupations. When this is the case in Texas, lawmakers should take action to reduce fees to the appropriate level.

7 Texas should use strong "sunrise" and "sunset" processes to review occupational licensing requirements. In 2013, Texas adopted a sunrise type of law for occupational licensing proposals to be reviewed and analyzed before consideration by the legislature, but the process is apparently not mandatory, as it apparently was not used in any of the many licensing proposals filed in 2015. Since the literature and case studies suggest that parties who stand to benefit tend to dominate the licensing process and that groups representing the public are usually not involved, a true analysis of the pros and cons of enacting occupational licensing legislation, along with a list of alternative policy options for each proposal would be positive. Maine has a very thorough sunrise process for occupational licensing proposals, and Texas legislators should at least look into the merits of discussing such a process. Texas does have a sunset process where each agency is subject to review by the Texas Sunset Commission on a periodic basis. Legislation must pass to keep agencies operating past the sunset date. Therefore, occupational licensing laws are subject to sunset review due to the fact that if an agency was abolished, licensing overseen by the agency would also be abolished. In making changes before reauthorizing an agency, legislators could also consider changes to occupational licensing policies overseen by the agency. However, it seems as the sunset review process is often driven by much more noticeable policy matters than that of occupational licensing, and that licensing usually continues unchanged after a sunset review, with very little discussion. Better discussion would bring about a chance to determine positives and

negatives associated with licensing that has been on the books and the results that have been realized from such practices. Even when the Sunset Commission recommends deregulation of an occupation, it seems to rarely happen in Texas. For instance, in 2013, the commission recommended the deregulation of interior designers, noting that there were few complaints about interior designers, very little regulatory activity, and virtually no threats to public health and safety. Licensed interior designers spent weeks lobbying legislators, speaking at hearings, and doing other things to convince policymakers that their licensing should remain intact. As a result, the deregulation proposal was left out of the sunset bill and an attempt on the House floor by State Representative Matt Schaefer to amend the bill to follow the commission's recommendation to deregulate the occupation was defeated. In 2015, a review of the Department of State Health Services promoted the Sunset Commission to call for the deregulation of 15 different occupations. Ultimately, in reauthorizing the agency, the legislature chose to deregulate only six of the recommended occupations. Despite the results, in these instances, there was at least some discussion of occupational licensing. Far more often, licensing requirements in the agencies are not even discussed during the sunset review process. A potential policy reform would make each occupational licensing requirement subject to its own sunset review. In this case, when an agency was up for review, any occupational licensing program administered by the agency would also be up for its own review. Legislators would be required to pass legislation to continue the licensing programs and could choose to leave them unchanged, make changes as necessary, or deregulate the occupations. While the addition of reviewing specific licensing policies would take more time than the

current sunset review process, it would also serve an important public policy function of bringing more attention to occupational licensing from legislators and the public alike.

- 8 The Speaker of the Texas House of Representatives should consider the benefits of diversity of thought when appointing members of the House Committee on Licensing and Administrative Procedures. While this committee does not hear all occupational licensing legislation, they do get the bulk of it. In reviewing footage of committee hearings from the case studies, it became obvious that there was very little diversity of thought with committee members. Committee members asked no specific questions about the costs and benefits of licensing to the bill authors or people testifying in support of the legislation, nor did they ask about the true risks to public health and safety associated with occupations or whether there were other, less restrictive policy options that might work to address concerns. Most occupational licensing proposals that make it out of committee seem to do so with virtually no opposing votes, another sign of the lack of diversity of thought on the committee. Just as noticeable is that based on all legislation related to occupational licensing that has been filed over the last four legislative sessions, bills calling to create a new license or expand the applicability of existing licenses are much more likely to at least get a hearing than are bills to loosen regulations or deregulate occupations. This is another sign that committee members seem to have a certain bias in this policy area.
- 9. Legislators who present proposals to create occupational licenses should be prepared to articulate why the licensing is necessary in terms of public health and safety concerns in committee hearings and on the House and Senate floors. This was largely absent in the case studies, aside from some general, hypothetical concerns.

Statistical tests verified that safety concerns are not significant in determining whether or not a Texas occupation will have licensing requirements. Perhaps they do not articulate these reasons because they do not expect other legislators to question them. Other legislators, regardless of whether they generally support or oppose this type of legislation, should be more willing to ask their colleagues specific questions about costs, benefits, and health and safety concerns. If these issues were discussed openly, legislators could cast a better informed vote on licensing proposals.

- 10. Legislators should attempt to hear input from a variety of sources, not just those with more political power and organization. Regardless of the issue at hand, legislators are faced with the challenge of representing constituents and their responsibility to the state as a whole, regardless of whether constituents are vocal through lobby groups and campaigns. This could be done very simply. For example, if groups of interior designers associated with certain professional associations were lobbying in favor of stricter licensing requirements, a legislator could easily contact interior designers in his or her district that were not affiliated with the same organization to get input. While the input may or may not be the same as the legislator has already heard, it would show an effort to consider multiple points of view. It is quite possible that most legislators already do this, but the case studies did not show them making use of such information in committee hearings or floor debates on licensing proposals.
- 11. Lawmakers would be well served by reviewing the structure of regulatory boards that oversee different agencies and occupational licensing programs. The literature often refers to regulatory capture, where members of a profession take over regulatory functions to make them favorable to themselves and other current

practitioners. In the case of North Carolina Board of Dental Examiners v. Federal Trade Commission, decided in early 2015, the United States Supreme Court ruled that a regulatory structure giving practitioners in the dental industry the majority voice in the regulation of non-dentistry teeth whitening businesses was a violation of anti-trust laws (North Carolina State Board of Dental Examiners v. Federal Trade Commission 574 U.S.) To avoid such problems, legislators should consider making public members the majority of such regulatory boards, while members of the affected occupation would be in the minority. This would allow experience and knowledge from the occupation to be introduced into the process, but would allow the public members who would be likely to be less biased to have the greatest say in carrying out regulatory functions. Also, since the stated objective of most licensing legislation is to protect the public, it makes sense that the general public would be well represented in carrying out regulatory functions. The literature also suggests that licensing boards dominated by practitioners tend to not want to levy punishments on one of their own and, instead, that they focus enforcement efforts on unlicensed practice. Boards dominated by public members might be more likely to issue sanctions in the case of true health or safety violations by licensed practitioners.

12. The Speaker of the Texas House of Representatives and the Lieutenant Governor, who presides over the Senate, should consider appointing an interim joint committee of House and Senate members to study already existing occupational licensing policies between legislative sessions, giving them plenty of time to study the issues and, if necessary, prepare proposals to address concerns for future legislative sessions. A similar action was taken by the House of Representatives back in 2008 and an

informative report was produced, but very little action was taken in regards to issues raised in the report. In appointing such a committee, it would be helpful to have a diverse group of senators and representatives representing diverse constituencies, including members that have not previously served on committees considering occupational licensing issues.

- such as House Bill 3170, authored by Representative Matt Schaefer, and Senate Bill 1346, authored by Senator Don Huffines. These bills, similar in nature, would have shifted the burden of proof to the state in enforcement actions for occupational licensing violations. For instance, if an individual was accused by a licensing authority of a rule violation and the individual challenged the rule in terms of whether it was relevant for public health and safety, the state would be legally required to prove why it was relevant. Currently, the state has no burden of proof and a court will consider things to be health and safety concerns simply because such is stated in statutes or administrative rules. A change in the manner proposed by Schaefer and Huffines seems to be fair in terms of due process for individuals, while still protecting the ability of the state to enforce matters related to health and safety concerns. Neither bill even received a public hearing in the 2015 legislative session.
- 14. Legislators should consider how occupational licensing policies affect worker mobility. States vary greatly in the specific requirements to gain licensure in specific occupations. A successful cosmetologist in Massachusetts could move to Texas and learn that he or she not only has to obtain a new occupational license, but might not even meet the requirements for doing so without attaining more educational hours,

something that an individual who has already successfully worked in an occupation might find to be very costly and time consuming. Also, the literature suggests that military spouses are disproportionately affected, as a large percentage of this group holds occupational licenses and they may be more likely to move than other individuals. Some current Texas statutes and administrative rules allow for reciprocity with certain states for certain occupations, but usually only if the requirements under which an individual obtained a license elsewhere are "substantially similar" to those in Texas, and it is usually up to individual licensing authorities to evaluate each applicant and make a decision as to whether substantially similar requirements have been met. With no specific guidelines, results of this policy vary tremendously in who is granted reciprocity and who is not. One option would be the passage of legislation such as House Bill 2484, introduced by Representative Matt Schaefer during the 2015 session. This bill would have provided blanket reciprocity for any out of state applicant for an occupational license if they had held a license to perform the same job duties in their prior state. Of course, reciprocity requirements such as those called for in Schaefer's bill would not help an unlicensed plumber who legally worked in Kansas, for example, but moved to Texas. In such cases of individuals with job experience working in states that do not require licenses for their occupation, legislators could consider implementing a system of verifying training and employment experience in the previous state of residence and setting a minimal standard for the granting of a Texas occupational license. Part of determining the effects of licensing on worker mobility would also include the legislature studying the requirements for occupational licenses enacted at the municipal level. The literature suggests that most licenses are not enacted at the municipal level but in a large state like Texas, that could

lead to concerns. If an individual moved from Houston, working under a state license, to El Paso only to find that they needed to obtain an additional municipal license with more stringent requirements than the state license, there could be problems as the cities are hundreds of miles apart and the individual would not be able to work until meeting the new licensing requirements. In small states where workers could easily commute to anywhere in the state, this might not be such a concern, but it is important in Texas. Licensing requirements at the municipal level and the effects thereof would be an important topic for an additional study. Before that takes place, the legislature could consider a measure like House Bill 3263, filed by State Representative Ryan Guillen in 2015. This bill would have prohibited municipalities from requiring their own licenses for any occupations that were already licensed by the state, as a way to ensure that workers were held to the same standards across the state. The bill stated that any municipal ordinance or rule that was already effective was void and unenforceable. The bill was given a public hearing in the House Committee on Urban Affairs, but was never brought up for a vote by the committee chair. While a measure like Guillen's proposal would help with worker mobility concerns, a thorough study of occupational licensing at the municipal level might reveal important information about the type and number of occupations licensed at that level which are not already licensed by the state and about the costs and benefits of those licensing requirements, as well. As a public policy principle, it is not desirable for workers who move to a new state or to a new part of the state to be unable to work, if it can be avoided. If people cannot find a job for which they have been trained, it is likely that unemployment rates will be higher. If this happens, higher demands could result for unemployment benefits and other social programs.

requirements are necessary to protect public health and safety and the legislature passes them anyway, the governor should consider vetoing the legislation. During his 2014 campaign and in a speech prior to his January 2015 inauguration, Texas Governor Greg Abbott called for occupational licensing reform including the repeal of unnecessary licensing requirements, and scaling back others to only address legitimate health and safety concerns among other things. After his inauguration, no records indicate that Abbott has publicly addressed the issue again. Although there were fewer new or expanded licensing requirements passed by the legislature in 2015 as opposed to other recent legislative sessions, Abbott signed them all into law despite being asked by legislators to veto at least one of them. Without direct legislative power, this would be the governor's only opportunity to directly affect the process and it should be used if the circumstances warrant doing so.

Part Five: Putting Together Findings

This work began as an attempt to answer some questions on a policy topic that affects many citizens and public policy decision makers across the United States-occupational licensing. As there is a void of information that studies occupational licensing in an academic manner, this work began as an attempt to "scratch the surface" of the topic and attempt to answer some basic questions about the topic. In some ways, the study raised additional questions beyond those that were considered, but some important findings also became clear. This dissertation utilized case studies, based on an extensive examination of public records related to six specific occupational licensing proposals in Texas. When combining the results of the case studies with the results of

related empirical work, several trends emerged. For instance, the literature suggested that policymakers and interest groups may often jump on a licensing "bandwagon" and begin supporting licensing requirements with the main justification being the fact that many other states also have licensing requirements for the same occupation or other similar occupations. In almost all of the case studies, someone supporting the licensing proposal whether it was the legislative sponsor or someone in the occupation supporting the measure quoted statistics about the number of other states requiring licensing in the occupation. Without asking for specifics on the costs and benefits of specific licensing requirements found in those states and without asking what triggered the licensing in the states that first passed it, legislators seemed to take that as a valid reason for promoting licensing legislation. The promotion of proposals by using the amount of states with similar licensing requirements is something that was backed up by empirical study. Out of variables studied, the only significant predictor of whether or not Texas would require licensing in specific occupations was the amount of other states requiring licensing in the occupation.

In another part of this work, licensing proposals across the United States were studied via the specific occupation of behavior analysts. Once again, information gleaned in the literature was backed up by both case studies and empirical work. It was suggested that sometimes, the public policy decision as to whether or not to require licensing in a specific occupation was the product of competition between organized political interests. In three of the six case studies from Texas, there were significant, well organized interests represented on each side of the issue, and the groups that were opposing licensure were heavily involved in the political process, just like the supporters. In these

three case studies, the licensing proposals failed while three other case studies saw organized interests supporting licensing but no significant opposition. In each of these cases, the licensing proposal passed. Out of independent variables studied for the occupation of behavior analysts across the United States, empricial work shows the most significant predictor to be the number of members belonging to groups opposing licensure. Again, this ties the literature to the case studies and the empirical work.

Another theme that echoed between the literature, the case studies, and the empirical work is the lack of determination as to whether health and safety risks to the public play a large role in occupational licensing considerations. One of the first things that is usually stated as to why there is a need for occupational licensing is due to the risk posed to the public by incompetent practitioners and bad actors who might work in a given occupation. However, the literature called into question as to whether or not this was actually the case. In the case studies, the risk posed by bad actors was sometimes mentioned, but there were no specific examples utilized in any debates of harm being perpretrated on the public. Not only were specific examples not detailed by supporters of such legislation, but other decision makers did not press them for specifics and seemed to make their decisions without this knowledge. In the part of the empirical work dealing with whether or not a Texas occupation is likely to be licensed, the risk posed to the public as determined by reported accident rates was not found to be a significant factor in whether licensing would be required. While that alone doesn't show that risk is not a factor, combined with the case studies and the literature, it certainly calls into question how much attention that true health and safety concerns actually get in the process and

whether or not decision makers separate true concerns from hypothetical scenarios mentioned in policy debates.

The policy recommendations are meant to not only address the major findings of the study, but also to address other issues that became noticeable through the literature and the case studies. For example, this study did not focus on aspects of criminalizing work or the effect of occupational licensing on workers with criminal records, however, the policy recommendations section contains comments on those issues because legislators who approach this subject in a public policy context would be well served to study occupational licensing on a very broad basis, and not just on a few specific issues.

Overall, this study should be a significant contribution to the topic of occupational licensing, as it takes a major Texas public policy issue that has never been addressed in an academic context and does just that. Many other studies could be performed over time with the same topic. For instance, specific licensing requirements could be studied over time to determine when they were first enacted, what types of concerns were raised at that time, and whether or not any proposals to change those have been made over time. Comparisons could be made to the same process playing out in other states. Also, more occupations could be studied across the United States to build on the work with behavior analysts. This would help determine if the significant predictors of licensing for behavior analysts across the United States were also significant in other occupations as well. Other beneficial studies could attempt to answer questions about the effect of occupational licensing on unemployment rates, employment of those with criminal records, and the number of service providers available for the public. Finally, a similar study could be performed after the Texas Legislature takes action that is expected in

coming months. In November 2015 Joe Straus, Speaker of the Texas House of Representatives, announced interim charges for House committees. These are issues that committees are told to study between the biennial legislative sessions for the purpose of developing policy recommendations that can be discussed during the next legislative session. Out of five interim charges for the House Committee on Licensing and Administrative Procedures, first on the list is to "identify all occupations licensed by the state to determine if they are necessary for public safety and health. Determine if any criminal penalties associated with licensure are unnecessarily punitive, recommend methods to improve reciprocity with other states, and determine if a mandatory certification program could be used in lieu of mandatory licensure" (Texas House of Representatives 2015, 45). Following this process could be the start of a new case study, as the speaker's specific charge for this issue may cause legislators to pay more attention to health and safety requirements, along with other issues that do not often seem to be considered. If the committee takes significant action with this charge, new policy proposals would begin in January 2017, making the issue important for further study.

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APPENDIX A

Institutional Review Board (IRB) Protocol Exemption Report



Institutional Review Board (IRB) for the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

PROTOCOL NUMBER:	IRB-03001-2013	INVESTIGATOR:	Judd Quarles				
PROJECT TITLE:	Effects of Occupational Licensing Policies in Texas						
This research protocol study immediately. If t	BOARD DETERMINATION: is exempt from Institutional Review he nature of the research project of irb@valdosta.edu) before continui	hanges such that exemption	nption Category(ies) :4. You may begin your criteria may no longer apply, please consult with				
ADDITIONAL COMMENT	s/suggestions:						
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NONE							
	cked, please submit any document of your exemption.	s you revise to the IRB Admir	nistrator at <u>irb@valdosta.edu</u> to ensure an				
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Elizabeth W. Olok	ie 2/5/14	Thank you for su	bmitting an IRB application.				

Please direct questions to irb@valdosta.edu or 229-259-5045.

Revised: 12.13.12

Elizabeth W. Olphie, IRB Administrator

Date

This dissertation, "An Analysis of Occupational Licensing Policies in Texas," by Judd H. Quarles, is approved by:

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