Texas Conservative Coalition Research Institute (TCCRI)

Free Enterprise, Energy, & Infrastructure Task Force:

Final Report

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I. Introduction

Encouraging the free market is a central tenet of conservatism, which rests on the belief that the individuals and businesses in the market place are better-able to make rational decisions than are government bureaucrats. Texas has built one of the strongest economies in the nation based largely on relatively low taxation and limited government interference in the private sector economy. Over the past two decades, landmark partial deregulation of the

insurance, telecommunications, and retail and wholesale electric markets has opened each of these industries to greater levels of competition and innovation. The 82nd Legislature enacted "loser pays" tort reform and continued the state's record of electric, telecommunications, and insurance market deregulation. The 83rd Legislature took steps towards preventing the growth of burdensome occupational licensing regulations, as did the 84th. The 84th Legislature also ensured that local governments could not enact energy policies denying property owners access to their mineral interests.

However, there is still much work to be done to free the Texas economy. Despite the success of market freedom in meeting consumer needs, opposition to such competition (or further competition) suggests a distrust of the free market itself. As Milton Friedman explains:

> The central feature of the market organization of economic activity is that it prevents one person from interfering with another in respect of most of his activities… Indeed, a major source of objection to a free economy is precisely that it does this task so well. It gives people what they want instead of what a particular group thinks they ought to want. Underlying most arguments against the free market is a lack of belief in freedom itself.[1]

Government regulation typically stems from some form of perceived "market failure." In other words, government regulation assumes that the free market is failing to work correctly, resulting in efficiencies that are manifest through economic harm to a specified group of actors within the marketplace in question. As Nobel prize-winning economist (and self-described advocate for "selective government intervention") Joseph Stiglitz puts it:

> We have regulations designed to maintain competition (restrictions on anti-competitive practices), and to ensure that natural monopolies do not abuse their monopoly position (utilities regulations). We have a large set of regulations aimed at protecting consumers (ensuring that the banks where they deposit their money are sufficiently sound, that food and products are safe, or that they are not taken advantage of by unscrupulous merchants, advertising, or lenders).[2]

If we accept those parameters as valid, two further issues are raised: firstly, can government actually achieve the goals described by Stiglitz without creating equal or similar governmental or "regulatory" failures of its own? And secondly, how do specific examples of government regulation in Texas impact the market failures that Stiglitz describes?

Taking governmental regulatory failure first, when considering any new government regulation or authority to regulate, policy makers must not assume that a state regulatory agency is actually capable of alleviating the perceived market failure, or that any mitigation of the market failure by the regulatory agency will be costless. As M.I.T. economist Paul Joskow explains:

> [T]he worst mistake that can be made by policymakers is to assume that government regulatory institutions pursue some well-defined public interest, are well informed, can easily and costlessly mitigate the market imperfections

> identified, and are not influenced by interest groups that can benefit or be harmed by their regulatory decisions. Accordingly, we must recognize that regulation necessarily carries with it its own costs—direct implementation costs, but more importantly, indirect costs that can make market performance even worse than it was if we simply lived with the market imperfections at issue.[3]

Indeed, one need only look at the many highly regulated areas of the U.S. and Texas economies to see that regulatory oversight and intervention in the marketplace is not a panacea, and that some of the worse market failures in history have occurred in some of the most regulated marketplaces.

The Free Enterprise, Energy, and Infrastructure Task Force studied a number of regulatory issues, including occupational licensing, local economic regulations, electric market competition, Sunset review of the Railroad Commission, and Texas's water markets. Having laid the criteria upon which market interventions are typically justified—regardless of whether or not we agree with those criteria—it is clear that these are areas in which reform is necessary.

The path forward is clear. Unnecessary government intervention must end. Faith in the free market has made Texas one of the nation's most prosperous states; it is time to let the free market work. The subsequent sections of this report study a variety of issues in detail, and ultimately make the following recommendations:

1. Increase reciprocity in occupational licensing
2. Repeal specific occupational licenses.
3. Impose a mandatory sunset on occupational licenses.
4. Enact the "Occupational Licensing Relief and Job Creation Act"
5. Preempt local sharing economy regulations at the state level with market friendly reforms
6. *Extend a statutory exemption for out-of-state nursing school licenses*
7. *Expand the competitive electricity market to Austin and San Antonio*
8. Leave contested case hearings pertaining to oil and gas issues under the Railroad Commission's jurisdiction
9. Create a private market for water, modeled on private oil and gas rights.

II. Free Enterprise

A. Occupational Licensing

An occupational license is a government-issued license required to pursue a particular occupation or engage in certain economic activity. Under occupational licensure, individuals are restricted from working in those occupations or engaging in those activities without permission from the state. Licensure typically requires numerous hours of training,

experience, fees, and a state-administered examination. While licensure may be justified in professions affecting the health and safety of its customers (e.g. doctors), it is also frequently imposed on many professions where such concerns are absent (e.g. hair braiders and auctioneers). Violating licensing regulations or operating without a license often carries criminal and civil penalties.

Texas regulates or licenses more than one-third of its workforce, a rate higher than the national average.[4] More than 500 professional activities require a state-issued license before they may be legally performed in Texas.[5] According to a 2012 study conducted by the Institute for Justice, Texas licensure requirements for many low-income professions—such as door repair contractors, hair shampooers, and truck drivers—are the 17th most burdensome in the nation, typically requiring an average of $304 in fees, more than 300 days of training, and multiple examinations.[6] In 2009, an interim report by the House Committee on Government Reform argued that occupational licensing programs create a monopoly for current licensed practitioners.[7] The Committee's report recommended alternatives to state licensing and regulation (such as private accreditation), and also suggested that existing regulatory programs submit to Sunset Review.[8]

The practice of state licensure is receiving legislative attention because a growing body of evidence and research reveals that occupational licensing schemes can have broad and negative effects on the job market. One study of national trends found that occupational licensing programs reduce the rate of job growth by 20 percent.[9] The same study estimated that the total economic cost of licensing regulations from reduced job growth, decreased competition, higher prices, and discouraged innovation and investment falls between $34.8 billion and $41.7 billion per year.[10]

Furthermore, licensing is oftentimes a cost shift from employers to potential workers creating an expensive, state-sanctioned barrier to employment. For example, simply becoming a hair shampooer requires a license fee and two examinations. Texas is one of only five states to require a shampoo license.[11] Moreover, the requirements for many licenses are not based on legitimate, demonstrable public safety concerns that are used to justify them in the first place.

The barriers to entry created by licensure should be paid particular attention by the Legislature, as it does barriers to entry in other contexts, such as people attempting to find employment upon workforce reentry post-incarceration. In the last several years, the legislature has passed numerous bills creating costly programs to assist with re-entry. For example, in the 2016-17 budget, the cities of Dallas and Houston *each* received $1,000,000 for reentry services pilot programs, in addition to permanent funding throughout the state. These are individuals who have committed a crime and less likely to be employed. In any case, many licensing schemes prevent people with criminal backgrounds from being employed in certain professions. The "ban the box" movement, which proposes to remove the requirement that applicants disclose past criminal history during the job application process, is an outward recognition of the problem created by these schemes, though policy-makers still need to work through whether banning the box actually might create a genuine public safety risk whereas licenses passed under the guise of public health and safety are nothing more than a burden imposed on those willing to seek gainful employment.

Legislative Developments in Occupational Licensing

The recognition of burdensome occupational licensing gained traction during the 83rd Legislative Session, where licenses for timekeepers and ringside physicians for sporting events were repealed. Additionally, bills creating new licensing schemes for foundation repair contractors and camera systems installers were defeated on the House floor.

The momentum from the 83rd Legislative session carried forward into the interim, as then candidate for Governor Greg Abbott made occupational licensing reform part of his economic agenda, explaining the issue thusly in a policy paper:

> Proponents of occupational licensing argue that licensure ensures the safety and reliability of products and services. Such claims are dubious, however. In a competitive and free market, one must always stay ahead of the next competitor or risk losing business. With some exceptions, quality, price, and availability adapt to changing market conditions. Regulation by licensure, on the other hand, results in less competition, fewer choices, higher costs, and the potential to thwart innovation. These effects are not always visible to the consumer, but they are nonetheless built-in costs without justification in most instances.[12]

To address the problem of occupational overregulation, Gov. Abbott recommended repeal of a number of licenses, including interior designers, salvage vehicle dealers, dog trainers, auctioneers, barbers, and cosmetologists, to name a few.[13] The Governor also recommended increasing reciprocity with other states, prohibiting grandfathering, and abolishing criminal penalties.[14]

The 84th Legislature adopted some of the Governor's recommendations, including a repeal of hair braiding licenses (HB 2717, Goldman), increased reciprocity with other states (HB 3742, Smith), preventing dual licensure of wholesale motor vehicle auctioneers by the Texas Department of Licensing and regulation (TDLR) and DMV (SB 1982, Kolkhorst), and requiring state agencies that issue licenses to waive licensing requirements for military service members or veterans whose military service and training substantially meet the requirements for the license (SB 807, Campbell). The 84th Legislature also succeeded in preventing several licensing bills from becoming law, including new licenses for anesthesiologist assistants (HB 2267, Davis).

Health and Safety

The state should focus on protecting public health and safety, not regulating the performance and provision of goods and services that have no impact on health and safety. With respect to determining whether or not an occupational license is necessary, it should be analyzed through the lens of two questions:

1. *Does the occupation directly relate to health and safety?*

2. *Does the license attempt to address a substantiated health and safety issue—supported by evidence—and does the new regulation adequately address the problem* in the least burdensome way?

Question 1 of the test is a threshold question. If the occupation does not relate to health and safety, it should be repealed, or in the case of proposed legislation, opposed. There is difficulty with this question as savvy proponents can find ways to frame nearly any profession in terms of health and safety. Note, for example, House Bill 4069, which would have deregulated the occupational practice of eyebrow threading (explained in further detail below). Subject to a constitutional challenge in state court, the Texas Department of Licensing and Regulation took the position through six years of litigation that the practice of eyebrow threading is a threat to health and safety. In stark contrast to that position, floor debate over HB 4069 revealed that TDLR "was a part of the process" and "asked for" eyebrow threading to be deregulated in a committee substitute version of HB 4069 because, the agency asserted, it is not a threat to health and safety.[15]

Question 2 of the test is more substantive. For example, House Bill 2267 proposed to create a new occupational license for anesthesiologist assistants (AAs). Administering anesthesia is clearly a practice relating to health and safety, as it is undeniable that anesthesiologist assistants have a role in the practice of medicine. The principal objection to HB 2267, however, fell under the second question. The bill did not address *a known problem related health and safety* concerns, and the industry was (and remains) adequately regulated through a private certification system, which has been operating for decades without issue. HB 2267 even required the existing private certification as a condition of the new license being proposed, raising additional questions of redundancy and necessity. The House voted HB 2267 down.

Few practices will satisfy both parts of the test outlined above, and it provides a strong framework through which to view occupational licensing.

The extent to which health and safety is asserted in order justify licensing laws cannot be overstated. Two recent decisions in constitutional challenges to occupational regulations in Texas – one state and one federal – speak to burdensome nature of these regulations.

The first decision was a state court challenge to TDLR's aforementioned eyebrow threading regulations. TDLR began regulating the practice of eyebrow threading as cosmetology in 2008. Despite the fact that threading has little in common with western-style cosmetology and that Chapter 1602 of the Occupations Code (Cosmetology) makes no reference to the practice of threading, TDLR began issuing $2,000 penalties to eyebrow threaders in Texas and forcing them close their businesses until they attend coursework in private beauty schools costing between $9,000 and $20,000—*schools which do not teach the practice of threading*. Those regulations were challenged in *Patel v. TDLR*. Ultimately, the Texas Supreme Court ruled against TDLR, holding that its regulations on eyebrow threading were "so oppressive" that they violate Article I, Section 19 of the Texas Constitution. Justice Willett issued a strongly worded concurring opinion in which he admonished the government's "dreamed-up justifications" for TDLR's threading regulations, which infringed on the right to earn an honest living free from unnecessarily burdensome government interference.

TDLR also lost a recent decision in *federal* court. In 2014, TDLR told Isis Brantley—a licensed hair braider[16] who for many years has been sought out by famous musicians and actors for her services—that she could not legally teach hair braiding at her own school in Texas without becoming a licensed barber instructor. To do so would require her to complete 1,500 hours of barber curriculum—all of which is unnecessary and completely irrelevant to African hair braiding.[17] Moreover, it would have cost her more than $20,000 in equipment and renovations, including installations of five sinks for washing hair even though washing hair is not part of the braiding process and may not be legally performed by a braider.[18] On January 7, 2015, United States District Court Judge Sam Sparks declared TDLR's regulation on teaching hair braiding unconstitutional.[19] Although governments may "require applicants for professional licensure to meet 'high standards of qualification,'" the court reasoned, those "qualifications required must have a rational connection with the fitness or capacity of the applicant to practice his or her profession."[20] Judge Sparks found that TDLR's regulations lacked such rationality.[21]

The eyebrow threading and hair braiding cases are instructive because they speak to the way in which interested parties will assert health and safety as a justification for burdensome, unnecessary regulations. TCC's position is that the state licenses many occupations that do not pass the test.

Criminal Penalties

Occupational licensing regimes are typically enforced by the prospect of having a license revoked, but violators are also often subject to civil and criminal penalties. Indeed, practicing many occupations without a license results in violations of criminal law. A particularly egregious example—yet one that is the perfect microcosm of the larger problem—is the practice interior designer. Under Chapter 1035 of the Occupations Code, practicing interior design without a license is a Class C misdemeanor, punishable by jail confinement for up to one year and a fine of up to $4,000.

Real estate appraisers, manufactured housing retailers, polygraph examiners, auctioneers, sports agents, coin-operated machine licensees, and countless other occupations regulated in Texas impose criminal penalties for operating without a license. Given that the harm for working within a profession without a license falls only upon workers within that profession who went through the process of obtaining or renewing their license, criminal penalties should be viewed, in general, as punitive. As Governor Abbott stated in his Occupational Licensing policy paper during his campaign:

> Criminal penalties apply to a host of businesses that have coin-operated machines on their premises if they do not comply with licensing regulations. The same can be said for longshoremen, polygraph examiners, athletic trainers, vehicle towers and dieticians. The result is a state regulatory structure that not only makes it difficult to start a new business, but risks turning people who attempt to do so into criminals. Imposing a Class C Misdemeanor on otherwise legal and harmless economic activity puts people who are trying to earn a living on par with people who commit disorderly conduct, assault, bail jumping,

trespassing or leaving a child in a vehicle. Other examples of Class B Misdemeanors include DWI, prostitution, terroristic threats and indecent exposure.[22]

Criminal penalties should only be considered when harm to the general public is a real possibility. They should not be imposed for operating without a license.

Increase Reciprocity

Increasing reciprocity is an important goal. TDLR has the authority to grant a considerable amount of reciprocity, should it choose to exercise that power. The 84th Legislature passed House Bill 3742 which allows TDLR or its Executive Director to "adopt alternative means of determining or verifying a person's eligibility for a license issued by the department, including evaluating the person's education, training, experience, and military service." It also allows the Director to "waive any prerequisite for obtaining a license" if the applicant is already licensed in another jurisdiction that has either similar licensing requirements or has entered a reciprocity agreement with Texas. The bill also provides that TDLR, "with approval of the governor," may enter into such an agreement with another state for licensing reciprocity. TDLR should be encouraged to liberally and enthusiastically exercise the waiver and reciprocity authorities granted in HB 3742 so that a greater number of Texans have fewer barriers to workforce entry. To the extent that the Legislature can assist or facilitate this process, perhaps it can require TDLR to report on its progress. If it chooses not to exercise its current powers to waive requirements and grant reciprocity, the Legislature should consider mandating it.

Licenses to Repeal

The 83rd and 84th Legislatures made progress on licensing, which the 85th should build upon and accelerate. Governor Abbott recommended several areas in which to focus:

- Interior Designers (Chapter 1053, Occupations Code)
- Salvage Vehicle Dealer (Section 2302.101 Occupations Code)
- Dog Trainer (Section 1702.221, Occupations Code)
- Auctioneer (Chapter 1802, Occupations Code)
- Barber Licenses (Chapter 1601, Occupations Code)
- Cosmetology Licenses (Chapter 1602, Occupations Code)
- Towing/Booting Operator (Chapter 2308, Occupations Code)

Senator Don Huffines and Representative Craig Goldman, for example, filed several bills in the 84th Session worth revisiting in the 85th, including:

- Senate Bill 1179 - relating to abolishing certain occupational licensing requirements and associated regulations.
- Senate Bill 1346 - relating to the regulation of occupations by this state.
- House Bill 2719 - Relating to the repeal of the criminal penalty for a violation of the interior designers licensing law.

- House Bill 2720 - Relating to abolishing shampoo apprentice permits and shampoo specialty certificates.
- House Bill 2846 - Relating to abolishing certain specialty licenses and certificates for the practice of barbering or cosmetology.

Impose a Mandatory Sunset Requirement on Occupational Licenses

All occupational licenses codified in the Occupations Code should be subject to sunset review every ten years. In each review, the two-part test outlined above should be applied:

1. *Does the occupation directly relate to health and safety?*
2. *Does the license attempt to address a substantiated health and safety issue—supported by evidence—and does the new regulation adequately address the problem* in the least burdensome way?

If the answer to either question in the test is "no," then the license should be repealed outright or the manner of regulation should be lowered in terms of its burden. Optional registration or certification, to cite two examples, would be more appropriate than a required license in many instances.

Pass the Occupational Licensing Relief and Job Creation Act

Based on model legislation drafted by the Institute for Justice, the Occupational Licensing Relief and Job Creation Act is a statutory right to engage in lawful business free from unreasonable regulation. The "right to engage in a lawful occupation" would protect individuals from "any substantial burden in an occupational regulation unless the government demonstrates (a) it has a compelling interest in protecting against present and recognizable harm to the public health or safety, and (b) the occupational regulation is the least restrictive means of furthering that compelling interest."

The "least restrictive means of furthering a compelling governmental interest" is defined from least to most restrictive means as follows:

(1) market competition;
(2) a provision for private civil action in small-claims or district court to remedy consumer harm;
(3) inspection;
(4) bonding or insurance;
(5) registration;
(6) certification; or
(7) occupational license.

The statutory right could be asserted as a defense in any government enforcement of occupational licensing regulation or as a cause of action against the government.

B. The Sharing Economy

The sharing economy, also known as "collaborative consumption" or the "peer economy" is a new business model that allows individuals to rent and borrow goods to and from each other rather than buying and owning them. One outlets describes it as "a socio-economic ecosystem built around the sharing of human, physical and intellectual resources. It includes the shared creation, production, distribution, trade and consumption of goods and services by different people and organizations."[23] Prominent examples include short-term rental properties (STRs), which connect travelers to individuals willing to rent out their homes on a short-term basis,[24] and ridesharing companies, which allow a person with a smartphone to use an app to arrange a ride with the driver of a usually privately owned vehicle for hire.[25]

The sharing economy is thriving new industry. In 2015 alone, the sharing economy created approximately 60,000 jobs in the United States and drew in $15 billion in financing.[26] Unless hampered, it will continue to grow on its own. Therefore, the state's goal should not be to help the sharing economy grow, but to prevent its hampering, primarily by local regulation at the city level.

Consumer security and satisfaction tend to be the primary goals of a service economy. Harm or wrong your customers and a competitor will take your place by offering a better service or product. This natural market force ensures customer security and satisfaction better than any government policy ever could. If the state is interested in ensuring security and satisfaction without enacting burdensome regulations, then it simply need not enact burdensome

regulations. There is certainly a role for the state to play in terms of consumer safety and protection, but Texas need not act before and unless a legitimate consumer safety and protection issue arises.

The premise just laid out has been largely ignored at the local level. As a result, cities across the state have placed burdensome and unnecessary regulations on the sharing economy, particularly with respect to ridesharing services and short-term rental properties. To the extent that the Texas Legislature adopts *any* new regulation on the sharing economy, the goal should be to preempt these local efforts with a uniform framework premised upon minimal burden. Unlike the recent trend at the city level, the Texas Legislature should trust the marketplace to provide consumers with safe services they want to use at prices they are willing to pay.

The Scope of the Sharing Economy

Rarely does an industry make such an immediate impact as the sharing economy. As of 2015, the sharing economy has created at least 17 billion-dollar companies which employ 60,000 people.[27] It has attracted $15 billion in funding, which is more than the entire social media network of Facebook, Twitter, Snapchat et al.[28] Many of these startups became billion-dollar companies in less than four years.[29]

Jeremiah Owyang[30] of VB Profiles[31], an expert in disruptive technologies, classifies companies in the sharing economy using a honeycomb rubric with twelve categories, including goods, money, transport, space, and learning, to name a few.[32] The following is a graphic representation of his rubric, along with where some of the most prominent sharing economy companies fit in:

Source: Venture Beat[33]

Most prominent among these businesses are ridesharing companies like Uber and Lyft, as well as Short-term rental companies like Airbnb and Homeaway.

Ridesharing services are immensely popular and have a global footprint. Uber, for example, operates in over 450 cities worldwide[34] and claims to have made over one billion connections between drivers and passengers to date.[35] The raw statistics are staggering. More than eight million users accept an average of one million daily rides from approximately 160,000 Uber drivers.[36]

Short-term rental properties are likewise popular on a worldwide scale. Airbnb, for instance, offers more than 2 million properties for rent across more than 34,000 cities in nearly 200 countries.[37] That includes properties ranging from small apartments to castles (over 1,400 castles are available to rent through Airbnb).[38] More than 60 million people have used Airbnb to find a place to stay while traveling.[39]

Beyond the success of the sharing economy from a business perspective, these technologies are solving larger problems. Ridesharing, for instance, has been shown to reduce drunk driving and decrease traffic congestion.[40] On a more macro level, the shift towards sharing resources will help to address the growing issue of accumulated goods. Researchers at UCLA conducted a study which concluded that the average three room household contains more than 2,200 possessions, 75 percent of garages have nowhere to store a car, and possessions increase by 30 percent with each new child.[41] Sharing economy services like Yerdle, for example, allow people to give and get things to and from each other for free. Credits are gained by giving unused possessions away, and those credits can be used in turn to acquire possessions of need or want.[42] The sustainability of current levels of global consumption is an open debate, but if the end of the spectrum more concerned about its viability is correct, the sharing economy is a natural market solution to those issues. Lauren Anderson of Collaborative Consumption explains:

> We are using resources in a way that isn't sustainable. Things need to shift. There is absolutely an endpoint where we won't be able to do things like this anymore, and these platforms offer us not a way we have to sacrifice our lifestyles, but actually get access to more in this collaborative and connected way that actually makes the whole experience richer. That's the ultimate in how we should be living and working with each other.[43]

From the high profile ridesharing and short-term rental services to meal sharing, financial tools, and the exchange of everyday household items, the sharing economy is changing the way individuals interact with each other in ways that make those individuals and the larger economy they operate within more efficient and productive.

Disruption of Existing Markets

The rise of the sharing economy and its myriad successful businesses has rapidly disrupted many existing markets, and market disruption breeds discontent among existing market players. Most prominent among this disruption are short-term rental properties and ridesharing companies.

Short-term Rental Properties

Traditional hotels now have competition, not just amongst themselves, but from the rise of short-term rental properties (STRs). Airbnb, for instance, has drawn the ire of conventional hotels, and the reasons why are understandable. According to one estimate, the size of the vacation rental market is approximately $100 billion[44], and as a relatively new market entrant, STRs are eating a growing size of that pie. Goldman Sachs estimates that Airbnb, alone, is estimated to provide 5.4 percent of lodging in the United States in 2016, up 3.6 percent from 2015.[45] To put that number in perspective, only five hotel-management companies are above the five percent mark.[46]

According to a report from Boston University, a ten percent increase in STR (the study looked specifically at Airbnb) supply results in a 0.37 percent decrease in hotel room revenue.[47] In Austin, Texas, that translates to a range of between eight and ten percent in terms of impact on revenue.[48] The report explains that its underlying research "provides empirical evidence that the sharing economy is making inroads by successfully competing with, and acquiring market share from, incumbent firms."[49] Using Austin, Texas as a model for the study, its authors explained that hotels responded to STRs with lower pricing, "an impact that benefits all consumers, not just participants in the sharing economy."[50]

Despite providing more amenities in the traditional sense, hotels are losing business to STRs for a variety of reasons, namely lower prices. Cost savings of renting an entire apartment through Airbnb can run approximately 20 percent cheaper than a hotel room.[51] Renting one private room provides even greater savings of approximately 50 percent.[52]

While these savings directly impact hotels to a certain degree, those savings facilitate both increased travel and more spending money in the pockets of travelers. Indeed, the average business traveler stays in an Airbnb for 3.8 nights while only 2.1 nights are spent by similar travelers staying in a hotel.[53] Studies have shown that the money not spent on lodging is typically spent in the local economy. For instance, one study of the economic impact of STRs in Los Angeles concluded that in 2013, STRs created a total economic activity of $1.4 billion and 12,314 jobs, which included $204.4 million on food and beverage, $146 million on ground transportation, $109.5 million on art, entertainment, and recreation, and $58.4 million on retail sales.[54] Another analysis in San Diego estimated that from July 1, 2014 through June 30, 2015, STRs in that city generated $110.3 million in lodging revenue and another $86.4 million in other visitor related spending.[55] The study estimated a total economic impact of $285 million, which supported 1,842 jobs.[56]

Hotel operators recognize the growing threat that STRs pose to them.[57] Their initial reaction was to fight the new business model by lobbying states and municipalities to enforce zoning laws to prohibit STRs, but as Jan DeRoos, a professor of hotel finance at Cornell University, explains, that tactic "has proven to be unsuccessful" because those governing units "are more interested in collecting taxes than enforcing zoning codes."[58] Nevertheless, local governments across Texas have placed new regulations on STRs, as will be discussed further on in this paper.

Ridesharing Companies

The public debate over ridesharing has been considerably more contentious than the fight over STRs. There are a variety of reasons for this, but, generally speaking, ridesharing offers a more convenient product in the form of a smartphone app that all but eliminates the frustrations of utilizing a taxi service. For decades, taxi companies have enjoyed a codified business model, protected by local government from competition. This generally came in the form of a taxi medallion issued by the city, of which supply was controlled. This had the effect of artificially boosting the demand for taxi services by keeping supply low.[59] Because taxi medallions were so limited, the value they held inflated in places like Chicago from the price of $28,000 in 1991 to $360,000 in 2014.[60] Peak medallion prices in New York City reached $1 million.[61] As the only service in town, limited supply made it difficult to hail a taxi at times, and no competition meant that there was no downward market pressure on taxi rates, which continue to be set by the city. The taxi industry is heavily regulated by local governments, but as it operated with little to no competition for decades, there was little objection to these regulations. Ridesharing companies are not subject to the same regulations as taxis, which the taxi industry understandably objects to, though whether or not those objections are justified is an open question.

Along came ridesharing companies like Uber and Lyft, and medallion prices dropped precipitously. In New York, one commentator explained in August 2015 that "[i]n less than one year, we've seen the astonishing effects. Not only has the price of taxi medallions fallen dramatically from a peak of $1 million, it's not even clear that there is a market remaining at all for these permits. There hasn't been a single medallion sale in four months. They are on the verge of becoming scrap metal or collector's items destined for eBay."[62] Another commentator summarizes the issue quite well in a report about San Francisco's ridesharing debate:

> Enter high-tech car services Uber, Sidecar, and Lyft. These companies don't place any artificial restrictions on the supply of their cars and they've made it easy to book a ride using a mobile phone—often at a lower price than a traditional taxi would charge. They've been so popular that the city's cab industry is starting to "crumble," according to a recent story in the San Francisco Chronicle. Old guard cab companies are now struggling to find enough drivers to utilize their medallions, since most new cabbies would rather go work for one of the new car services instead. In Chicago, where a similar dynamic is playing out, the cab industry protests that the city's allowing its precious medallions, worth an estimated $2.38 billion, to drain in value.[63]

But disruption of the controlled supply is only part of the impact ridesharing has had on taxi companies. In addition to the general convenience and ease-of-use in ridesharing, a typical ride with Uber or Lyft is more economical for passengers, as the following table illustrates:

Table 1

Sample trip: 5 miles, 30 MPH, No idling

	Uber	Taxi	Taxi / Uber
New York	17.75	15.50	0.9
Philadelphia	15.23	14.20	0.9
Portland	15.05	15.00	1.0
Cleveland	13.00	13.95	1.1
Dallas	10.50	11.25	1.1
Miami	13.25	14.50	1.1
Indianapolis	11.55	13.00	1.1
Phoenix	11.00	12.50	1.1
Minneapolis	12.15	14.25	1.2
Baltimore	10.75	13.05	1.2
Columbus	10.20	12.85	1.3
Denver	10.35	13.75	1.3
Detroit	12.30	16.50	1.3
Seattle	11.70	16.00	1.4
San Francisco	12.30	17.25	1.4
Chicago	9.90	14.00	1.5
Boston	11.10	16.60	1.5
Atlanta	10.00	15.00	1.5
Houston	9.00	13.75	1.5
San Diego	11.35	17.80	1.6
Los Angeles	9.40	16.35	1.7

Rate sources: Uber, TaxiFareFinder.com

Table 2

Add 20% tip to taxi fare

	Uber	Taxi +20% Tip	Taxi / Uber
New York	17.75	18.60	1.0
Philadelphia	15.23	17.04	1.1
Portland	15.05	18.00	1.2
Cleveland	13.00	16.74	1.3
Dallas	10.50	13.50	1.3
Miami	13.25	17.40	1.3
Indianapolis	11.55	15.60	1.3
Phoenix	11.00	15.00	1.4
Minneapolis	12.15	17.10	1.4
Baltimore	10.75	15.66	1.5
Columbus	10.20	15.42	1.5
Denver	10.35	16.50	1.6
Detroit	12.30	19.80	1.6
Seattle	11.70	19.20	1.6
San Francisco	12.30	20.70	1.7
Chicago	9.90	16.80	1.8
Boston	11.10	19.92	1.8
Atlanta	10.00	18.00	1.8
Houston	9.00	16.50	1.8
San Diego	11.35	21.36	1.9
Los Angeles	9.40	19.62	2.1

Source: Bruegel[64]

In Table 1, Uber offers a lower fare than taxi companies for a five mile trip in nineteen out of twenty-one cities, including Dallas and Houston. Add in a twenty percent tip, as shown in Table 2, and Uber outdoes taxis in every city on the list.

The taxi industry's well documented opposition to ridesharing ranges from peaceful, legal protest in places like New York City[65] to unlawful, violent riots in Paris.[66] The taxi industry in Chicago sued the city and demanded that it shut down "unlawful transportation providers."[67] In a nakedly protectionist position, the lawsuit states that competition "threatens seriously to devalue more than 6,800 medallions currently in use in Chicago."[68] Indeed, most regulations on the sharing economy are unnecessary, anticompetitive, and almost nakedly protectionist in nature, though they are typically advocated for using arguments about consumer safety and satisfaction. Those arguments are generally misguided, as the next section will discuss.

Misplaced Criticisms of the Sharing Economy

Short-term Rental Properties

Criticisms of STRs are few. The primary complaint comes from neighbors when guests in an STR become noisy or disruptive. Nowhere was this position more evident than the debate over STRs in Austin, between 2012 and 2016. Anecdotal evidence abounds, and it is not difficult to find quotes from Austinites during that period like East Austin resident Kristen Hotopp, who told the Austin American Statesman that "I bought into this neighborhood 20 years ago thinking it was a residential neighborhood. I'm furious that my block has been turned into a commercial area."[69] Austin City Council member Sabino Renteria publicly lamented that it is "not fair for our neighbors to suffer this weekend after weekend of partying and drinking."[70]

A report on STRs by the Austin Code Department provides statistics on STR complaints from October 2012 through August 2015.[71] During that period, 3-1-1's STR complaint service received a total of 353 complaints.[72] Beyond that raw number, however, a clear picture of the alleged problem is difficult to ascertain. For instance, of those 353 complaints, more than half (200) were called in against unlicensed STRs, meaning that renters on those properties may not have been bothering anyone at all, but simply renting from property owners who never jumped through the regulatory hoops involved in asking the City's permission to rent out their own property.[73]

Separate from 3-1-1's complaint service are statistics on licensed STRs with actual Code complaints. During that same October 2012 to August 2015 period, there were 252 Code complaints against Type 2 STRs (Type 2 is an STR in which the owner is not present and a traveler rents the entire home for a number of days).[74] Those complaints were spread across the categories of noise (13), over occupancy (43), parking (10), operating without a license from the City (73), and alleged illegal activity, along with "trash, debris, etc…" (110).[75] Once again, these statistics reveal little in the way of a problem in need of a solution. First, the numbers do not reveal how many complaints resulted in an *actual* code violation necessitating enforcement, which should be the standard upon which STRs are judged. Nevertheless, thirteen noise complaints and ten parking complaints over a three year period are minor nuisances hardly unique to STRS. In terms of over-occupancy and operating without a license, forty-three and seventy-six complaints, respectively, those may be categories the City has an interest in enforcing, but it is difficult to imagine a neighbor upset about renters in an unlicensed house so long as they are creating no disturbance. The largest category is "Alleged Illegal Activity, trash and debris, etc.." with 110 complaints.[76] Illegal activity is the most—perhaps only—relevant complaint in the report, yet combining it with complaints of "trash and debris" achieves little more than inflating number of complaints which *appear* to involve illegal activity, which renders the category statistically meaningless.

None of this is meant to undermine the legitimacy of valid complaints against STRs, but the data available suggests that the problem—to the extent there is one—is overblown. Noise, over-occupancy, parking violations, and illegal activity are all issues that law enforcement has successfully addressed long before the arrival of STRs. To the extent that STRs are unique, legitimate problems could be addressed using contract requirements, neighborhood associations, and stronger enforcement of existing laws on noise and nuisance.

At its most basic level, STRs involve a decision by property owners to lease out their own real property. This is a transaction which has taken place for thousands of years. That new technology facilitates it with greater ease today is no cause for alarm. And yet, as will be discussed later on, local governments have imposed restrictive measures on property owners leasing their own property as STRs. To the extent that the Texas Legislature wishes to help the sharing economy grow, it should address these local regulatory burdens.

Ridesharing Companies

It is axiomatic that allowing customers to be harmed is bad for business. In addition to the natural moral desire to not be responsible for anyone's injury, the losses to a business in

terms of reputation and liability are disincentive enough to take the steps necessary to minimize that harm. Nevertheless, proponents of heavy-handed ridesharing regulations argue that the regulations are necessary to ensure the safety of passengers.

One need not be a doctrinaire free marketer to understand why ridesharing is safe. Unlike traditional taxi services, ridesharing passengers know who their driver will be before they are picked up, and whether or not that driver has a good reputation. The same can be said for drivers about passengers. The route is tracked via GPS, so both passengers and drivers can feel secure knowing that any unplanned actions will leave a trail.[77] For the larger ridesharing companies like Uber and Lyft, drivers are extensively screened before authorized to use the service. Uber, for example, uses a third-party background check service called Checkr.[78] Uber explains their process as follows:

> Potential drivers must provide detailed information, including their full name, date of birth, social security number, driver's license number, a copy of their driver's license, vehicle registration, insurance, and proof of a completed vehicle inspection. Individuals who pass the driving history screen then undergo a national, state, and local-level criminal history check that screens a series of national, state, and local databases including the US Department of Justice National Sex Offender Public Website,* the PACER database, and several different databases used to identify suspected terrorists. Upon identifying a potential criminal record, Checkr sends an individual to review the record in-person at the relevant courthouse or, if possible, pulls the record electronically. Verifying potential criminal records at the source—the courthouse records—helps ensure that we are checking the most up-to-date records.[79]

The following chart displays the criteria by which Uber disqualifies an individual from driving:

		P2P	LIVERY
AGE AND DOCUMENTATION	Age	If age 21 or 22, the applicant must have a driver's license for THREE or more years	Age 21 or older with 1 year of licensing
		If 23 or older, the applicant must have a driver's license for ONE or more years	
	Documentation	Valid personal auto insurance that meets or exceeds state requirements	Valid commercial auto insurance
			Valid commercial registration
			Valid licensing
DRIVING HISTORY	Minor Violations	No more than THREE in past THREE years	No more than FIVE in past FIVE years
		Non-fatal accidents, moving violations, speeding tickets, traffic light violations	
	Major violations	None of the following in the last THREE years	
		Driving on a suspended, revoked or invalid license or insurance	
		None of the following in the last SEVEN years	
		DUI or drug-related driving offenses	
		Speeding 100+ MPH, hit and run, reckless driving, street racing or speed contest	
CRIMINAL HISTORY		None of the following convictions in last SEVEN years	
		Any felony	
		Any driving-related offenses	
		Violent crimes	
		Sexual offenses	
		Child abuse or endangerment	

Source: Uber Newsroom[80]

As the table shows, Uber's screening process and criteria for qualification to drive are extensive. In the event that an Uber driver threatens the safety of a passenger or violates Uber's code of conduct, the driver is suspended, and if such action is confirmed, is permanently deactivated.[81] A suspended driver cannot access the Uber app, which means he or she cannot pick up passengers.[82] Lyft has similar safety and driver policies.[83]

Despite these extensive safety precautions, local governments across the United States and Texas have insisted on additional regulations couched in the need for more safety. Such is the case in the ongoing debate over regulations in Austin, Texas, which were recently made final via voter referendum.[84] Specifically, fingerprint background checks for drivers were—and remain—the point of contention. The City argues that the fingerprint checks are necessary for safety. Uber and Lyft argue that they are not, and requiring those checks actually discourages people from working as Uber or Lyft drivers, which leaves more drunk drivers on the road, ironically making Austin roads less safe. To date, there is no empirical evidence to support the proposition that fingerprint background checks are safer than name-based background checks.[85]

The debate in Austin and elsewhere has been framed as the need to ensure the safety of passengers above and beyond what ridesharing companies already offer. The cynical—but perhaps accurate—view is that these unnecessary regulatory burdens are being pushed by the taxi industry which for decades has enjoyed city-government protection of its business model. Whatever the motivations may be, these regulations have the practical effect of stifling an innovative new business model to the benefit of the old market players, despite the fact that consumers favor the former over the latter.

Taking the City of Austin at its word regarding the desire for safety leads to a number of absurd paradoxes. For instance, while *passenger* safety is the main regulatory justification offered by Councilmembers, it is likely that being a ridesharing *driver* is far more dangerous. That conclusion can be drawn from long-established data trends among taxi drivers. The National Institute for Occupational Safety and Health reports that "[b]etween 1992 and 2006 700 taxicab drivers were the victims of homicide while driving for work," and "taxicab drivers face a greater risk for injury and homicide on the job than those working in law enforcement and security."[86] The U.S. Occupational and Safety Administration reports that "taxi drivers are over 20 times more likely to be murdered on the job than other types of workers."[87] The Bureau of Labor Statistics found in 2014 that of 3,200 taxi drivers who were hurt or killed on the job, 180 (5.6 percent) of those were caused by a violent person.[88]

7-11, Wells Fargo, and Exxon have the incentive to keep their customers safe but when a person enters a convenience store, Spec's, or liquor store, we are not inclined to think of the clerk as a predator-in-waiting. We tend to think, however, that the clerk may be a victim of assault and armed robbery. The same is true of a multitude of contractors: roofers, landscapers, plumbers, tow truck drivers. The image being conjured by opponents of ridesharing is a calumny not just against the Uber and Lyft business model, but the thousands of independent contractors who drive for the companies to earn extra money.[89]

Local Regulation is Stifling the Sharing Economy in Texas

Regulation of STRs and ridesharing services at the local level is already prominent in Texas, and continues to grow as an issue. Of Texas's biggest cities, all but El Paso appear to have regulations in place for STRs, ridesharing, or both. These regulations vary in the space ranging from accommodation (e.g. STRs in Dallas) to unnecessarily burdensome (e.g. ridesharing in Austin).

Short-term Rental Properties

Regulation of STRs in Texas is a mix of good and bad. R-Street, a Washington D.C.-based public policy think tank, recently released an analysis of STR regulation in the largest 59 cities in the United States based a number of factors.[90] First, the study looked at whether or not the city has a framework for STR regulation at all, which could receive negative or positive points based on how accommodating or stifling the framework is.[91] Next, the study awarded or deducted points based on what, if any, legal restrictions are in place to curb STRs.[92] Third, the study determined whether or not tax obligations are placed on STR services within a given city.[93] There, the researchers found that cities which tax STRs often do so at a disproportionately higher rate than they tax hotels, and in those cases points were deducted.[94] Fourth, a determination was made on how burdensome and expansive the city's licensing regime for short-term rentals actually is, with points awarded or deducted accordingly.[95] Lastly, the study gauged how hostile the city's enforcement regime for STRs actually is, including restrictions that do not fit neatly in the other four categories.[96] Based on the points awarded or deducted in those categories from a baseline score of 90, each city was assigned a letter grade. Seven Texas cities were included in the study. Their results are as follows:

City	Framework	Restrictions	Taxation	Licensing	Enforcement	Total	Grade
Austin	+10	-25	0	-7	-5	63	D
Dallas	0	0	0	0	0	90	A-
El Paso	0	0	0	0	0	90	A-
Ft. Worth	0	-30	0	-2	0	58	F
Galveston	+10	0	-2	0	-1	97	A+
Houston	0	-20	0	0	-5	65	D
San Antonio	0	0	0	0	0	90	A-

A number of interesting things can be gleaned from the performance of Texas cities in the study. From the outset, note that the three cities with no regulatory framework or restrictions in place—Dallas, El Paso, and San Antonio—earn an "A-" simply by letting the market work. Secondly, note that places like Houston and Dallas, which have no formal regulatory framework in place, nevertheless score poorly by restricting the use of STRs. Lastly, there is a distinct contrast between Austin and Galveston—the two cities with a formal regulatory framework in place. In Austin, that framework is accompanied by strict regulatory restrictions, licensing, and enforcement, which earn the city a grade of "D." In contrast, Galveston has a formal regulatory framework in place, but imposes minimal taxation with light enforcement, and it earns the highest grade on the list of an "A+."

To the extent that the Texas Legislature creates a statewide regulatory framework for STRs, the goal should be to make the state look less like Austin, Fort Worth, and Houston, and more like Galveston.

Ridesharing Companies

Like STRs, ridesharing regulation is mixed in Texas from city to city. In Austin[97] and Corpus Christi[98], imposition of fingerprint background checks for drivers have prompted Uber and Lyft to leave the market. They're threatening to do the same in Houston if it does not change its fingerprint requirement.[99] Other cities are taking a more cautious approach. Following the Austin vote on ridesharing, Mayor of Fort Worth Besty Price stated that city officials would not jump into the ridesharing regulatory waters because "it's the council's duty to facilitate business, not regulate businesses out of the city."[100] Indeed, Price explained that the city "doesn't need to regulate a lot of this. It's market-driven."[101]

There is a clear split among local lawmakers on the issue of ridesharing regulations. This is best exemplified by the results of R-Street's analysis of ridesharing regulations in fifty of the nation's largest cities.[102] Like its analysis for STRs, R-Street's methodology was to look at several categories and award or subtract points from a baseline score of 90.[103] In the ridesharing study, those categories are legality of ridesharing, hostility of regulatory framework, and insurance requirements (specifically, are they disproportionately high relative

to taxis, limousines, and ordinary drivers?).[104] Six Texas cities were included on the list and the results are as follows:

City	Legality	Hostility	Insurance	Score	2015 grade
Austin	+10	-2.5	-5	95	A*
Dallas	+10	-10	-5	85	B
El Paso	0	0	-5	85	B
Ft. Worth	0	0	-5	85	B
Houston	+1	-20	-2	69	D+
San Antonio	+5	-15	-5	75	C

From the outset, note that R-Street's analysis is based on data available in December 2015—Before Austin's new ordinance including fingerprint background checks for drivers took effect. Thus, the only "A" score in Texas is almost certain to be reduced if a 2016 update is published. Dallas, the only city on the list still earning a score of "B" despite having a regulatory regime in place does not require fingerprint background checks for drivers. "D" scoring Houston does.

Conclusion

Governor Greg Abbott laments what he calls "a patchwork quilt of bans and rules and regulations that is eroding the Texas model" of economic success."[105] Heeding the Governor's call to action, the 84th Texas Legislature passed a law preempting all local regulations on hydraulic fracturing. This was a response to the City of Denton's ban on the practice which interfered with the property rights and economic expectations of many land and mineral owners in the area. Cities across Texas are stifling innovative new businesses and services that consumers want by passing unnecessary and burdensome regulations. This new industry does not need help thriving, but it needs help in the form of relief from local regulations which stifle their ability to grow. To the extent that the Texas Legislature enters the regulatory waters of the shared economy at all, it should do so with the express intent of lifting these unnecessary local burdens. But it should proceed with extreme caution. Opening the door to state-level regulation of this industry poses the danger that an oppressive regulatory regime could be implemented state-wide, which would result no longer in a patchwork quilt, but a wet blanket across the entire state of Texas.

C. Nursing Education Programs

In 2009, the Legislature passed House Bill 3961, which, among other things, provided conditions under which nursing programs operated in a state other than Texas would be considered to meet standards substantially equivalent to the Texas Board of Nursing's standards.[106] Those conditions would provide eligibility requirements for graduates of those out-of-state nursing programs to apply for nursing licenses in Texas.

The provisions in HB 3961 treating certain out-of-state nursing programs as substantially equivalent to the Texas Board of Nursing's standards are set to expire December 31, 2017 unless extended or permanently reauthorized by the Legislature during the 85th Legislative Session.[107] In order to assist with the decision to make this reauthorization, HB 3961 called for a "study of alternative ways to assure clinical competency of graduates of nursing educational programs" and additionally specified that "the research study must be designed to determine if the graduates of a clinical competency assessment program are substantially equivalent to the graduates of supervised clinical learning experiences programs in terms of clinical judgments and behaviors."[108]

The study required by HB 3961 was not funded by the Legislature and was not completed, leaving the reauthorization of provisions relating to clinical competency examinations an open question for the Sunset Advisory Commission, which was tasked with making a recommendation on that issue.

Currently, the only nursing program affected by the expiration of these provisions is that of Excelsior College.[109] Excelsior College is a private, nonprofit, distance learning institution.[110] It offers Associate Degrees in Nursing to Licensed Vocational Nurses, paramedics, and other limited categories.[111] Degrees are obtained primarily online. Excelsior's student body includes over 1,800 Texas residents seeking an Associate Degree in Nursing. To date, over 4,300 Associate Degrees in Nursing have been awarded to students from Excelsior.[112]

Excelsior's graduates have NCLEX-RN passage rates comparable to in-state associate degree programs with 74.45% of Excelsior graduates passing the NCLEX nationally in 2015.[113] Its NCLEX-NR rates in the first two quarters of 2016 are even higher (74.86% in Q1 and 79.19% in Q2).[114] The Texas passage rate for NCLEX-RN in 2015 was 85.22[115], meaning that Excelsior's program is producing comparable results to the statewide average and is performing better than many schools with physical locations in Texas.

The idea that out-of-state programs may do an adequate job preparing Texans is not a novel concept. Reciprocity—in which one state recognizes that the scrutiny applied to a policy or practitioner in another state as adequate for its own qualification purposes—is common in Texas. In the area of occupational licensing, Texas has reciprocity with other states in many areas, including cosmetologists, electricians, auctioneers, and housing and building inspectors, to name a few. House Bill 3742 (84R) expanded the Texas Department of Licensing and Regulation's authority with respect to reciprocity in licensing. The progress in this area logically translates to online nursing programs with a track-record of success.

The Sunset Commission released its Staff Report on the Texas Board of Nursing in October 2016. The Commission's charges were to:

1. Recommend whether to continue allowing Excelsior graduates to be eligible for licensure; and
2. Recommend any changes relating to the eligibility for a license of Excelsior graduates.

As the Commission's findings explain, "Sunset staff lacks the specific expertise to determine the level and amount of clinical experience required to ensure the competency of a nurse for initial licensure," which is why a study—which was never completed—was supposed to be conducted. Furthermore, "Existing evidence does not provide clear conclusions regarding Excelsior's nontraditional model of nursing education." Ultimately, because of Sunset's lack of guidance on the issue, the Commission recommends allowing Excelsior's statutory exception to expire. Meanwhile, it recommends requiring the Nursing Board to develop out-of-state licensure rules under which schools like Excelsior could re-apply for licensure.

It is understandable that Sunset Commission Staff would, in the absence of the required study and data, recommend allowing the statutory exemption to expire. The Legislature need not be so guarded for two reasons.

First, Sunset Staff's approach to licensure is backwards in that it holds the view that "[e]xemptions to state licensing requirements are not the norm, but when present, *should have a clear and reasonable basis that does not risk the health, safety, or welfare* of the public." Quite the opposite, the burden should be on a regulatory proponent to establish that a particular market participant poses a risk. While the Commission's Staff Report discusses graduation rates and varying clinical requirements from state to state, it nowhere suggests that out-of-state schools like Excelsior put anyone at risk.

Second, as Sunset's Report points out, "the state is expected to have an estimated shortage of over 66,000 registered nurses by 2030." In the absence of bona fide health and safety issue —supported by evidence—regulatory barriers to additional nurses should be removed, not added.

The provisions allowing graduates from schools like Excelsior—specifically, Sections 301.157(d-8) and 301.157(d-9)—should be extended or made permanent. Having an online, competency-based option is important for many students already working full-time or part-time, and Excelsior appears to be delivering on its educational promises. It should be up to consumers whether or not such an option is appropriate for them.

III. Energy

A. Electric Competition

In 1999, Texas introduced competition to its retail electric market through passage of Senate Bill 7 (76R). The reforms opened some of the Electric Reliability Council of Texas (ERCOT) service area up to competition. The state's largest urban areas— Dallas-Fort Worth and Houston— were included in the competitive market, yet many other urban and rural areas were left out. Most significantly, the Austin-Round Rock metro area and San Antonio were excluded.

In the areas of the state that were exempted from competition, electricity is typically provided to retail customers by a municipally-owned utility or by an electric co-operative. This is the case in Austin and San Antonio, where approximately 4 million residents are arbitrarily excluded from the competitive electric market. This is problematic because residential and business customers are denied the opportunity to choose their retail electric provider on the basis of any number of factors that can be weighed by consumers in competitive parts of the state. Price, reliability, and customer service are just some of these.

Looking at price specifically, it is clear that when consumers do have the ability to choose their electric provider based on the comparative prices of several competitors, there exists the opportunity for the sole provider to abuse its market position. This was acknowledged when Senate Bill 7 was enacted in 1999, the House Research Organization noting that:

> Market power means the power of one company to dominate the market. Traditional utilities were authorized by law to own and operate all aspects of the electric industry in a single market, including generation, transmission, distribution, and retail customer service. Because traditional utilities have an incumbent advantage in all of the aspects of the utility industry, they potentially could play a dominant role in each aspect of the business.[116]

Largely unregulated retail rates have allowed a competitive market to develop in which consumers can choose their electric provider based on price, and the prices presented to consumers actually reflect the cost of producing the electricity. In addition, in the competitive market, consumers can also weigh other factors when choosing their provider, such as service quality, reliability, and even the fuel mix used to generate the electricity they purchase. The result is a robust market that attracts investment in all segments of the state's electric market.

This point is underscored by the Energy Retailer Research Consortium's Annual Baseline Assessment of Choice in Canada and the United States. The 2014 report ranks Texas' electric market as the number one market in North America, ahead of all other states and Canadian provinces.[117] Texas also ranked number one in 2012.[118]

In short, competition works. Texas' competitive electric market has delivered substantial benefits to consumers and businesses. In most parts of the state the lowest competitive retail electric prices are lower than the last regulated prices available; this is despite upward pressure on prices due to inflation and the cost of generation fuels and new infrastructure. Current prices are lower than the national average, and customers have the ability to lock these prices in on an annual basis. Customers in Texas's competitive market can choose from numerous retail products offered by a broad spectrum of providers, including numerous options for contract terms and renewable content which can all be viewed at www.powertochoose.com. Integrated utilities, co-ops or municipalities do not offer this range of choice to their customers.

Expand the Competitive Market to Austin and San Antonio

Texas should retain and strengthen its competitive market by opening non-competitive areas of the state to competition, particularly major urban areas. The Austin and San Antonio metro areas, for example, which have a combined population of approximately 4 million, are currently exempted from competition and operate municipal monopolies. The competitive market plays a vital role balancing supply and demand and setting fair prices; without that balancing role, the current strengths of Texas' electric industry will be jeopardized.

B. Railroad Commission (Sunset)

The Texas Sunset Advisory Commission (the "Sunset Commission") released its "Railroad Commission of Texas Staff Report" in April 2016.[119] In it, the Sunset Commission summarizes its review of agency performance and "identifies problem areas and makes specific recommendations for positive change, either to the laws governing [the] agency or in the form of management directives to agency leadership."

Among the report's recommendations (Number 2.1 and Number 2.2, respectively) are directives that the Railroad Commission (RRC) should transfer its authority to conduct contested case hearings[120] to the State Office of Administrative Hearings (SOAH), the purported justification being that such hearings are "not core commission functions" and thus their transfer will "promote efficiency, effectiveness, transparency, and fairness."

The Sunset Commission made the same recommendation in 2011 and 2013,[121] but the legislature did not act on it either year, and contested case hearings are currently being held at the agency. Although the Commission's recommendation and reasoning deserve consideration, they ultimately fail to establish a need to transfer contested case hearings to SOAH. Given the RRC's technical expertise and tradition of conducting contested case hearings ably, fairly and largely without controversy, the Sunset Commission's recommendations in this regard should be declined.

Background

RRC is the oldest regulatory agency in the state and one of the oldest in the country. It was established in 1891 to regulate the rail industry but since that time has been given the responsibility of activities of many different industries. Today, it is the primary entity charged with regulating the oil and gas industry, gas utilities, pipeline safety and surface coal and uranium mining.

Created in 1991, SOAH is an independent agency within the executive branch of state government. SOAH is staffed by administrative law judges (ALJs), who are charged with presiding over hearings in response to referrals from more than fifty state agencies.[122] SOAH is divided into several teams according to subject matter and the referring agencies. Those teams are Alternative Dispute Resolution, Administrative License Revocation and Field Enforcement; Economic; Licensing and Enforcement; Natural Resources; Tax; and Utilities.

August 22, 2016 Hearing

Members of the Sunset Commission convened a hearing to discuss, *inter alia*, staff recommendations laid out in the sunset report, including those calling for the transfer of contested cases from RRC to SOAH. Rep. Larry Gonzalez, Chair of the Commission, presided over the hearing, and members of the sunset staff that compiled the recommendations, RRC commissioners, and various trade groups and private citizens testified. Below is a brief synopsis of key remarks – please note that all comments are paraphrased:

- Rep. Burkett: SOAH hears so many different types of cases from so many agencies, does it really have the expertise to hear RRC cases? Does it have the capacity, or would transfer result in a backlog at SOAH? Finally, is there a concern of too much authority being consolidated at SOAH?
    - *Sunset staff response*: It is our belief that SOAH does have the requisite expertise – it already handles complex environmental cases for TCEQ, for example, and some of the subject matter in those cases is also present in RRC ones. SOAH has not indicated any concern over a possible backlog in the event of transfer, and we reviewed the issue of consolidated authority when SOAH went through sunset recently and ultimately concluded the agency was operating well and that criticisms of its operations by other agencies whose cases are heard by SOAH are relatively few.
- Rep. Burkett: You have said that one of the primary reasons cases from other agencies have been transferred to SOAH is for the semblance of independence. Is independence a concern at RRC; in other words, have you seen any signs of bias among adjudicators of contested cases and their staff?
    - *Sunset staff response*: No. We cannot "prove" bias, and there is really no way for us to know for sure. We can't say whether or not independence is really a legitimate concern right now. All we know is based on anecdotal information, and we think the transfer would "remove the temptation" of bias playing a role in decision-making.

- Sen. Schwertner: We already transferred contested cases to SOAH in 2001, and doing so didn't seem to work so well. Why would we do it again?
    - *Sunset staff response*: We can't say that the transfer in SOAH *didn't* work in 2001. There's no any indication that there were problems at SOAH during the brief time contested cases were heard there (2001-03).
- Rep. S. Thompson: I'm having a hard time seeing what is "broken" at RRC.
    - *Sunset staff response*: We have laid out a series of concerns in our report – among the primary ones are the lack of a sufficiently robust case management system, an outdated *ex parte* communications policy, and the reputational conflict of interest issues.
- Rep. Flynn: Why is Sunset so "angry" at RRC? That's the gist I got from reading the report. My office is flooded with constituent complaints about SOAH, while complaints about RRC are few and far between. I am worried that we're building a "huge" state agency at SOAH and that it keeps growing and growing…
    - *Sunset staff response*: Our report should not be seen as us "attacking" RRC in any way.
- Rep. Raymond: Do we have data about the judicial review of RRC decisions? How often are they overturned by district courts? Having that information would help us establish whether or not the RRC is acting arbitrarily and without legal justification.
    - *Sunset staff response*: Yes, in FY 2015, five RRC decisions were appealed to district court, and none were overturned.

At this point in the hearing, Sunset staff's testimony concluded, and the RRC commissioners were invited to testify.

- Cmsnr. Porter thanked all at the Commission, as he is reaching the end of his term and will not seek reelection.
- Cmsnr. Sitton mentioned that the RRC agrees with 15 of the 24 recommendations offered by the Sunset Commission. In general, the agency stands ready to cooperate with Sunset and, as in the past, finds many of the report's suggestions valuable and worthy of implementation. Disagreement regarding *some* of the recommendations need not imply obstinance or a refusal/inability to change and improve operations.
- Cmsnr. Craddick stressed that the RRC "has listened" to critiques over the past 6 years and tried to implement many of Sunset's recommendations – case in point being the establishment of a separate hearings division in 2012 that is "firewalled" from other parts of the agency (i.e. is completely separate and distinct). Craddick specifically discussed the possibility of transfer of contested cases to SOAH, saying that doing so would increase cost and inefficiency as far as staff time and bureaucracy, "fragment" the state energy regulatory apparatus, and result in an additional $2.1-2.6 million being spent for additional staff (12 FTEs) and technology.
- Cmsnrs. Craddick and Sitton, responding to Sen. Hinojosa: It's important to note that RRC commissioners do *not* interact with hearing examiners – we're not allowed to, and we're strict about that. In recent years, the perception of practitioners seems to have changed in this regard; they appear to notice the firewall/independence of the hearings division. It also bears mention that we commissioners overturn a very, very small number of ALJs' proposals for decision. Much more normal for us is to accept those decisions after we conduct our analysis and have questions answered, while perhaps making small modifications. It's also very rare that our rationale for changing

> an ALJ proposal would be unclear – we usually *do* include explanations when we reverse a decision, even though, under the relevant rules, we're not required to do so, strictly speaking.

Analysis

1. *Purported bias.*

The sunset report criticizes the current system because the in-house RRC examiners, who are involved in contested case hearings and are supposed to be objective and independent, are also employees of the commissioners who hire them and set their salaries. Furthermore, commissioners receive substantial campaign contributions from the industry they regulate, "raising inevitable concerns about the potential influence [of the industry] on decision making." The Commission elaborates on how SOAH is different, saying, "Unlike having ALJs at an agency, where they are both paid and housed by that agency, SOAH judges are members of a distinct, neutral hearings organization." The presumption is that by transferring contested case hearings to SOAH, Texas will better ensure impartial adjudication.

This alleged justification, however, fails to account for extant statutory and regulatory provisions, appears to be largely based on conjecture, and assumes ease in changing negative public perception that may or may not exist. In any event, Texas law contains statutory provisions that adequately address improper conflict of interest in relation to the functions of the RRC,[123] and one specifically makes mention of contested cases:

> The commission may not…accept a gift or donation of money or of property from a party in a contested case during the period from the inception of the contested case until the 30th day after the date a final order is signed in the contested case.[124]

Agency rules, furthermore, clearly establish that "a Railroad Commissioner shall not allow any relationship, personal or pecuniary, to influence decisions or policies, and shall not convey, or permit others to convey, the impression that any person is a special position to influence commission decisions."[125] A commissioner must recuse himself or herself any time he or she has a "financial or *other* interest in the matter in controversy" that may cause his or her impartiality to be reasonably questioned.[126] Finally, as the Sunset Commission itself notes in its report, an ex parte rule already exists which prohibits improper intra-agency communications.[127]

Thus, although the Sunset Commission raises the issue of bias, there is no reason to believe that RRC commissioners do not take the aforementioned legal obligations seriously and stringently abide by them. Nor has the Sunset Commission provided *any* data suggesting that, in cases involving industry parties, companies that have donated to commissioner campaigns win a disproportionate number of cases, or that any impropriety has taken place.

It seems that the problem is not so much the *actual incidence* of impartial adjudication (indeed, no evidence of such is presented) as the *perception* of such. But even then, the question becomes: of whom? It is unclear, when the Sunset Report refers vaguely to the

"impression" that in-house judges are biased, who it's really referring to: the Sunset Commission itself, perhaps, or the general public? If the latter is what the Commission really means, no polls or other data are presented that confirm that this "impression" of bias exists. More importantly, despite the allegation that the commissioners may be biased, their actions suggest that they are far from unsympathetic toward landowners. There are have been published accounts of them traveling to permit sites to walk the property and meet local residents. When they have one so, one has stressed, "It's our job to make sure that [sites are] safe and it's our expectation that [oil and gas companies] operate very well and they're a good neighbor. If they don't do that, we'll shut them down."[128]

Certainly there will remain some subset of disgruntled landowners who lose cases and/or concerned citizens that are not familiar with the finer points of regulation, but these groups, who may claim bias on the part of the RRC, will not necessarily change their mind if ALJs at another agency step in. As long as cases are decided according to the law, and not upon the identity of the "little guy" involved, the possibility of negative public perception will remain.

2. *Commissioners' ability to modify proposals for decision (PFDs) and orders.*

The sunset report also concludes that the Commission's "final orders lack transparency" because an RRC commissioner is not required to offer any written explanation as to why his or her final order differs from the PFD issued by the commission's in-house technical examiners and ALJs. "Railroad Commission final orders simply insert substitute findings of fact or conclusions of law or note when the commission declines to adopt a recommendation."

This criticism misses the mark for three reasons. First, there is no reason why commissioners should merely rubber-stamp examiners' PFDs. Their careful double-checking and independent analysis are desirable procedural steps. Thus, the occasional changing of decisions (including substitute findings) need not imply improper motive – it could instead mean honest disagreement over difficult technical issues, or correction of error.

Second, in the event that commissioners act arbitrarily in issuing a final order, parties may appeal, and the orders are subject to judicial review by a district court. As stated at the August 22 Sunset hearing by several parties, appeals are rare, and courts seldom overturn an agency decision. (Indeed, in FY 2015, they did not do so in even a single case.)

Finally, the Sunset Commission's report seems to sidestep the possibility of an easier, narrower reform: to simply require – by rule or statute – more detailed written explanations when commissioners modify ALJ PFDs or orders. If that's really the key issue, it can be handled without the exorbitant step of moving all cases to a new agency.

3. *Expertise.*

The Sunset Commission points to SOAH ALJs' years of experience as a reason why they, instead of the RRC, should hear contested cases: "As of February 2016, SOAH's 58 ALJs had nearly 12 years average experience conducting administrative hearings at the agency. At that time, the Railroad Commission had seven ALJs with almost seven years average experience hearing cases for the commission . . . ."

But that gap in experience suggests little of value. It is akin to comparing apples to oranges, since the SOAH judges evaluate cases from other agencies, involving other rules and material. RRC's expertise is particular, as the agency itself explains:

> The Commission is unique in its use of Technical Examiners in the adjudication of the cases before it. Technical examiners do not offer evidence at hearings, rather they more fully develop the evidentiary record by inspecting and evaluating exhibits and other highly technical data offered at hearings through testimony and exhibits…and coordinating with the ALJs in drafting orders and Proposals for Decision. The Commission's technical examiners have education or experience as petroleum engineers, geophysicists, geologists, economists, auditors, or regulatory analysts. The breadth and depth of their knowledge enables the orders issued by the Commission to fully incorporate various technical aspects of each case. The complex regulatory oversight of the[] ever-changing and dynamic [oil and gas] industries requires the subject matter expertise offered by both the Commission's Administrative Law Judges and its Technical Examiners.[129]

Additionally, serious questions persist around SOAH presiding over largely technical issues related to oil and gas permitting. SOAH conducts hearings on behalf of more than fifty state agencies, ranging from the Department of Public Safety to the Alcoholic Beverage Commission, and is responsible for numerous types of disciplinary proceedings, ranging from those against horse and greyhound racing trainers, to those against occupational licensees.[130]

As a result of this broad range of areas over which SOAH has jurisdiction, applicants often must educate the ALJs on many technical finer points, which – in the case of new, detailed oil and gas cases – has the potential to result in inefficient or ineffective handling of contested matters. Although, as the Commission's report and SOAH's response suggest, the SOAH ALJs are probably up to the task, any transfer would require them to devote considerable time to new subject matter. SOAH would also need to hire *new* ALJs/staff (or perhaps get them from RRC) and find new hearing space, which could be problematic. As SOAH has written, this potential cost is an "unknown variable" because "SOAH's present offices would not be able to accommodate" the new cases.[131]

There are also expected costs to RRC: according to the agency's own internal analysis, the agency would need to maintain a significant percentage of its current personnel in the Hearings Division (to conclude the cases filed at the RRC prior to the date of transfer, and to represent the RRC in contested cases heard by SOAH) as well as continue to invest in a docket management system. The agency would need to hire additional staff for SOAH cases, which it budgets as costing roughly $1.1 million.[132]

4. *The current system is not broken.*

RRC closed nearly 1,100 cases in FY2015. The Sunset Commission readily concedes that "Railroad Commission ratemaking functions are working" and that it has made improvements to its hearing protocol in recent years.

As the RRC reminds us in its response, "Past experience shows previous efforts to move the Commission's gas utility rate case function did not produce the promised results."[133] The RRC's gas rate cases were transferred from 2001 to 2003, but then they switched back. In short, at SOAH, "[g]as utility consumers did not realize any appreciable benefits," "[r]eferred cases were not processed more quickly," and SOAH ALJs' legal analyses were "of no greater quality."[134]

Certainly the management of any agency – including the RRC – can be improved upon. In the RRC's case, however, there is no reason to fix what isn't broken, or to make large-scale changes when smaller ones will suffice. Based on the Sunset Commission's report, a more technologically-robust case management system seems to be one thing the RRC is sorely lacking, and other piecemeal reforms (updating a possibly outdated *ex parte* policy memorandum, perhaps) may also be beneficial. Importantly, though, these can be made *without* taking the unnecessary step of transferring all contested cases to SOAH.

Conclusion

Given the expertise that RRC staff and commissioners have regarding oil and gas issues, and the existing statutory and regulatory provisions that prohibit conflicts of interest in relation to contested case hearings, the RRC should retain the ability to conduct contested case hearings on matters that fall within its jurisdiction.

IV. Infrastructure

A. Water Markets

The Texas Water Development Board's (TWDB) most recent State Water Plan found that Texas' population is expected to increase 82 percent by 2060, to 46.3 million people. The challenge before the legislature is to ensure not only that there is sufficient water available in the aggregate to meet the demands of a growing state, but to ensure that it is available both in the population centers that will experience the sharpest growth, as well as in the rural areas that produce such a vast array of critical agricultural products and other economically beneficial goods.

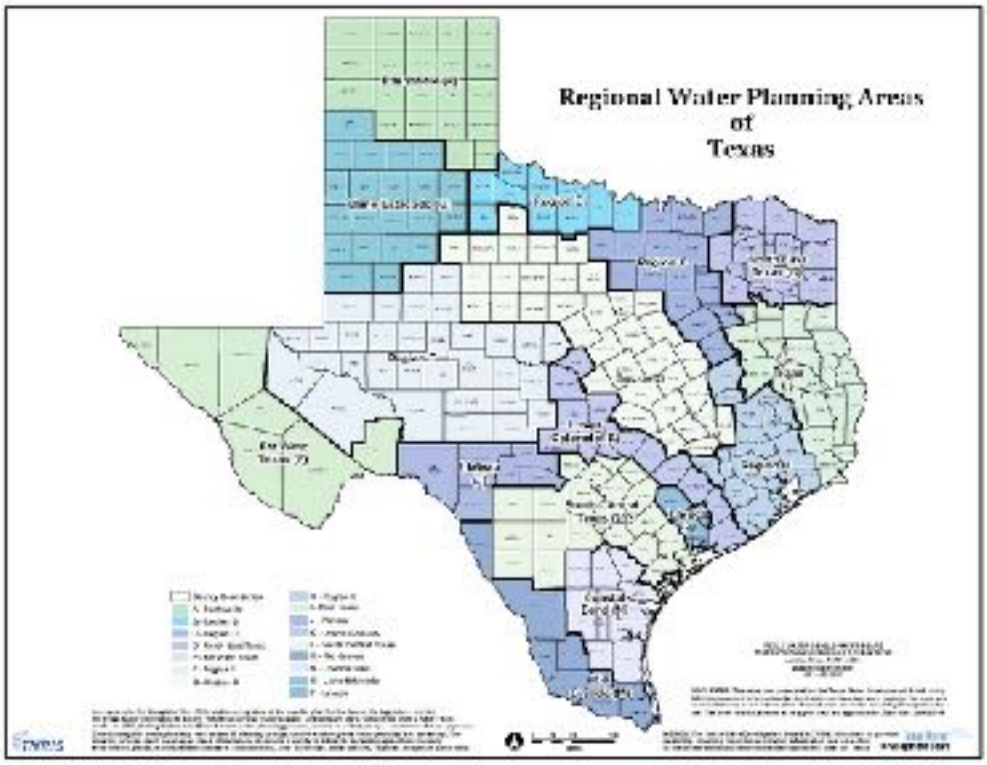
To that end, every five years since 1992, TWDB has developed and produced a State Water Plan containing both legislative recommendations and specific water infrastructure projects that the Board believes will help the state meet its water needs.[135] The latest of these plans – the 2017 State Water Plan – is the fourth iteration that was developed through the regional water planning process. According to TWDB:

> At the end of each five-year regional water planning cycle, agency staff compiles information from the approved regional water plans and other sources to develop the state water plan, which is presented to TWDB's governing Board for adoption … In addition to incorporating the regional water plans, the state water plan serves as a guide to state water policy and includes legislative recommendations that the Board believes are needed and desirable to facilitate voluntary water transfers. The plan also identifies river and stream segments of unique ecological value and sites of unique value for the construction of reservoirs that the Board recommends for protection.[136]

Improving the development and execution of the State Water Plan (SWP) therefore requires a brief discussion of the regional water planning process and how it and other factors contribute to the SWP.

The Regional Water Planning Process and the State Water Plan

For the purpose of regional water planning, the state is divided into 16 regional water-planning areas which are identified by letters A through P:



Membership of the state's 16 regional water planning groups is diverse, with state law requiring each group to have at least one representative from each of the following groups: the general public, cities, counties, industry, agriculture, environmental organizations, small business, electric generating utilities, river authorities, water districts, water utilities, and groundwater management areas. According to TWDB, "Planning groups must have at least one voting representative from each required interest and may designate representatives for additional interests that are important to the planning area. Currently, each planning group has more than the minimum 12 voting members, with the largest having 30 voting members."[137] Each regional planning group identifies water surpluses and needs in their respective regions. They then evaluate and recommend water management strategies designed to meet the needs for water during severe drought conditions.[138] If projected needs cannot be met with the existing water supply, the groups recommend specific water management strategies, defined as a plan or project designed "to meet a need for additional water by a discrete user group, which can mean increasing the total water supply or maximizing an existing supply."[139] Types of water management strategies include conservation, reuse, surface and groundwater development, and conveyance projects for moving available or newly developed water supplies to areas of need.[140]

The regional planning groups submit their individual plans to TWDB, from which the Board develops the State Water Plan, which also includes its own recommendation to the legislature:

> After planning groups adopt their regional water plans, they are submitted to the TWDB for approval. As required by statute, the TWDB develops the state

> water plan based on those plans. The state water plan compiles key information from the regional water plans and also serves as a guide to state water policy. It explains planning methodology, presents data for the state as a whole, identifies statewide trends, and provides recommendations to the Texas Legislature.[141]

Eligible parties, which include political subdivisions and non-profit water supply corporations, may apply for financial assistance from the TWDB for water supply projects, provided that the needs to be addressed by the projects are consistent with the regional and state water plans.[142] To facilitate this process, regional planning groups are required to separately submit a prioritization of all the recommended water management strategy projects for funding consideration by TWDB. Certain TWDB funding programs, such as the Water Infrastructure Fund, are targeted specifically at the implementation of projects recommended in the state water plan.[143] Projects eligible to receive funding under one of these programs are limited to recommended water management strategies included in the state water plan.[144]

Uniform procedures are used to estimate the cost of implementing a water management strategy, and costs are compared between regions and over time.[145] Costs are "expressed in 2008 dollars, using a 20-year debt service schedule, using capital costs of construction as well as annual operation and maintenance costs, and providing unit costs per acre-foot of water produced."[146] While the costs of implementing the plan are often funded through conventional financing tools (the open bond market for instance) – the Board is typically called upon to provide financial assistance to cover over half the costs.[147] The State Water Implementation Fund for Texas (SWIFT), which was authorized by the legislature and approved by voters in 2013, provides a funding mechanism – initially financed with $2 billion from the state's Economic Stabilization ("Rainy Day") Fund – for water infrastructure projects that are identified in TWDB's State Water Plan.[148]

The process through which the State Water Plan is developed has evolved into a bottom-up system through which the vast majority of the specific infrastructure and water resource management project that are proposed begin at the local level, are developed and approved by regional planning groups, and included in the SWP as recommendations to the TWDB from a regional planning group. This approach is reasonable and likely preferable to a top-down approach in which TWDB attempts to coordinate the planning of specific infrastructure projects centrally.

However, this approach to meeting the state's water needs must recognize the regulatory barriers that impede the use of water in the state, the removal of which could help facilitate movement of water and may also spur greater private sector investment in water development and infrastructure. Most notably, statutory restrictions on inter-basin water transfers present a significant challenge, but there are others. At a broader level, giving greater recognition to private property water rights and moving toward a more free market for water in Texas is an approach that this committee should seriously consider.

The Current Regulatory Structure

Water in Texas is heavily regulated by at least two state agencies—the Texas Water Development Board (TWBD) and the Texas Commission on Environmental Quality (TCEQ) —and over a hundred local government entities, the majority of which are groundwater conservation districts. In the face of so many tiers of government, the emergence of a free market for water is severely hampered. Texas' regulatory approach is different for the water in lakes, streams, and rivers ("surface water") than it is for the water in underground aquifers ("groundwater").

Surface Water and Junior Water Rights

Unlike mineral ownership, which can be owned privately in the same way real property is owned, the Water Code declares that surface water[149] is "the property of the state" (Section 11.021) and that "the waters of the state are held in trust for the public" (Section 11.0235). In practice and effect, this means that the state owns surface waters, and, by extension, permission to use that water must be given by the state. This permission is given in the form of a water permit issued by TCEQ. When a permit is issued, the holder is obliged to abide by a number of provisions. The first of these is the "seniority rule," which stipulates that the earlier a water right was granted, the higher the priority of that water right in times of shortage. A permit will usually also entitle the holder to a certain amount of water (measured flow or volume), although there is no guarantee that this quantity of water will be available. Water permits can also be transferred (with approval by TCEQ) which creates a limited market for water rights. TCEQ can also revoke surface water rights under certain conditions.[150]

Senate Bill 1 (75R, 1997) amended the Water Code to regulate inter-basin transfers. While SB1 dealt extensively with drought planning and response, one of its most significant reforms asserted that inter-basin transfers would assume a water right that was junior to every other water right in the basin to which water was transferred.[151] This created a conspicuous disincentive to transfer water from one basin to another. Having incurred the costs of transferring water, an investor may not derive any benefit if he is unable to use the water he has transferred.

TWDB has repeatedly suggested (both in the 2012 State Water Plan and its Legislative Priorities for the 84th Legislature) that these restrictions on inter-basin transfers be repealed, noting that since passage of SB 1 "the amount of inter-basin transfer authorizations issued has dropped significantly… only two inter-basin transfer authorizations that were subject to those provisions have been granted."[152] The State Water Plan suggested specifically that "the legislature should enact statutory provisions that eliminate unreasonable restrictions on the voluntary transfer of surface water from one basin to another."[153]

Although the intention of this change was to protect rural areas from the growing demand for water from urban parts of the state, junior water-rights constitute an impediment to the effective functioning of a water market in Texas. Furthermore, far from protecting the water rights of rural areas, junior water-rights have forced urban areas to turn to the state's groundwater supplies in order to meet their residential, commercial, and manufacturing needs. However, the majority of the state's groundwater is also located in rural areas,[154] which presents significant logistical and cost burdens to transporting even nominal amounts to

urban areas. In a free water market, there would be no arbitrary impediments to *voluntary* water transfers.

Groundwater and the Rule of Capture

Groundwater exists in 23 aquifers that underlie Texas. These aquifers hold approximately 430 million acre-feet, ninety percent of which is in the Ogallala aquifer beneath the Texas Panhandle. Aquifers supply slightly more than 60 percent of Texas' annual water consumption, but more than 80 percent of agricultural water consumption. The rule of capture has governed the use of groundwater in Texas for more than a century and has been repeatedly affirmed by the Texas Supreme Court.[155] Derivative of the common law rule that the owner of the land has absolute ownership of the surface and everything below it, the rule of capture gives landowners:

> [T]he right to capture all the water under their land and use it or sell it even if their groundwater use deprives their neighbor of his or her groundwater use. Unless groundwater is pumped with a malicious intention to harm or is willfully wasted, under Texas law the landowner is not liable to a neighbor.[156]

This fundamental right was reaffirmed in a 2012 Texas Supreme Court decision, *Edwards Aquifer Authority v.* Day, in which the Court held that "a landowner cannot be deprived of all beneficial use of the groundwater below his property."[157]

However, within that broad framework, the legislature has authorized the local creation of more than one hundred groundwater conservation districts, which are empowered to control the pumping of groundwater and to regulate the transfer of groundwater out of the district's jurisdiction. Legislation enacted in 2001 that expanded the power of groundwater conservation districts sought to address fears that cities or other entities were "grabbing" water by water ranching. Groundwater districts were seen as a way to hold the line against unreasonable withdrawals and subsequent transfers of water from an area.[158]

The authority given to groundwater conservation districts serves as a significant hindrance to the rule of capture and private property rights. As attorney Russell Johnson puts it: "most of the groundwater conservation districts in Texas want to preserve the status quo and that's going to be hard to do and simultaneously respect groundwater rights."[159] Johnson successfully sued the Edwards Aquifer Authority (EAA) on behalf of pecan farmers in Medina County who argued that the amount of water allocated to them by EAA was "insufficient for mature pecan trees, diminishing their crop and economically wrecking their livelihood."

The Texas Fourth Court of Appeals, applying the *Day* decision for the first time ruled that "landowners do have a constitutionally compensable interest in groundwater" and that such landowners are "entitled to compensation for the amount by which their property was impaired by the [regulatory] taking." House Bill 4112 (84R, 2015) codified this common law right by entitling a landowner to have any other right recognized under common law relating to groundwater ownership and rights.[160]

The power and authority of groundwater conservation districts to regulate the production and transfer of groundwater presents another significant regulatory hurdle to the creation of a more free market for water in Texas. Easing the regulatory burden of producing and selling both ground and surface water must be a central part of any efforts to ensure that there is adequate water available to sustain Texas' projected growth, as well as efforts to protect private property water rights and create a more free market for water.

Creating Water Markets: Exercising Property Rights

The effectiveness with which private investors can meet the state's demand for water is restricted by excessive regulation of the water market and it is clear that many of the restrictions placed by statute on the use of water hinder the efficient operation of Texas' water market. There are many incremental reforms that can address these obstructions and bring the state closer to a more free water market.
The state has a role to play through the State Water Plan and the Water Code in ensuring that water supplies are neither over-used nor willfully wasted. However, allowing the demand for water to be met as fully as possible through a competitive market is more efficient than large-scale public works projects contemplated by the State Water Plan and funded through TWDB. The effectiveness with which private investors can meet the state's demand for water is restricted by excessive regulation of water, and it is clear that many of the restrictions placed by statute on the use of water hinder the efficient operation of a market for water in Texas.

Encourage private investment in Texas water market by using regulation of the oil and gas industry as a model.

The oil and gas industries in Texas are regulated by one agency (the Railroad Commission), which has four primary statutory roles, including the protection of "the correlative rights of different interest owners."[161] The Texas oil and gas industries are the largest in the United States with almost 375,000 oil, gas, and projection wells currently in operation.[162] Light-handed regulation allowed the oil and gas industry to grow from employing just 7,000 people in 1900 to a total employment of 366,200 at the industry's peak in 1981, which represented around 6 percent of all non-agricultural employment in Texas.[163] To encourage private development, a statement of legislative intent should be included in the Water Code to the effect that:

> The use of private capital in water projects is necessary if the state's future water needs are to be met. The state and the private sector should work to provide for the conservation and development of the state's water resources, including the development of a free, open, and competitive water market in the state.

Doing so may help the state become a national leader in water development. The lighter-handed regulation of oil & gas exploration, production, refining and distribution in Texas show how an industry can grow under these conditions. There is no reason that Texas' water industry could not grow as the oil and gas industry did in the absence of such heavy-handed regulation.

Revisiting House Bill 3298 (84R, 2015) could also be instructive. The bill, which passed the House 111-28 but stalled in the Senate, would have directed TWDB to study the development of a market and conveyance network for water in Texas. The study would have included an assessment of the features of an efficient market for water, a review of water markets in other jurisdictions, an evaluation of water rights and ownership, and would identify methods to fund establishment of a "water grid" in Texas. Such an approach could allow private investment and planning to supplant much of what the state does through the SWP and the funding mechanisms overseen by TWDB.

As noted above, there are also significant regulatory barriers that impede the use of water in the state, the removal of which could help facilitate movement of water and which may also spur greater private sector investment in water development and infrastructure. The study proposed by HB 3298 would further those goals.

Conclusion

The free market, which exists to bring supply and demand into equilibrium, must be allowed greater room to flourish. Government planning can only go far: estimating future needs, calculating current supply, and projecting the cost of meeting future needs; all things at which TWDB, its regional planning groups, and the SWP have become adept. However, each successive state water plan projects higher and higher future demand against declining "current" supply. There is no amount of state planning that will ever eliminate this projected disparity. Embracing a free market for water in Texas is the only way to ensure an adequate supply of water to where it is needed.

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[10] *Ibid.*

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[14] *Ibid.*

[15] See House Journal, Eighty-Fourth Legislature, Regular Session, Proceedings, Sixty-Fifth Day, pp 2749-50 (May 7, 2015).

[16] In Texas, hair braiding is considered both "barbering" (TEX. OCC. CODE § 1601.002(1)(K)) and "cosmetology,"(TEX. OCC. CODE § 1602.002(a)(2)) and requires a license. Applicants for a "Hair Braiding Specialty Certificate of Registration" must sit through a 35-hour "commission approved training program" before obtaining a license to braid hair. The hair braiding curriculum consists of eleven hours of "technical skills," sixteen hours covering health and safety regulations, and eight hours addressing "hair analysis and scalp care."(16 TEX. ADMIN. CODE § 82.120(k))

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[28] *Ibid.*

[29] *Ibid.*

[30] Mr. Owyang's profile is available at https://www.vbprofiles.com/people/jeremiah-owyang-4fc8430a9029a841d4042ce6.

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[36] Craig Smith, "By the Numbers 42 Amazing Uber Statistics (April 2016)," *Expanded Ramblings* (June 2, 2016). Available at http://expandedramblings.com/index.php/uber-statistics/.

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