

SENATE COMMITTEE ON BUSINESS AND COMMERCE

January 28, 2013

*Texas Documents
Reid
January 31, 2013*

The Honorable David Dewhurst
Lieutenant Governor
P.O. Box 12068
Austin, Texas 78711

Dear Governor Dewhurst:

Thank you for the opportunity to address important issues facing Texas today through your charges for interim study. The Senate Committee on Business & Commerce, having conducted public hearings and received public and invited testimony, is pleased to submit its final report with recommendations for consideration by the 83rd Texas Legislature.

Respectfully submitted,

Senator John Carona
Chairman

Senator Chris Harris
Vice-Chairman

Senator Kevin Eltife

Senator Craig Estes

Senator Mike Jackson

Senator Eddie Lucio, Jr.

Senator Leticia Van de Putte

Senator Kirk Watson

Senator John Whitmire

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INTERIM STUDY CHARGES BACKGROUND, FINDINGS, AND RECOMMENDATIONS

- 1. Study and make recommendations for workforce training programs in Texas to ensure that such programs meet business and worker needs. Specifically, study whether such programs target economic growth areas and future workforce needs of the health care, skilled trades, construction, manufacturing, aerospace, and information technology industries and help retain workers in those trades and fields.**

BACKGROUND

Texas is known for having a strong economy and workforce. There are a variety of workforce training programs in Texas that target healthcare, skilled trades, construction, manufacturing, aerospace, and information technology industries. The skill sets needed to fulfill these areas of economic growth are dynamic and diverse. Texas must ensure that training programs are available to help retain and recruit workers in these trades and fields.

THE NEED

According to testimony before the Senate Committee on Business and Commerce on April 10, 2012, there is a definite shortage of workers in the skilled trades, healthcare, construction, and manufacturing industries.

While the U.S. shed 5.5 million manufacturing jobs from 2001 to 2010 (250,000 of these jobs were in Texas), manufacturing firms across the nation are complaining of a shortage of skilled workers.¹ The 2011 annual survey from the Manpower Group listed the skilled trades as the hardest jobs to fill in the United States for the fifth year in a row. The *Wall Street Journal* reported that 83 percent of manufacturers reported a moderate or severe shortage of skilled production workers for hire.² The shortage of skilled craft construction workers will require 185,000 new workers annually nationwide to meet demand, with 1.5 million workers projected to be needed nationwide by 2014.³ This shortage extends to other skilled areas, such as the automotive aftermarket industry, which is in need of highly trained technicians to work on today's complex vehicles.⁴ Furthermore, the Alliance for Science & Technology Research in

¹ Testimony of Tom Pauken, Chairman, Texas Workforce Commission, before the Senate Committee on Business and Commerce on April 10, 2012.

² Ibid.

³ Testimony of Dr. Anne Matula and Mr. Robert (Bob) E. Parker, Craft Training Center of the Coastal Bend, before the Senate Committee on Business and Commerce on April 10, 2012.

⁴ Testimony of Jim Quinten, President of the Automotive Parts and Services Association (APSA), before the Senate Committee on Business and Commerce on April 10, 2012.

America estimates that by 2018 Texas will need to fill 758,000 STEM-related jobs (jobs that focus on science, technology, engineering, and math).⁵ Health information technology is another area that expressed a need for workforce development to train and implement new technology used to share health information.⁶

Texas is predicted to have a greater increase in demand for skilled workers than the rest of the nation. The Texas refining and chemical plant sector of the petrochemical industry is the largest employer of skilled craft workers for the ongoing maintenance of refining and chemical facilities across Texas and across the nation. The construction of new facilities, such as the Las Brisas Power Project, Cheniere's liquefied natural gas (LNG) plant in the Corpus Christi area, and other major projects statewide will require large additional numbers of the same skilled craft workers. The Eagle Ford Shale play in South Texas has increased the need for workers in the exploration and production sector of the petrochemical industry, compounding the effects of the shortage by attracting skilled workers away from other existing industry sectors.⁷

Texas manufacturers have expressed their trouble finding skilled workers to fill open jobs. In late March 2012, the San Antonio Manufacturers Association (SAMA) estimated that more than 1,500 open jobs in the area remained unfilled due to a lack of skills among potential workers.⁸ SAMA hosted a town hall meeting on December 14, 2011 to assess regional manufacturing immediate workforce need, and determined that there was a need for skilled assemblers, manufacturing technologists, and machinists.⁹

Understanding the reason behind the shortage of skilled workers is vital to ensuring that there will be people to fill these jobs, and having these jobs filled is vital for a healthy Texas economy. In his testimony before the Senate Committee on Business and Commerce on April 10, 2012, Joe Arnold, representing the Texas Association of Manufacturers said: *"Without educated and trained workers we- at BASF, where I work, or our state's manufacturing community at large- cannot grow our operations nor sustain our businesses in the State."*¹⁰

THE SHORTAGE

The shortage for skilled workers can be viewed as two-fold. There is both a lack of interest and a lack of appropriate skills sets needed to fulfill these occupations amongst the pool of potential employees. First, there is what can be called a "pipeline shortage" meaning the industry is not attracting, training, and retaining a sufficient number of entry level and new workers. There is also what can be called a "skills shortage" meaning that there is a lack of potential workers who have the skills to fill job openings. Additionally, demographic workforce research points to

⁵ Testimony of Joe Arnold, Chairman, Workforce Committee, Texas Association of Manufacturers, before the Senate Committee on Business and Commerce on April 10, 2012.

⁶ Texas e-Health Alliance Fact Sheet.

⁷ Testimony of Dr. Anne Matula and Mr. Robert (Bob) E. Parker, Craft Training Center of the Coastal Bend, before the Senate Committee on Business and Commerce on April 10, 2012.

⁸ Testimony of Joe Arnold, Chairman, Workforce Committee, Texas Association of Manufacturers, before the Senate Committee on Business and Commerce on April 10, 2012.

⁹ Letter from Michael Melver, Chairman, San Antonio Manufacturers Association, to Reader, dated March 12, 2012, as submitted in written Testimony of John Dewey to the Senate Committee on Business and Commerce on April 10, 2012.

¹⁰ Testimony of Joe Arnold, Chairman, Workforce Committee, Texas Association of Manufacturers, before the Senate Committee on Business and Commerce on April 10, 2012.

declining numbers of skilled craft workers primarily because of the retirement of the "baby boomers."¹¹

An example of the baby boomer effect is seen in testimony provided by Zachry Industrial Incorporated, one of the largest open shop contractors in the United States, with nearly 11,000 employees nationwide. Currently, the average age of a person entering the construction workforce is 26 to 27 years old while the average age of the current construction worker is 47 years old. This statistic demonstrates the demographic of this industry and the need for younger workers. Based on current age demographics, 20 percent of the construction workforce is expected to retire in the next four to six years.¹² The Construction Labor Research Council states that 185,000 skilled workers will be needed annually for the next decade to make up for the deficit left by the baby boomers.

A study done by Harvard University called *Paths to Prosperity* described a "skills gap" due to the amount of young people lacking the skills and work ethic for many jobs that pay a middle class wage.¹³ In 1973, 72 percent of the nation's workforce had only a high school diploma or below. While by 2007, the number of overall available jobs had grown by 63 million, the number of jobs held by people with no post-secondary education had fallen by over two million. Thus, over the past third of a century, all the net job growth in America has been generated by positions that require some post-secondary education. Post-secondary education can mean a variety of things and does not have to mean a traditional four-year degree. The *Paths to Prosperity* study outlines an important question: "*The message is clear, in 21st century America, education beyond high school is the passport to the American Dream. But how much and what kind of post-secondary is really needed to prosper in the New American Society?*"

Georgetown Center projects that 14 million job openings, nearly half to be filled by those with post-secondary education, will go to people with associates degrees or occupational certification. Joe Arnold with the Texas Association of Manufacturers was quoted in the *Dallas Business Journal* saying "*I think that we have a lack of relevant education in the workforce, you can go to college and get a degree in English or Psychology and there are no skills that we need.*" These job openings will be "middle skill" such as electricians, construction managers, dental hygienists, paralegals, and police officers. Even if they do not require a traditional four year college degree, these jobs are well paying jobs. In fact, 27 percent of people with post-secondary licenses or certificates earn more than those with average bachelor's degrees. The days of the wrench turning mechanic are also gone. Technicians today must be educated in reading, writing, math, electronics, and physics.¹⁴ Training programs in Texas exist at both a secondary and post-secondary level.

¹¹ Testimony of Dr. Anne Matula and Mr. Robert (Bob) E. Parker, Craft Training Center of the Coastal Bend, before the Senate Committee on Business and Commerce on April 10, 2012.

¹² Testimony of Dan Barrow, Zachry Industrial Incorporated, before the Senate Committee on Business and Commerce on April 10, 2012.

¹³ Harvard Graduate School of Education, "Pathways to Prosperity," February 2011.

¹⁴ Testimony of Jim Quinten, President of the Automotive Parts and Services Association (APSA), before the Senate Committee on Business and Commerce on April 10, 2012.

AVAILABLE TRAINING IN TEXAS

Texas has a variety of different workforce training available for skilled crafts. Some programs are joint partnerships with the private sector and others are through the community college system.

Skills USA

Skills USA is a partnership of students, instructors, and industry dedicated to assuring America has a skilled workforce. It has over one quarter million members annually in 54 states. The local chapter becomes a "leadership lab" where employability skills are taught and practiced.

Student leaders are elected and an advisor is identified to assist and guide the student through the program. There is professional development, social activities, employment, community service, and Skills USA championships. There is a National Leadership and Skills Conference attended by more than 15,000 people, including teachers, students, and business partners who work to prove their skills in occupations, such as electronics, computers, aided drafting, precision machining, and medical assisting. 45 percent of those that complete this program in high school go to work, 36 percent to college, six percent to apprenticeship or other post-secondary, and five percent to the military. Testifying before the Senate Committee on Business and Commerce, Jim Quinten, President of the Automotive Parts and Services Association (APSA) said: *"Career and Technology programs, however, involve more than learning technical skills. Through student organizations, such as Skills USA- Texas, students are better prepared to enter the workforce. They receive training in leadership, work ethics and communication skills. You can ask any businessman, today's entry-level employee is sorely lacking in work ethics."*¹⁵

Career and Technical Education

Public school district Career and Technical Education (CTE) programs are some of the first opportunities Texas students have to gain knowledge and skills that directly relate to a particular industry or occupation. School districts have relatively wide discretion over which courses are offered in these programs, especially when compared to more prescriptive academic course requirements. Texas adopted the federal organization of CTE courses in 2005. This framework reorganized all CTE courses into "career clusters," 16 groupings of occupations and broad industries based on similarities such as common knowledge and skills. It organizes CTEs around common occupational themes, such as finance, marketing, or human services. The 16 career clusters are:

- Agriculture, Food & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business, Management & Administration
- Education & Training
- Finance

¹⁵ Testimony of Jim Quinten, President of the Automotive Parts and Services Association (APSA), before the Senate Committee on Business and Commerce on April 10, 2012.

- Government & Public Administration
- Health Science
- Hospitality & Tourism
- Human Service
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing, Sales & Service
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics

This course reorganization corresponded with a revision of the CTE curriculum managed by the Texas Education Agency that resulted in a remapping of the CTE course landscape, reducing the total number of CTE courses eligible for state funding from approximately 600 to 190. They were developed to meet college readiness standards and have appropriate technical skill attainment measures. School districts also have the option to create "innovative courses." These are courses related to certain careers or occupations that do not have to have a state-approved curriculum. Following approval, any district may offer these courses.¹⁶

Approximately 73 percent of CTE courses delivered in school year 2009-10 were related to a regional labor market need by broad occupational similarities. School districts closer to a major metropolitan area deliver a wider variety of CTE courses, while more rural school districts offer fewer courses, but have a greater share of their CTE courses aligned to regional labor market needs. CTE courses related to information technology, human services, and agriculture, food, and natural resources had the largest share of student CTE course enrollment in school year 2009-10.¹⁷

CTE can serve as a stepping stone for a student's career goals. For example, health science classes can provide beneficial skills for those who wish to become a doctor. They can also serve as a springboard for a career. Some courses offer certifications. For example, 36 students earned welding certificates through Sealy High School's CTE program, while 10 became certified nursing assistants in partnership with the Sealy Medical Foundation that reimburses their expenses.¹⁸ Jim Quinten, President of the Automotive Parts and Services Association (APSA), expressed to the Senate Business and Commerce Committee that APSA's members worked closely with the high school Career and Technology programs throughout the State, and that many of their employees come directly through these programs.¹⁹ The number of students graduating from Texas high schools who received industry certifications or licensures increased annually, up to a total of approximately 25,000 students.²⁰

¹⁶ "Public School Career and Technical Education Labor Market Relevance and Course Variety," Legislative Budget Board Staff. January 2011.

¹⁷ "Public School Career and Technical Education Labor Market Relevance and Course Variety," Legislative Budget Board Staff. January 2011.

¹⁸ Gonzales, Amber. "Career and Tech. Program Gives Kids More Options." *The Sealy News*. September 6, 2012.

¹⁹ Testimony of Jim Quinten, President of the Automotive Parts and Services Association (APSA), before the Senate Committee on Business and Commerce on April 10, 2012.

²⁰ TIVA, An Association for Career and Technical Educators, Career & Technical Education Points of Interest in Texas.

Craft Training Center of the Coastal Bend

The Craft Training Center of the Coastal Bend (CTCCB) is an educational organization established and funded by industry partners to meet their workforce needs for skilled craft workers. It began in 1987 as a trust of the Associated Builders and Contractors Texas Coastal Bend Chapter. The organization was originally named the ABC Merit Shop Training Program, Inc., but was later renamed the Craft Training Center of the Coastal Bend and designated as a 501(c)(3) non-profit educational organization by the IRS on January 19, 1989. The post-secondary organization is led by a Board of Directors comprised of owner and contractor representatives. Their mission is to meet the shared manpower needs of the community, business, and industry by providing education for the construction industry.

The CTCCB provides two apprenticeship programs registered with the Department of Labor's Bureau of Apprenticeship and Training (BAT) and seven accelerated craft training programs accredited by the National Center for Construction Education and Research. The programs offered are:

- BAT: electrical
- BAT: plumbing
- Welding: shielded metal arc welding (SMAW), gas tungsten arc welding (GTAW), metal insert gas welding (MIG), flux-cored arc welding (FCAW), and submerged arc welding
- Pipefitting
- Instrument fitter and instrument technician
- Mobile crane operations
- Scaffold-building
- Industrial painting/coating
- Field safety/safety technology

The training facilities were financed by local industry and contractors. No tax monies were used. The facilities are located on a large campus that includes the Contractors Safety Council of the Coastal Bend, the offices of the Associated Builders and Contractors, Texas Coastal Bend Chapter, and a medical clinic. The City of Corpus Christi, through its Type A Board has approved a \$1.75 million grant, which will be matched by \$1.75 million from the industry for CTCCB to expand its facilities for training in other needed crafts.

There are seven industry owners/contractors who provide funding based on person-hours to the CTCCB on a monthly basis: Brand services, CITGO, DuPont Corpus Christi, Flint Hills Resources, LyondellBasell, Repcon, Inc., and Valero. The direct funding by industry subsidizes the tuition fees for adult students. For example, one semester (84 clock hours) of welding, including supplies and textbooks, only costs an adult student \$425. Without such subsidy, tuition would cost \$1,900 per semester in order for the CTCCB to cover the costs of the program. The CTCCB has offered evening classes since 1989 in a 14-week semester format, with classes meeting three hours an evening, twice a week. Fall, spring, and summer semesters are taught each year. In 2008, classes for high school students began with a supporting grant from the local workforce board. Currently, students from 14 high schools travel daily to the Craft Training Center site for instruction in various crafts, such as: welding, pipefitting, electrical, instrumentation, and construction management.

CTCCB instructors also teach at four high school locations. Within three months of completion of the adult evening program, 97 percent to 100 percent of those that complete or graduate from the program are employed in their field at wages well above the minimum wage, which are about \$17 to \$24 an hour. High school students who have been in the program and go to work immediately upon high school graduation can expect to earn \$9 to \$19 per hour plus overtime. The program's 2010 and 2011 high school graduates are earning \$1,000 to \$1,800 net per week.²¹ In 2011, the average enrollment for spring, summer, and fall was 314 students. Of these 314 students, 174 completed sufficient training for employment, while 100 graduated from the program.

Community Colleges

There are multiple pathways to high school graduation and post-secondary training and education that help reduce the skilled worker gap. Community colleges across Texas help bridge the skills gap.

Community colleges rely heavily on local industry representatives and Workforce Development Boards to identify potential workforce training needs. As time passes, community colleges continually work with industry and community advisory boards to ensure that the curriculum maintains the necessary flexibility to meet the workforce needs. Community colleges align to workforce training needs. As these needs shift over time, and jobs change or are eliminated, workforce training, certificates, and degrees are also revised or eliminated. This high level of responsiveness to changing workforce needs is one of the most dominant characteristics of community colleges.²² The following are some examples of college collaborations that promote workforce training and placement.

Bell Helicopter and Amarillo College

Bell Helicopter worked with Amarillo College to develop a training program preparing students to work at the assembly center for their product. Students enroll through the college and are responsible for paying approximately \$1,500 in tuition for the program. Upon completion of the program, students are guaranteed a preferential hiring interview at Bell. Those who do not receive jobs remain in the applicant pool for future jobs. More than 450 students have graduated from the program and more than 220 have been hired by Bell Helicopter with starting wages ranging from \$12.50 to \$22.70 an hour depending on previous experience. The factory now employs 731 Amarillo residents.²³

²¹ Testimony of Dr. Anne Matula and Mr. Robert (Bob) E. Parker, Craft Training Center of the Coastal Bend, before the Senate Committee on Business and Commerce on April 10, 2012.

²² Testimony of Dr. MacGregor Stephenson, Assistant Commissioner for Workforce, Academic Affairs and Research, Texas Higher Education Coordinating Board, before the Senate Committee on Business and Commerce on April 10, 2012.

²³ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

McLennan Community College

McLennan Community College collaborates with the Heart of Texas Workforce Center to train workers for employers in McLennan and Falls counties. They offer trainers who listen to clients' challenges and design solutions to meet their goals. They have training initiatives in fields including computer technology, occupation safety and health administration, and supervisory leadership. They have trained more than 850 workers over the past five years.²⁴

Odessa College

Odessa College offers a 100 percent online course in occupational safety and health technology (OSHT). The OSHT degree is a two-year program and allows students to pursue their careers without interruption while enrolled in school. The program produces safety and environmental professionals with the background needed to create a safe and healthy work environment that complies with current regulations.²⁵

Laredo Community College Economic Development Center

The Laredo Community College (LCC) Economic Development Center (EDC) coordinates workforce, economic, and community development efforts within the college's district. It focuses on strategies designed with the help of area businesses to meet key industry needs, with particular concentration in the oil and gas, manufacturing, international trade, and health sectors. For example, LCC led the development of a program to train lease operators at the request of Conoco Phillips. The EDC, with Conoco support, is creating a series of associate degrees in applied science, safety and training, and industry awareness to prepare individuals for jobs in the oil and gas industry.²⁶

Alamo Colleges

San Antonio's Alamo Area Academies educate and train high school students for high-skill, well-paid industry jobs. The academies are partnerships of community businesses, the Alamo Community College District (ACCD), 17 school districts in the San Antonio area, the City of San Antonio, Alamo Workforce Development, and others. In partnership with the independent school district in the San Antonio area, ACCD offers industry-driven dual-credit courses through three individual Alamo Academies: the Alamo Area Aerospace Academy, the Information Technology and Security Academy, and the Manufacturing Technology Academy. The two-year Alamo Academy high-tech training and education program is free to high school juniors and seniors. The ISDs pay for the student's books and transportation. Academy students can earn 30 hours of college credit towards higher education while training for well-paid careers. In addition to the course work, all Academy students must work 40 hours per week in an eight week paid internship between their junior or senior year.²⁷

²⁴ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

²⁵ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

²⁶ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

²⁷ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

San Jacinto College

The San Jacinto College District is located in the same area as much of the City of Houston's industry. Therefore, it has been able to forge many partnerships with the Port of Houston Authority, manufacturing and petrochemical plants, and NASA's Johnson Space Center to develop programs to meet the workforce needs.²⁸ Some of the programs offered by San Jacinto College District include:

Maritime Training. The Port of Houston Authority is ranked first in the United States in foreign waterborne tonnage, first in U.S. imports, second in U.S. exports, and second in total U.S. tonnage. A shortage of mariners is expected as 60 percent of mariners are 50 years of age or older and nearing retirement. In conjunction with the Port of Houston, the Houston Pilots, Western Gulf Maritime Association, G & H Towing, Kinder Morgan, Diamond Offshore, Conoco Phillips, the United States Coast Guard, Mid-Atlantic Maritime Association, Texas A&M University at Galveston, Texas Southern University, the University of Houston College of Technology, and many others, San Jacinto College is offering U.S. Coast Guard certified courses to upskill current worker licenses, and create pathways to careers for high school students. The programs that San Jacinto College offers range from workforce training, maritime business, maritime logistics, and transfer programs to area universities with maritime bachelor's degrees.²⁹

Eye Care Technology Programs. San Jacinto College also has a program for those students who want to work under the supervision of licensed eye care professionals. The program is designed to correlate classroom and laboratory experiences with clinical experience in ophthalmic offices and clinics. The program is accredited by the Commission on Accreditation for Ophthalmic Medical Programs (CoA-OMP). Graduates of the applied science degree program are eligible to petition for examination through the Joint Commission on Allied Health Personnel in Ophthalmology at the certified ophthalmic technician level. Graduates of any of the three levels (occupational certificate, certificate of technology, associate degree) are eligible to petition for examination through the American Board of Opticianry for certification as an optician or National Contact Lens Examiner. The program, which is one of only ten such programs in the country, is the only accredited ophthalmic technician program in Texas and enjoys a 100 percent job placement rate.³⁰

Automotive Technology Program. Through partnerships with Chrysler, Ford, General Motors, Honda, Toyota, and others, San Jacinto Colleges has developed an automotive technology program that not only meets industry needs, but is also certified by industry partners. Students graduating from this program have enjoyed 100 percent job placement.³¹

²⁸ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

²⁹ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

³⁰ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

³¹ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

Process Technology and Instrumentation Programs. Manufacturing and petrochemical industries in the San Jacinto College District, such as Bayer, Dow Chemical, Valero, DuPont, and Shell to name a few, are guiding the curriculum process so that training is provided for their companies. Shell Deer Park has hired nearly 60 students from the process technology program in the last year.³²

Diesel Technology Program. San Jacinto College's Diesel Technology Program includes a rigorous curriculum based on industry need. Partners such as Cummins Engine Company, Detroit Diesel, Stewart and Stevenson, Penske Truck Leasing, Saia Freight Lines, Wartsila, and several others serve as an advisory committee to set curriculum to meet the workforce need. Over the last five years, students have enjoyed a consistent 95 percent job placement rate upon graduation.

Healthcare Pathways. San Jacinto College has partnered with area community colleges and businesses to create a Healthcare Pathways program. This program is funded through a \$4.7 million Department of Labor grant to train students who are constrained financially, or who meet other eligibility requirements. They must be interested in pursuing training in the areas of electrocardiogram (EKG), phlebotomy, certified nurse's aide (CAN), licensed vocational nurse (LVN), transition or mobility associate degree nurse (ADN), or medical laboratory technology. This grant also assists eligible applicants with English as a second language (ESL) courses, online reading skills classes, general educational development (GED) courses, and student success classes.

VETERANS PROGRAMS

Texas accounts for 18 percent of the nation's veterans entering employment.³³ It is important that these veterans find gainful employment. They can also contribute to the shortage of skilled workers.

San Jacinto College has programs such as the San Jacinto College Veterans Workforce Development Project grant, which covers up to \$2,100 for college tuition. Provided through the U.S. Department of Labor, the grant includes scholarships for up to 50 veterans per semester and can be applied toward credit or noncredit certificate programs in areas with increasing employment rates, such as welding, non-destructive testing, payroll specialists, emergency medical technician basic certification, environmental safety specialist, truck driving, computer specialist, cyber-security, or other programs chosen on the basis of regional labor market demands. With an influx of about 200 additional student military veterans each year, the College is also using funds from a Department of Education grant to open Centers of Excellence for Veteran Student Success at each of the three San Jacinto College campuses. More than 1,200 student veterans attended San Jacinto College last year.³⁴

³² Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

³³ Testimony of Thomas Palladino, Executive Director, Texas Veterans Commission before the Senate Committee on Business and Commerce on April 10, 2012.

³⁴ Testimony of Dr. Brenda Hellyer, Chancellor, San Jacinto College, before the Senate Committee on Business and Commerce on April 10, 2012.

FUNDING

The Higher Education Coordinating Board has a wide range of responsibilities for the development of workforce training efforts across the state. Through the Federal Title I Carl D. Perkins Grant Program, the state of Texas allocates approximately \$23 million in what are called Perkins Basic Grants to the public community, state, and technical colleges based upon enrollments of Pell Grant recipients with a declared intent to major in career and technical fields. A good example is the funding from the Dallas County Community College District El Centro Campus. The institution has created a 45 bed simulation training center which provides realistic training for students in applied health fields, nursing, cardiac catheter, and lab technicians.³⁵

Perkins Title I funds provide funding for projects that can have a positive statewide impact on students in career and technical programs. Some examples include:

- Tarrant County College District's "Career Pathways to Student Success," which develops course standards and career foundation for the Energy Career Cluster. This curriculum is also vetted by industry partners.
- Del Mar College's "Skill Standards-Based Curriculum Development Project," which promotes the role, awareness, and adoption of skills standards among Texas community and technical colleges. They are selected competitively based on how they support the Governor's Industry Cluster Initiative.³⁶

The Texas Science Technology Engineering and Math Challenge Scholarship Program was passed by the Legislature in FY 2011. The Coordinating Board worked with Texas Guaranteed Student Loan Corporation (TG) on implementation. \$25 million was committed to support the program. The purpose of the program is to increase the number of students graduating in STEM fields and completing STEM training. Scholarships will be provided to students not to exceed \$2,500 annually, for a maximum of two years.³⁷

SELECTED COMMENTS RECEIVED VIA FACEBOOK

Senator John Carona, Chair, invited the public to add their comments via his Facebook page. One commenter said that community colleges should provide workforce training and will provide training if there is a demand for them.

Another said: "Workforce training programs are great! But not if they are funded by the Government. Let those who need the workers fund them. And if you feel it is really necessary to reward companies for doing what is already in their best interest, maybe provide a tax

³⁵ Testimony of Dr. MacGregor Stephenson, Assistant Commissioner for Workforce, Academic Affairs and Research, Texas Higher Education Coordinating Board, before the Senate Committee on Business and Commerce on April 10, 2012.

³⁶ Testimony of Dr. MacGregor Stephenson, Assistant Commissioner for Workforce, Academic Affairs and Research, Texas Higher Education Coordinating Board, before the Senate Committee on Business and Commerce on April 10, 2012.

³⁷ Testimony of Dr. MacGregor Stephenson, Assistant Commissioner for Workforce, Academic Affairs and Research, Texas Higher Education Coordinating Board, before the Senate Committee on Business and Commerce on April 10, 2012.

deduction. But from personal experience I know, if companies think they can get the government to pay for their employee training of course they will. Otherwise, they will just do it themselves. Government programs train people for what industries they would like to promote. Businesses train people to fill immediate vacancies. Which do you think works better..."

A different commenter added: "And Government has a poor track record of picking winning business ideas."

One commenter said: "I was recently unemployed after 35 years and I think it should be up to the person to decide if they need training from the workforce commission while they get paid unemployment if they feel they need it."

RECOMMENDATIONS

1. In the long term, while we push more Texans toward college, all sectors of education should clarify the definition of "college" to mean post-secondary education that results in prosperous job opportunities. We should strengthen the career and technology curriculum in our public schools and give students more informed choices.
2. The Legislature should encourage industry-supported training facilities, such as the Craft Training Center of the Coastal Bend model. A collaborative effort between industry and the local community is key to ensuring that there will be skilled workers to meet the needs of both the industry and the community.
3. The Legislature should encourage the use of technology in the training and education of the workforce, including online training opportunities. This support may encourage students to complete degree programs rather than dropping out. Technology also allows for flexibility in training approaches.

2. Study the state's approach to licensing and regulation of occupations to ensure protection of public welfare, trust, health, and safety and eliminate unnecessary, overly restrictive, or anti-competitive regulation. Review guidelines and other states' approaches for determining when regulation is necessary and make recommendations for improving Texas' regulatory system.

BACKGROUND

Texas exceeds the national average on percentage of workforce that is licensed, licensing approximately one-third. In the 2007 session alone, Texas lawmakers licensed 21 new occupations and businesses, including property tax lenders, residential fire alarm technicians, professional land surveying firms, air conditioning and refrigeration technicians, hair braiders and weavers, combative sports events coordinators, residential appliance installers, tow truck operators, and vehicle storage facility employees. University of Texas at Austin economics Professor Daniel Hammermesh estimated that the “deadweight loss” to society from occupational licensing is between \$34.8 and \$41.7 billion per year.³⁸ It is, therefore, important to differentiate between necessary regulation and regulation that is overly restrictive or anti-competitive.

HISTORY OF REGULATION

In the United States, occupational regulation typically occurs at the state level. Conversely, occupational regulation occurs at a national level in most countries. The U.S. approach to regulation is the result of the 1888 Supreme Court decision in *Dent v. West Virginia*, which established the right of states to grant licenses to protect the health, welfare, or safety of citizens. The interpretation of this decision gave states the primary right to regulate occupations.³⁹

The stated rationale for licensing was to provide public protection at a time when occupational standards did not exist or were not stringent enough, and information on individuals and their businesses was difficult to obtain. Research on licensing in the late 1800s and early 1900s found that licensing provided consumers with information on minimum quality and standardization. As professional knowledge expanded in fields like health and as the number of available services increased in urban areas, consumers had little information on the quality of essential services. Licensing filled some of those gaps.⁴⁰

³⁸ Testimony of Marc Levin, Director of the Center for Effective Justice at the Texas Public Policy Foundation, before the Senate Committee on Business and Commerce on April 10, 2012.

³⁹ Kleiner, Morris M. University of Minnesota. "A License for Protection." Fall 2006.

⁴⁰ Ibid.

Over time, licensing activities expanded to other occupations. Early licensing was largely in the health and the legal professions. Related occupations (such as physician's assistant and dental assistant) then became regulated during the post-World War II period. Workers in other industries, such as construction and financial services, also approached state legislatures to seek regulation.⁴¹ The Republic of Texas began regulating the practice of medicine in 1837. Over time, licensing activities expanded to other occupations. By World War II, the state had added a number of other health-related fields to the list of professions requiring a license (including dentists, pharmacists, and nurses), along with teachers (1905), barbers (1929), insurance sales personnel (1933), architects and professional engineers (1937), and real estate brokers (1939).⁴²

The presumption that occupational regulation provided information and raised quality without any negative economic effects changed in 1975 with *Goldfarb v. Virginia*. In this case, the Supreme Court ruled that the state bar's policy of a minimum association fee violated the Sherman Act's prohibition on monopolies in restraint of trade. Prior to this case, many state and federal courts thought that the "learned professions" should be treated differently because their supposed goal was to provide services necessary to the community rather than to generate profits. With the 1975 decision, occupational associations could now fall within the terms "trade and commerce" found in the Sherman Act. The central finding in *Goldfarb* was that professional licensing activities affect interstate commerce enough to trigger Sherman Act antitrust provisions. Thus, federal agencies like the Federal Trade Commission and the Department of Justice can sue occupations that constrain trade through unreasonable occupational licensing requirements, as well as bring greater scrutiny to states' occupational policies and procedures. For example, federal lawsuits have been brought against dentists who have sought to restrain the work of hygienists when the restraint could influence federal government programs.⁴³

Licensing has increased dramatically over the last 50 years. In the 1950s, less than five percent of U.S. workers were in occupations that required a license. By the 1980s that number had increased to 18 percent. By 2006, 29 percent of workers were in occupations that required a license.⁴⁴

FORMS OF REGULATION

Generally, there are three forms of regulation: registration, certification, and licensing. These designations in essence determine who can work in particular occupations. The least restrictive form of regulation is registration. Registration involves individuals or businesses filing their names and contact information for inclusion in a database of those practicing that occupation. Certification permits a particular task to be done after the passage of an exam on the relevant subject matter. Licensing typically includes a combination of education, an exam, and a licensing fee.⁴⁵ It is considered the toughest form of regulation. It is sometimes referred to as the right to practice. Under licensure laws, working in an occupation for compensation without first meeting state standards is illegal.⁴⁶

⁴¹ Ibid.

⁴² "Occupational Licensing in Texas Report to the Senate Business & Commerce Committee," The University of Texas at Dallas, December 2012 (UT Dallas Study).

⁴³ Kleiner, Morris M. University of Minnesota. "A License for Protection." Fall 2006.

⁴⁴ O'Sullivan, Courtney. National Center for Policy Analysis. "Is Occupational Licensing Necessary?"

⁴⁵ Ibid.

⁴⁶ Kleiner, Morris M. University of Minnesota. "A License for Protection." Fall 2006.

There is a fourth distinct form of occupational regulation that falls between registration and full-scale licensure: title acts or laws. Title laws allow practitioners to provide services without a license, but they cannot use a particular title associated with that service unless they get approval. For example, title laws bar anyone who offers services that constitute "interior design" from being called "interior designers" without first getting approval.⁴⁷

Today, occupations do not always exactly fit into these molds. For example, Texas regulates certified elevator inspectors, and these inspectors have a continuing education requirement.

PROS AND CONS OF REGULATION

When discussing regulation, proponents or opponents will list positives and negatives associated with regulation. Licensing proponents see its role as ensuring a base level of education, experience, and competence within a profession. Licensing is also a method to exclude potentially dangerous personnel, such as persons with violent criminal records or a history of embezzlement. It can also protect the public from professional misconduct via the ongoing oversight of licensed practitioners. Licensing can protect the public in cases of market failure – either for involuntary transactions, or for transactions in fields where consumers have difficulty distinguishing between good and bad practitioners (due either to lack of information or insufficient technical knowledge). It can also make it easier to prosecute or discipline bad actors whose conduct would not readily fall within other criminal or consumer protection statutes.⁴⁸

On the other hand, opponents of licensing argue that many licensed occupations have weak connections to public health and safety, and as a result, licensing serves more to protect industry incumbents from competition than to safeguard public welfare. Opponents will say that the private marketplace is perfectly capable of weeding out incompetent practitioners, especially now that consumers have access to far more comprehensive information than they had even a decade ago. Some view licensing criteria as being arbitrary and bearing no relation to the dangers they purport to counter. For occupations that are licensed in some states but not others, some studies have found no significant difference in professional quality in the licensed states. Some licensed occupations have a minimal number of license holders and complaints or disciplinary actions. The need for regulation in these occupations is not always understood. Another argument against licensing is that it impedes labor mobility and places unreasonable obstacles in front of workers trying to improve themselves.⁴⁹

WHEN TO REGULATE

There is no question that regulation of certain occupations is necessary to meet public welfare, health, and safety concerns. However, in some instances regulation can be construed as overly burdensome, unnecessary, and possibly anti-competitive. Every session, legislators file numerous bills that are intended to initiate regulation of certain occupations or to modify or increase regulation of already regulated occupations. The bills are controversial because they necessarily involve obligations imposed on the subject occupations by government and therefore

⁴⁷ Carpenter, Dick M. and John K. Ross. "Designing Cartels Through Censorship." Institute for Justice. Summer 2008.

⁴⁸ UT Dallas Study.

⁴⁹ Ibid.

marketplace competitiveness. The bills may also restrict workers' authority to engage in certain practices, in which case they are commonly known as "scope of practice" bills. Because scope of practice bills often impacts other occupations that compete with the subject occupation, they can create tension among the affected occupations resulting in time-consuming, expensive, and divisive legislative battles. Under these circumstances, decisions regarding such legislation are often driven by which of the involved occupations is more persuasive with members of the Legislature rather than whether the suggested legislation is necessary or even advisable.

Witnesses before the Senate Committee on Business and Commerce on April 10, 2012 raised potential questions to ask when considering new occupational regulation. William Kuntz, Executive Director of the Texas Department of Licensing and Regulation (TDLR) noted that an important question is whether there is sufficient activity to justify the program because there must be a critical mass to cover the cost for licenses. Additionally, an important question is whether there is a public safety need. For example, if a profession requires a practitioner to enter another person's home, that profession may need regulation.⁵⁰ TDLR asks these questions administratively and has historically recommended that some of their regulatory programs be abolished. During the last legislative session, talent agencies and personnel employment services programs were abolished due to these recommendations.

Sherri Greenberg, Director of the Center for Politics and Governance at the Lyndon B. Johnson School of Public Affairs, raised the following questions: Is there value added by regulating? Is there a public health risk? She also recommended performing cost/benefit analyses.⁵¹

The Texas Government Code, Title 3, Legislative Branch states that when reviewing regulatory programs and evaluating whether an occupation should be regulated, certain factors should be considered. The first factor is whether the unregulated practice of a profession or other occupation may significantly harm or endanger the public health, safety, or welfare and whether the potential for harm is easily recognizable and not remote or dependent on a tenuous argument. The second factor is whether the profession requires training or specialized skills and whether the public clearly needs and will benefit by assurances of initial and continuing competence of practitioners of the profession or occupation. The third factor is whether the regulation would have the effect of directly or indirectly increasing the cost of any goods or services and, if so, whether the increase would be more harmful to the public than the harm that might result from the absence of regulation. The fourth factor is whether the regulatory process would significantly reduce competition in the field and, if so, whether the reduction would be more harmful to the public than the harm that might result from the absence of regulation. Finally, the fifth factor is whether the residents of the state are or may be effectively protected by other means.⁵²

The challenge in deciding what occupations should be regulated is that the consequences of regulating or not regulating can be very subjective. The University of Texas at Dallas (UT Dallas), at the request of the Committee, outlined one possible way to examine this issue. A matrix was constructed of the two most basic criteria for licensing: cases of market failure,

⁵⁰ Testimony of William Kuntz, Executive Director, Texas Department of Licensing and Regulation, before the Senate Committee on Business and Commerce on April 10, 2012.

⁵¹ Testimony of Sherri Greenberg, Director, Center for Politics and Governance, Lyndon B. Johnson School of Public Affairs, before the Senate Committee on Business and Commerce on April 10, 2012.

⁵² Section 318.002, Government Code.

combined with circumstances that render this failure a legitimate hazard to public health and safety.

		Serious Harm to the Public?	
		Yes	No
Market Failure?	Yes	Licensing necessary to protect the public interest	Cases of market failure exist, but the potential harm to the public is not sufficient to justify the state's interference with the right of citizens to earn a living.
	No	The most difficult quadrant - consumers have free choice but the potential for harm may justify the state's intervention in the private marketplace.	The free market is perfectly capable of protecting consumers

Source: UT Dallas Study

They determined that, in economic terms, “market failure” occurs when the allocation of goods and services is not efficient. In such cases, the outcome of a particular transaction does not reflect what would occur in the classic definition of a free market when the buyer is under no compulsion to buy, the seller is under no compulsion to sell, and both parties possess the information required to make the decision in their own best interests. The market fails when one or both of the following occur:

- **Compulsion:** one party cannot, as a practical matter, decline to participate in the transaction; and/or
- **Information Asymmetry:** one party has far more knowledge about or expertise in the subject matter in question so as to make the transaction inherently unequal.

An example of compulsion involves tow truck operators and vehicle storage facilities, where disputes over involuntary transactions, such as a vehicle being towed from a "no parking" area (non-consent tows) are common. Complaint and disciplinary numbers from TDLR over the past two years reflect the potential for consumer abuse by personnel in these industries.⁵³

⁵³ This table, as well as similar tables presented later in this report, was compiled by UT Dallas from data in the TDLR’s Administrative Orders database. <http://www.license.state.tx.us/cimsfo/fosearch2.asp>.

Tow Trucks	Count of #	%
Improper Fee	257	31.8%
Unauthorized Tow	96	11.9%
Safety Gear / ID	20	2.5%
Other Misconduct	17	2.1%
Failure to Return Vehicle	2	0.2%
		48.5% consumer abuse related
Admin / Inspection	190	23.5%
No License	188	23.2%
Conviction / Prison	33	4.1%
Drug Test Issues	6	0.7%
Total	809	100.0%

Source: UT Dallas Study

Most cases of market failure result from information asymmetry. For instance, few consumers possess the requisite knowledge to judge the skills and capabilities of their physicians, although the same could be said for lawyers, architects, plumbers, electricians, and a variety of other skilled trades. The decision to license must then be based on additional factors, namely the potential for harm and the ability of consumers to solve the information asymmetry problem in another way. The Better Business Bureau, along with sites like Angie’s List, Yelp, and a host of others, provide consumers with information beyond the traditional word-of-mouth reputation.

Licensing can also serve to keep potentially dangerous personnel away from occupations requiring access to their customers’ homes. UT Dallas' analysis of TDLR disciplinary records for electricians from August 2010 through September 2012 revealed that while only eight percent of the actions related to fraud or shoddy work, nearly 30 percent of the actions involved an applicant’s or licensee’s criminal record.⁵⁴

Electricians	Count	%
Fraud	43	3.7%
Bad Work	37	3.1%
No Work Permit	13	1.1%
Unsafe Practices	1	0.1%
		8.0% Consumer related
No License	701	59.7%
Conviction / Prison	340	28.9%
Admin / Inspection	35	3.0%
False Application	5	0.4%
Grand Total	1175	

Source: UT Dallas Study

Their review of these TDLR records also highlights a second major pillar of occupational licensing. Some licensing laws allow boards to discipline or remove professionals who become a hazard to their clients and the public at large after qualifying for a license. For example, in the “Conviction/Prison” electrician disciplinary actions noted above, the descriptions for 128 of the incidents state that the electrician’s license was “revoked upon Respondent's imprisonment in a penitentiary.”

⁵⁴ See <http://www.license.state.tx.us/cimsfo/fosearch2.asp>. Electricians were licensed by the state only in 2003. However, municipalities had required electrician licenses for years, and one of the main drivers behind HB 1487 (78th Regular Session, 2003) was to increase labor mobility by replacing up to 60 separate municipal licenses with one statewide license.

Professional boards that regulate their own profession's practitioners raise the question of whether licensing boards truly protect the public from incompetent or dangerous personnel. A number of observers have criticized such boards for being reluctant to discipline members of their own profession or to strip a person of his or her livelihood.⁵⁵ One recent study found that 55 percent of doctors who had their hospital privileges restricted or revoked for misconduct escaped any licensing actions by their respective states.⁵⁶ Although that study did not specify the exact nature of the misconduct, the report noted that roughly half of these physicians were considered an immediate threat to health or safety, were deemed incompetent or negligent, or provided substandard care.⁵⁷ Most advisory boards that serve under the umbrella board of TDLR have public members to avoid regulatory capture.

On the opposite end of the spectrum, UT Dallas found that some licensed occupations have little, if any, legitimate impact on public health or safety. Information about these practitioners is readily available, and dissatisfied customers are free to take their business elsewhere, at little harm to themselves other than perhaps some wasted money.

Texas, for instance, is one of the few states to regulate interior designers and is part of a somewhat larger number to license landscape architects. An argument can be made that incompetent practitioners in these fields do not pose a danger to public safety.⁵⁸ Complaint data for these occupations supports that argument. According to figures provided by the Texas Board of Architectural Examiners (TBAE) to UT Dallas, only four misconduct-related disciplinary actions against interior designers have been taken in the past five years (out of an average of 4,800 active licensees), and none at all have been taken against landscape architects out of approximately 1,300 active licensees.⁵⁹

UT Dallas found that other states have even less justifiable licensing requirements. Louisiana still requires a license for florists, though in 2010 the state did abolish the "demonstration exam" which was graded by existing licensed florists and had a failure rate approaching 50 percent.⁶⁰ Similarly, California licenses occupations such as upholsterers, travel guides, makeup artists, and funeral attendants.⁶¹ Indiana licensed hypnotists from 1997 until this requirement was abolished in 2010.⁶² The Indiana hypnotist statute led to an amusing unintended consequence. As word of

⁵⁵ UT Dallas Study.

⁵⁶ Sun, Lena, "Report: State boards don't always discipline doctors sanctioned by hospitals," *Washington Post*, March 16, 2011. <http://www.washingtonpost.com/wp-dyn/content/article/2011/03/16/AR2011031605966.html>. A review of the National Practitioner Data Bank from 1999 to 2004 found that roughly one-third of physicians disciplined for alcohol and drug abuse are repeat offenders, which calls into question the ultimate effectiveness of such sanctions. http://www.washingtonpost.com/wp-srv/metro/daily/graphics/doctorsChart_041005.html.

⁵⁷ Ibid.

⁵⁸ UT Dallas Study.

⁵⁹ UT Dallas' data request to the TBAE defined "misconduct" as anything other than unlicensed practice, failure to meet continuing education requirements or to pay annual dues, or other administrative-related actions.

⁶⁰ See Scott, Robert Travis, "Florist Licensing Requirement Challenge Remains Perennial," *New Orleans Times-Picayune*, March 4, 2010. http://www.nola.com/politics/index.ssf/2010/03/florist_licensing_requirement.html; Keller, Tim, "IJ Prunes Louisiana's Floral Cartel," Institute for Justice, October 2010. <http://www.ij.org/ij-prunes-louisianas-floral-cartel-2>. "A cynical mind might suggest that the floral demonstration exam's 50 percent failure rate was due to the existing license holders' desire to keep new competition out of their profession."

⁶¹ <http://licensetowork.ij.org/ca>.

⁶² <http://www.in.gov/pla/hypnotist.htm>; http://www.in.gov/pla/files/IHC.2009_EDITION.pdf.

the licensing regime spread, the state began receiving applications from people who did not live in Indiana. These individuals had no plans to move to the state, but they wanted to be able to advertise themselves in their home jurisdictions as “state licensed” and thus lend their enterprise a credibility that it did not otherwise possess.⁶³

A less straightforward case exists where it is possible that market failure has occurred, but this failure may not lead to any substantive, demonstrable harm to the public.

UT Dallas reviewed the two state agencies that administer the regulations for the greatest number of occupations in Texas. A review of complaint and disciplinary data from these agencies provided a mixed picture. They examined data for 23 occupations under the purview of the Texas Department of State Health Services (TDSHS) and another 23 under the jurisdiction of TDLR.⁶⁴

As the table below indicates, some TDLR occupations have so few licensees and so few complaints or disciplinary actions that they appear scarcely worth regulating. These include weather modification services (a legacy program from the 1960s), identity recovery service providers, loss damage waivers, and temporary common worker employers.

Profession	# Licensees FY 2012	Complaints per 100	Disciplinary Actions per 100
Cosmetology	301,832	1.33	0.86
Electricians	111,354	0.41	0.52
Air Conditioning and Refrigeration	50,398	1.48	0.67
Towing	30,937	3.77	1.93
Barbers	26,811	2.60	2.05
Legal Service Contracts	9,668	0.06	0.00
Vehicle Storage Facilities	5,786	10.58	9.35
Property Tax Professionals	3,977	1.13	0.08
Automotive Parts Recyclers	3,437	3.56	0.55
Combative Sports	3,053	2.90	1.60
Water Well Drillers & Pump Installers	2,579	2.18	0.96
Auctioneers	2,530	3.56	1.73
Property Tax Consultants	1,533	1.61	1.83
Continuing Ed Providers and Courses	1,278	0.00	0.00
Licensed Court Interpreters	544	0.28	0.12
Staff Leasing Services	363	0.83	0.28
Service Contracts (Ext Warranties)	302	40.23	2.43
Polygraph Examiners	257	1.46	0.00
Temp Common Worker Employers	108	0.00	0.00
Loss Damage Waivers (Rent to Own)	57	0.00	0.00
Vehicle Protection Products	45	5.00	1.48
Weather Modification Services	18	0.00	0.00
Identity Recovery Service Providers	2	0.00	0.00
<hr/>			
	Average	3.61	1.15
	Median	1.46	0.55

Source: UT Dallas Study

⁶³ Walker, Jesse, “Trance Licensing,” *Reason Foundation*, December 4, 2009. <http://reason.com/blog/2009/12/04/trance-licensing>.

⁶⁴ TDLR oversees 27 occupational fields, but we excluded Architectural Barriers, Boilers, and Elevators and Industrialized Housing and Buildings since these categories involve firms, rather than individuals, in most cases.

SUNRISE CONCEPT

States such as Colorado, Arizona, and Washington have established a "sunrise" process to vet new occupational regulation proposals. Under this process, sunrise commissions open such proposals to greater public scrutiny and make it more difficult for special interests to slip self-interested, protective measures through the legislative process.

In Hawaii, the Office of the Auditor is charged with sunrise analyses of proposed regulatory programs.⁶⁵ Before a new professional and occupational licensing program can be enacted, the statutes require that the measure be analyzed by the Office of the Auditor as to its probable effects⁶⁶ as measured against the legislative mandate that the:

“Regulation and licensing of professions and vocations shall be undertaken only where reasonably necessary to protect the health, safety, or welfare of consumers of the services; the purpose of regulation shall be the protection of the public welfare and not that of the regulated profession or vocation.”⁶⁷

Georgia requires that legislation intended to newly regulate a profession or business undergo a review by the state’s Occupational Regulation Review Council.⁶⁸

RECOMMENDATIONS

1. In order to avoid unnecessary burdens on Texans seeking to exercise their fundamental right to work and to inhibit anti-competitive regulation of occupations, the Texas Legislature should implement a "sunrise" process in Texas. The sunrise process should require that a report be submitted to the Legislature before legislation is filed to regulate a certain profession. The report would identify the program that is being considered for regulation, study the proposed regulation, and make a recommendation to the Legislature regarding the necessity for legislation to ensure the protection of the public welfare, health and safety. In order to maximize public input and involvement, regional hearings should be part of the sunrise process.
2. The Legislature should abolish the following TDLR programs: identity recovery service contract providers, weather modification, loss damage waivers, and temporary common worker providers.
3. In an effort to provide greater transparency to the public and occupational licensees, the Legislature should authorize TDLR to post an electronic notice via website or social media of any proposed legislation that may affect the programs they oversee.

⁶⁵ See Hawaii Revised Statutes, §26H.

⁶⁶ <http://www.state.hi.us/auditor/Reports/2008/08-04.pdf>, p. 2.

⁶⁷ Hawaii Revised Statutes §26H-2(1).

⁶⁸ See O.C.G.A. §43-1A.

3. Conduct a broad review of the Texas homeowners insurance market and make recommendations to improve transparency and consumer education, ensure fair practices, and lower rates. Specifically, consider the following:

- (1) Compare Texas' homeowners insurance premiums with those of other states and identify the factors underlying Texas' premium levels and recommend steps that the Legislature may take to reduce homeowners rates, if appropriate;
- (2) Study strategies that increase awareness of state insurance resources to help consumers compare rates and coverage among various insurance providers;
- (3) Study the relationship between insurance premiums and construction costs, especially as associated with recovery from natural disasters, to ensure that consumers are treated fairly;
- (4) Review the use by insurers, in rating and underwriting decisions, of customer inquiries regarding the general terms or conditions of, or coverage offered under, an insurance policy.

BACKGROUND

Texas homes face an array of potentially destructive weather patterns, from hurricanes along the Gulf Coast, to tornados and hailstorms in North Texas and the Panhandle, to wildfires throughout the state. As a result, Texans have seen some of the highest homeowners insurance premiums in the country. There are steps that can be taken by the Legislature to address this problem, although there does not appear to be a simple solution, nor one that can provide immediate relief for homeowners.

An insurance "rate" is a ratio that represents the cost to a customer for the purchase of \$1,000 of insurance coverage. Insurance "premium" is the amount an insurance customer actually pays once any adjustment is made to the rate for deductible amounts, credits, etc. A homeowners insurance policy is generally designed to cover the amount it would cost to completely rebuild the insured structure.

Texas Weather

According to the National Association of Insurance Commissioners' report on 2009 average homeowners insurance premiums (the most current data available), Texas has one of the highest average premiums in the country,⁶⁹ although comparison of homeowners insurance rates between Texas and other states is difficult as certain cost factors, such as windstorm coverage, are not consistently included in each state's cost data.⁷⁰

⁶⁹ Report to the Senate Business and Commerce Committee on Homeowners Premiums and Rates in Texas prepared by the Texas Department of Insurance - July 10, 2012, pg. 4.

⁷⁰ Ibid.

A number of factors contribute to this phenomenon, with the major cause being Texas' severe weather. Texas had more than 1,500 reports of severe weather in 2011 – the third highest in the nation.⁷¹ Over the past six decades, the state has had 331 federal disaster declarations, including major disaster declarations, emergency declarations, and fire management assistance declarations recorded by the Federal Emergency Management Agency - more than any other state in the nation.⁷² Texas surpassed California, which had the second highest number of declarations at 208, by almost 60 percent.⁷³ A recent study found that, unlike other high loss states such as Louisiana and Florida, Texas losses were largely "due to common thunderstorms and tornados, with the state enduring major wildfire loss, one tropical storm, four hurricanes, seven winter storms, and 53 severe weather incidents during the ten year study period."⁷⁴

Texas Rates

Homeowners rates are comprised of three main components: losses and loss adjusting expenses, which generally account for approximately 60 percent of the rate; underwriting expenses, such as agents' commissions and overhead, which generally account for 20 percent of the rate; and underwriting profits and reinsurance costs, which generally capture the remaining 20 percent.⁷⁵ These cost components, when combined, represent the average total annual rate charged for a homeowners policy in Texas. Non-hurricane loss and loss-adjusting expenses, which includes repair costs, increased from \$746 per policy in 2003 to \$961 in 2012. Underwriting expenses increase with the amount of the average premium and for Texas' top insurers, underwriting expenses increased from \$300 per policy in 2003 to \$444 in 2012. Underwriting profit and reinsurance costs, which are affected by the available level of investment income a lender is able to bring in, increased from \$62 in 2003 to \$200 in 2012.⁷⁶

In insurance terminology, a catastrophe loss is caused when a single event results in a large loss of insured value. A direct relationship exists between claim levels and insurance rates, and catastrophe claims can have a particularly large impact on rates because of the large number and severity of claims that may result. Over the last five years, nearly 60 percent of all homeowners losses paid in Texas have gone to cover insured catastrophe claims.⁷⁷ From 2006 through 2010, wind and hail damage accounted for the largest portion of homeowners premiums, totaling an average of 64.2 percent of the total loss cost per housing unit.⁷⁸ From 2002 to 2008, claim severities (i.e., average claim costs) from natural disasters were in the \$4,000 to \$7,000 range. Over the last few years, these costs have soared, now ranging from about \$8,000 to \$9,100.⁷⁹

In 2008 and 2009, Texas had the highest insured catastrophe losses in the nation, exceeding a total of \$14.1 billion.⁸⁰ A more recent example of this phenomenon was a single hailstorm in

⁷¹ Testimony of Joe Woods, Vice President - State Government Relations, Property Casualty Insurers Association of America, before the Senate Committee on Business and Commerce, July 10, 2012.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Testimony of Beaman Floyd, Executive Director, Texas Coalition for Affordable Insurance Solutions, before the Senate Committee on Business and Commerce, July 10, 2012.

⁷⁵ Report to the Senate Business and Commerce Committee on Homeowners Premiums and Rates in Texas prepared by the Texas Department of Insurance - July 10, 2012. pg. 39.

⁷⁶ Ibid, at 27.

⁷⁷ Testimony of Joe Woods, Vice President - State Government Relations, Property Casualty Insurers Association of America, before the Senate Committee on Business and Commerce, July 10, 2012.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

Dallas on June 13, 2012 that caused losses in excess of \$1 billion, which is more than 20 percent of Illinois' ten year total.⁸¹

Reinsurance

Reinsurance is purchased by insurers to spread risks that are geographically concentrated. The cost of reinsurance is included as a component of the rate paid by homeowners for their insurance. Hurricanes, unlike tornadoes and hailstorms, are rare but potentially extremely destructive events whose losses are difficult to estimate based on their infrequency. Following a number of recent hurricane events, some vendors that supply hurricane modeling services have significantly increased their hurricane loss estimates. These changes are based on information gained and lessons learned by the model vendors after evaluating damage from each new hurricane and have led insurers to increase their investments in reinsurance.⁸²

Risk Management Solutions (RMS) is one of the major catastrophe modeling firms. As an example of the impact of changes made by vendors to the hurricane models, RMS' hurricane model version 11.0 produces 76 percent higher estimates overall for hurricane costs in residential property than the previous version. One particular insurer's indication would increase about nine percentage points if the insurer were to use RMS' version 11.0, assuming a 76 percent higher estimate overall for hurricane losses.⁸³

In addition, recent catastrophes and their impact on insurer solvency have caused regulators and companies that rate insurers for soundness, such as Standard & Poor's, to sharpen their focus on the adequacy of an insurer's planning for catastrophic events. Many of the same factors that cause primary insurers to increase their projection of catastrophe losses, such as changes to catastrophe models and an increased awareness of exposure, apply equally to their reinsurers.⁸⁴

As a result, many insurers have increased their levels of reinsurance, and the cost of reinsurance has escalated. In the past, insurers that were subsidiaries of larger parent companies often could obtain reinsurance from their parent at below-market costs. Insurers that essentially reinsure their operations only with an affiliate insurer have become more aggressive in demanding the same return for retaining the risk that a reinsurer would for assuming the risk.⁸⁵

Underwriting

Underwriting is essentially the process of identifying the risks associated with issuing a given insurance policy. In addition to being higher than the countrywide average, the amounts paid for underwriting expenses in Texas have increased over time. From 2000 to 2011, the average commission to agents increased 61 percent; the average non-commission-based expense related to generating business, known as "other acquisition expense," increased 41 percent; the average general expense increased 21 percent; and the average premium taxes, licenses, and fees expense increased 75 percent. This is compared to a 61 percent increase in the average premium over the same period. Part of this increase is due to certain expenses being a percent of the premium,

⁸¹ Testimony of Beaman Floyd, Executive Director, Texas Coalition for Affordable Insurance Solutions, before the Senate Committee on Business and Commerce, July 10, 2012; Insurance Journal, June 25, 2012.

⁸² Report to the Senate Business and Commerce Committee on Homeowners Premiums and Rates in Texas prepared by the Texas Department of Insurance - July 10, 2012. pg. 32.

⁸³ Ibid.

⁸⁴ Ibid, at 33.

⁸⁵ Ibid.

such as on agents' commissions. As the average premium increases, expenses that are a percent of the premium will automatically increase by the same amount.⁸⁶

The underwriting profit reflects a margin in the rate that, together with the investment income, insurers are able to earn, providing a reasonable return to the insurer considering the risks involved. In recent years, insurers have increased the underwriting profit provision used to justify rates in their rate filings from an average of five percent to an average of eleven percent.⁸⁷ As interest rates decline, insurers have less opportunity to earn a return from investing premium dollars and are more inclined to seek a larger underwriting profit.⁸⁸

Expense Ratios

An insurer's expense ratio may be determined by dividing the company's premiums by its expenses. Expenses include commissions paid, other acquisition expenses, taxes, licenses and fees, and general expenses. Expense ratios can be informative about a company's relative financial position. In some instances increases in expense ratios are logical and unavoidable, as in the aftermath of a catastrophe where insurers expend tremendous resources in contracting, overtime, and specialty services to handle severe loss and high claims volume. However, some spikes, particularly in expenses associated with claims disputes, could involve the artificial generation of disputes, recalcitrance by a company or companies, or a basic lack of clarity in some facet of the claims process. A certain amount of dispute in the insurance claims system is inevitable, given the duties of insurers to stay within the terms of their contracts with customers, fact disputes, and human fallibility. Nevertheless, insurers, regulators, and policymakers should continue to examine broadly aberrant instances and make public policy improvements where possible.⁸⁹

Fraud

Another cost-driver seen in homeowners' rates is fraud, such as staging a burglary and falsifying the related theft or property damage report; overstating the value of stolen items or being dishonest about the extent of damage; intentionally damaging property to make a claim; asking a repairman to increase the amount of an estimate or charge; or fabricating repair bills, receipts or other supporting evidence, often in collusion with a disreputable contractor, plumber, repairman, or insurance adjuster.⁹⁰ According to the Insurance Information Institute, fraudulent property and casualty claims on homeowners insurance policies cost insurers nationwide about \$30 billion annually.⁹¹

⁸⁶ Ibid, at 34.

⁸⁷ Ibid, at 37.

⁸⁸ Ibid.

⁸⁹ Testimony of Beaman Floyd, Executive Director, Texas Coalition for Affordable Insurance Solutions, before the Senate Committee on Business and Commerce, July 10, 2012.

⁹⁰ Testimony of Joe Woods, Vice President - State Government Relations, Property Casualty Insurers Association of America, before the Senate Committee on Business and Commerce, July 10, 2012.

⁹¹ Ibid.

Loss Ratio

Although rates in Texas are high, the level of losses appears to be equally high. A combined loss ratio is the sum of direct claims payments and direct insurance expenses divided by premiums. This value is expressed as a percentage and a combined loss ratio of 100 percent would mean that an insurer paid out exactly the same amount of money in claims and related expenses that it took in as premium in a given year.⁹²

The previous five, ten, and twenty year average industry loss ratios are 109.1, 102, and 106.8 percent, respectively.⁹³ These increasing losses have resulted in homeowners premiums paid by policy holders in Texas being spent exclusively on claims expenses, insurance related expenses, and loss adjustment expenses, leaving no profit margin for insurers. From the premium to the claim, there is no significant pooling of money in the insurance process that could be accessed by a public policy requirement to lower rates.⁹⁴

Rate Improvements

Although the average amount of insurance purchased by policyholders in Texas has increased every year since 2000, the rate of increase has declined in recent years as compared to previous years. Between 2009 and 2011, an average coverage purchased under a homeowners policy was \$208,000, \$212,000 and \$215,000, respectively; while from 2000 to 2003 the cost for equivalent coverage was \$128,000, \$136,000, \$142,000 and \$151,000, respectively.⁹⁵

The average premium per \$1,000 of coverage in Texas has also decreased 4 percent overall from 2000 to 2011, whereas rates have increased approximately five percent annually on average.⁹⁶ Texas' rate per \$1,000 of coverage has dropped almost 22 percent; it is now lower than what it was at the beginning of the decade.⁹⁷

(1) Compare Texas' homeowners insurance premiums with those of other states and identify the factors underlying Texas' premium levels and recommend steps that the Legislature may take to reduce homeowners rates, if appropriate.

The Texas Department of Insurance (TDI) analyzed the average premiums for coverage amounts in the range of \$175,000 to \$199,999 over time. Although it was found that Texas has one of the highest average premiums in this coverage amount range for 2009, the rate of growth in average premium from 2005 to 2009 is lower in Texas than the corresponding growth in many other

⁹² Testimony of Beaman Floyd, Executive Director, Texas Coalition for Affordable Insurance Solutions, before the Senate Committee on Business and Commerce, July 10, 2012.

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Report to the Senate Business and Commerce Committee on Homeowners Premiums and Rates in Texas prepared by the Texas Department of Insurance - July 10, 2012. pg. 23.

⁹⁶ Ibid, at 24.

⁹⁷ Testimony of Joe Woods, Vice President - State Government Relations, Property Casualty Insurers Association of America, before the Senate Committee on Business and Commerce, July 10, 2012.

states. Texas' increase in average premiums is less than the nationwide increase and the increase in 35 other states.⁹⁸

TDI analyzed a number of possible factors that could contribute to Texas' high homeowners rates by considering the effect of those factors in other states. TDI made the following findings based on its analysis:

- The average premium for states with an elected commissioner is higher than that of states with an appointed commissioner, but the type of commissioner does not appear to be a predictor of premium levels.⁹⁹
- TDI compared states using the three most common types of rating structures: prior approval or flex rating; file-and-use; and use-and file or no file, and found that average premiums were very similar across all three types of rating laws. Therefore, the type of rating law is not a predictor of premium levels.¹⁰⁰
- States have varying restrictions on insurers' underwriting practices, including prohibitions against unfair discrimination and restrictions on an insurer's ability to decline to write a policy. The average premium for states with the least restrictive underwriting is less than states with the most restrictive underwriting; therefore, the level of underwriting restrictions is not a predictor of premium levels.¹⁰¹
- Some states allow insurers to non-renew or cancel a policy for any reason, while other states have restrictions on when insurers may non-renew or cancel a policy. The average premiums across the range of nonrenewal and cancellation restrictions are very similar, and the ease of nonrenewal and cancellation of a policy is not a predictor of premium levels.¹⁰²
- The average premium for mid-sized states with a medium number of policies is higher than that of smaller states with the lowest and larger states with the highest number of policies. However, the size of a state is not a predictor of premium levels.¹⁰³
- A combined ratio may be determined by adding a company's loss and expense ratios. There appears to be a relationship between combined ratios and premiums. States with high premiums tend to have high ten-year combined ratios. However, the combined ratio is not a predictor of premium levels.¹⁰⁴
- The average premium for states with the highest average losses is substantially higher than the average for the rest of the states and there appears to be a strong correlation

⁹⁸ Report to the Senate Business and Commerce Committee on Homeowners Premiums and Rates in Texas prepared by the Texas Department of Insurance - July 10, 2012. pg. 7.

⁹⁹ Ibid, at 9.

¹⁰⁰ Ibid, at 10.

¹⁰¹ Ibid, at 11.

¹⁰² Ibid, at 12.

¹⁰³ Ibid, at 13.

¹⁰⁴ Ibid, at 15.

between the average loss per policy and premium levels. TDI's analysis confirms that average loss per policy is a strong predictor of premium levels.¹⁰⁵

- The average premium for states exposed to two or more catastrophe-type perils is substantially higher than for states with zero or one catastrophe-type peril, and the number of catastrophe-type perils appears to be a strong predictor of premium levels. TDI's analysis confirms that exposure to catastrophe-type perils is a strong predictor of premium levels.¹⁰⁶

TDI also found that, although many factors influence homeowners' rates nationally, by far the most influential factor is average loss per claim. TDI found that there is a strong correlation between the average loss per policy and premium levels,¹⁰⁷ and as a result, the average premium for states with the highest average losses is substantially higher than the average for the rest of the states.¹⁰⁸

Possible Options to Protect Consumers

The high rates seen in Texas are undoubtedly burdensome on consumers, and those consumers paying high insurances rates should not be prevented, either directly or indirectly, from making reasonable claims on their policies. Other states have addressed this issue in different ways. Maryland now requires homeowners insurance companies to provide applicants and insured customers with notices that homeowner's policy may be cancelled or denied renewal on the basis of the number of claims made by a policyholder within the preceding three-year period due to weather-related claims.¹⁰⁹ In May of 2009, Maryland enacted legislation prohibiting an insurer under a homeowners policy from classifying or maintaining an insured for more than three years in a classification that entails a higher premium due to a specific claim.¹¹⁰ In May of 2012, Rhode Island enacted legislation prohibiting insurers from refusing to insure, canceling, non-renewing or surcharging an insurance policy covering damages to personal lines residential property based solely upon prior claim experience for property damage claims against the insured property while under the ownership of someone other than the current insured unless the risk from which the claim originated has not been mitigated.¹¹¹ Similar protective steps, if taken in Texas, could help ensure that Texas consumers are not punished solely for making a claim on their homeowners insurance policy.

Wind and Hailstorm Coverage

Wind and hailstorm risks along the Texas Gulf Coast are significant and policymakers have allowed insurers within the fourteen coastal counties and a portion of Harris County to sever wind and hailstorm coverage from standard homeowners policies they offer. A quasi-governmental entity, known as the Texas Windstorm Insurance Association (TWIA), provides wind and hailstorm coverage to many residents of these counties. TWIA's current funding structure relies on multiple funding mechanisms, which include the possibility of surcharges against homeowners policies throughout the state under certain circumstances. Alternatives to

¹⁰⁵ Ibid, at 14.

¹⁰⁶ Ibid, at 16.

¹⁰⁷ Ibid, at 14.

¹⁰⁸ Ibid.

¹⁰⁹ Testimony of Heather Morton, Program Principal, National Conference of State Legislatures - July 10, 2012.

¹¹⁰ Ibid.

¹¹¹ Ibid.

TWIA's current funding structure have been considered in hearings held by this committee and others. Regardless of how policymakers decide to address TWIA's funding issues during the upcoming session, the existence or lack of a reliable market of last resort for homeowners insurance along the coast will have repercussions throughout this state.

CONCLUSION

Although a number of factors contribute to Texas' high homeowners insurance rates, this state's extreme weather patterns constitute the largest cost driver. The Legislature cannot control the weather, but there are steps that may be taken to mitigate against the types of losses that have led to increased rates. Specifically, allowing for a competitive insurance market that makes underwriting decisions to manage overall risk and incentivizes risk mitigation should be the focus of policymakers moving forward. Also, limitations may be placed on certain underwriting and premium-setting practices to ensure that policyholders are not unduly punished for making a claim on their policy.

RECOMMENDATIONS

1. The Texas Department of Insurance (TDI) should review its policies and statutory authority to investigate sources and levels of reinsurance purchased by private insurers. Should TDI determine that it does not have sufficient authority to ensure that any reinsurance coverage is necessary and proper with respect to rates charged to consumers, particularly if purchased by an affiliate company, TDI should notify the Committee so that appropriate legislative action may be taken.
2. TDI should continue to study instances with high expense ratios, claims dispute levels, or possible claims fraud. TDI should periodically report to the Committee with a summary of its findings in these areas.
3. The issue of windstorm insurance coverage in Texas is a statewide issue because of the important role of the coast in the economic vitality of the state. This importance should be considered as reforms are proposed and enacted to windstorm insurance coverage while deterring negative effects to communities outside of the TWIA territory.
4. The Legislature should define insurance fraud as a specific crime and the Legislature should request that TDI investigate and make recommendations regarding the creation of an insurance fraud unit within the insurance department with the power to investigate and punish perpetrators.
5. The Legislature or TDI as appropriate should ensure that models used by insurers in estimating risks posed by both catastrophic and non-catastrophic events be evaluated by TDI as part of its rate review.

(2) Study strategies that increase awareness of state insurance resources to help consumers compare rates and coverage among various insurance providers.

Insurance agreements are complicated and, as a result, it is difficult for many consumers to easily shop for the policy that best meets their individual needs. However, informed and engaged consumers are critical for a competitive insurance market.

To address this concern, TDI has used a number of strategies to raise awareness of its services and resources designed to help Texans shop for insurance, including:

- advertising a number of consumer websites through print, radio, TV, and the Internet;
- maintaining two interactive websites, HelpInsure.com and TexasHealthOptions.com, which provide tools for Texans shopping for auto, home, and health insurance;
- engaging in statewide outreach at events ranging from neighborhood association meetings to large-scale home and garden and automobile shows by distributing information to consumers in-person;
- partnering with entities such as tax assessor collectors and counties throughout the state to distribute publications and conduct outreach; and
- providing educational materials, including publications, fact sheets, consumer alerts, and news releases.¹¹²

RECOMMENDATIONS

1. The Legislature should ensure that consumers are offered a standard policy option for coverage and comparison shopping.
2. The Legislature, TDI, OPIC, and insurance providers should continue to raise public awareness of comparison shopping resources, including Helpinsure.com, by printing information prominently on all materials delivered by the carriers to policyholders or the public. Public service announcements should be leveraged to raise the profile of these resources.

(3) Study the relationship between premiums and construction costs, especially as associated with recovery from natural disasters, to ensure that consumers are treated fairly.

Data suggests that homes and businesses built to higher standards are more resistant to minor and major weather events, thus reducing the risk of loss and potentially the rate charged by an insurer of that structure. Considering the wide range of natural disasters that Texas faces, including tornados, hailstorms, windstorms, earthquakes, and wildfires, stringent building

¹¹² Testimony of Eleanor Kitzman, Commissioner, Texas Department of Insurance, before the Senate Committee on Business and Commerce, July 10, 2012.

code standards and their consistent enforcement could have a positive impact on homeowners insurance costs throughout the state.

All homes in Texas built within municipalities must meet the nationally accepted International Residential Code (IRC).¹¹³ Since 2009, Texas counties have had authority to require that all homes be built to this code and to mandate that builders obtain independent third-party inspections to ensure homes are built to the IRC standards, which include stringent windstorm provisions along the Texas coast.¹¹⁴ However, some have questioned the consistency of enforcement of these standards outside of municipalities.

A recent study by TWIA found that newer, up-to-date building codes helped prevent property damage during Hurricane Rita and that homes built to the current codes at the time Hurricane Rita occurred resulted in far fewer claims, with the average paid loss for those homes at 40 to 50 percent less than homes not built to the current codes.¹¹⁵ In addition, according to a December 2008 Federal Emergency Management Agency's report following Hurricane Ike, the morning after the storm, homes built under the older building standards were devastated while modern homes built to the 130 mph standard of the IRC were still standing.¹¹⁶

Underlying repair costs can be a significant driver of insurance claim costs. In recent years, there has been a sharp increase in material costs for some types of building materials that are based on oil products, such as asphalt shingles (a nearly 50 percent increase in cost between 2007 and 2011).¹¹⁷ Construction costs to rebuild damaged properties influenced by the cost of materials and plumbing, and electrical and mechanical work have gone up steadily over time throughout the entire country – increasing 32.6 percent from 2000 to 2009.¹¹⁸

Uniform enforcement of strong building standards may not have an immediate impact on overall rates, but over the long-term it is one of the most effective steps the Legislature can take to protect Texans against future risk, loss, and higher premiums.

RECOMMENDATIONS

1. The Legislature, TDI, and TDLR should monitor costs, benefits, and experience of other states enacting licensing and regulation of roofers.
2. The Legislature and local governments should improve enforcement of building codes.
3. TDI should investigate requiring premium credits for consumers using impact-resistant roofing materials.

¹¹³ Testimony of Ned Munoz, General Counsel, Texas Association of Builders, before the Senate Committee on Business and Commerce, July 10, 2012.

¹¹⁴ Ibid.

¹¹⁵ Texas Windstorm Insurance Association Press Release "Building Codes Work During Texas Hurricanes, Study Reveals," January 25, 2007.

¹¹⁶ Testimony of Ned Munoz, General Counsel, Texas Association of Builders, before the Senate Committee on Business and Commerce, July 10, 2012.

¹¹⁷ Report to the Senate Business and Commerce Committee on Homeowners Premiums and Rates in Texas prepared by the Texas Department of Insurance - July 10, 2012, pg. 31.

¹¹⁸ Testimony of Joe Woods, Vice President - State Government Relations, Property Casualty Insurers Association of America, before the Senate Committee on Business and Commerce, July 10, 2012.

(4) Review the use by insurers, in rating and underwriting decisions, of customer inquiries regarding the general terms or conditions of, or coverage offered under, an insurance policy.

Section 551.113 of the Texas Insurance Code prohibits an insurer from considering a customer inquiry as a basis for declination of insurance but does not address the use of that information in rating and other underwriting decisions. Concern has been raised that information collected by an insurance company when one of its policyholders makes an inquiry relating to the policyholder's policy may be used against the policyholder in setting rates, premiums or deductibles.

In response, TDI has surveyed a number of insurers regarding their use of customer inquiries. The survey questions focused on how insurers handle customer inquiries, how inquiries may result in opening of a claim, and how inquiries might affect the rating and underwriting of a homeowners policy.¹¹⁹

Three of the insurers surveyed stated that they may establish a record in their system that would be attached to the customer's account if that customer has questions about claims, if the inquiry uncovers a situation that might result in a claim, or if the customer confirms a loss has occurred. In these instances, TDI's concern is that an insurer might open a claim based on the customer inquiry and not based on the customer's request to open a claim.

Two of the insurer groups surveyed use information obtained from customer inquiries to determine a policyholder's rate or premium if the information relates to a factor included in the insurer's rating plan or results in the need for additional coverage. For example, inquiries resulting in the need for additional coverage or a change in construction classification (frame vs. brick) because of a property remodel or addition may result in a premium increase.

Three insurer groups use information obtained from customer inquiries in making underwriting decisions. Information related to eligibility, prior damage, or known defects may be considered during renewal underwriting. For example, an insurer that learns about a leaking roof may not renew a policy if the insured has not made repairs.¹²⁰

Consumers should feel free to contact their insurance carriers with questions and concerns, while carriers have a responsibility to ensure that rates are not inflated by issues or losses that come to their attention.

RECOMMENDATION

1. The Legislature should revise Texas law to disallow insurers from refusing to issue, refusing to renew, adjusting rates for, or cancelling a homeowners policy based on any consumer inquiry.

¹¹⁹ Testimony of Eleanor Kitzman, Commissioner, Texas Department of Insurance, before the Senate Committee on Business and Commerce, July 10, 2012.

¹²⁰ Ibid.

4. Study the relationship between city governments and municipally-owned utilities, including any duplicative or redundant functions, the amounts and justifications required for transfer payments between the entities, and the benefits and disadvantages of alternative governance structures.

BACKGROUND

Municipally-Owned Utilities (MOUs) are electric utilities that own transmission infrastructure (poles and wires) and often power plants. The Electric Reliability Council of Texas (ERCOT) manages the flow of electric power to 23 million Texas customers - representing 85 percent of the state's electric load. ERCOT's members include consumers, cooperatives, generators, power marketers, retail electric providers, investor-owned electric utilities (transmission and distribution providers), and municipal-owned electric utilities. Within the ERCOT region, there are 72 MOUs serving 4.1 million Texans, approximately 15 percent of the state's electrical needs. MOUs and electric cooperatives had the choice to opt in to the deregulated retail electric market in 1999, but most did not. Municipally-owned utilities range in size from those that serve major metropolitan areas to those that serve small rural communities. Specifically, larger MOUs like Austin Energy and CPS Energy of San Antonio, retail greater than 10 million megawatt hours (MWh) a year. Mid-sized MOUs range from retail sales of less than three million MWh a year and greater than 500,000 MWh a year and include Brownsville Public Utility Board, Denton Municipal Electric, Garland Power & Light, Lubbock, and New Braunfels Utilities. Smaller MOUs with less than 500,000 MWh a year are numerous, (approximately 60 systems) and include Boerne, Floresville, Floydada, Seguin, and Weimar.¹²¹

MOUs currently use a separate model of local control for governance of the utilities. Specifically, locally elected officials, city councils, or citizen boards accountable to the ratepayers are the typical methods. In turn, MOUs experience limited regulation by the Public Utility Commission of Texas (PUC). PUC oversight is limited to MOUs' wholesale transmission rates, compliance with ERCOT wholesale market rules, and appeal of an MOU rate determination by customers located outside of the municipal boundaries.¹²²

In addition to transmission and distribution infrastructure and power plants, some MOUs own retail operations. Furthermore, MOUs are financed by utility revenues. MOUs are not-for-profit entities, but do generate profit margins through utility revenues. These revenue proceeds stay with the municipality, with a portion going to general municipal services like public safety, roads, parks, libraries, and community services.¹²³ Rates are set by local authorities and are currently lower or comparable to average competitive retail rates.¹²⁴

¹²¹ Testimony of Mark Zion, Executive Director, Texas Public Power Association, before the Senate Committee on Business and Commerce, July 10, 2012.

¹²² Ibid.

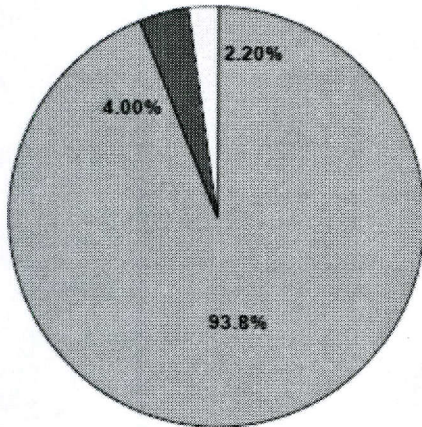
¹²³ Ibid.

¹²⁴ Ibid.

TESTIMONY

Payments, Contributions and General Fund Transfers

MOUs provide revenues to their communities in the form of payments and contributions to local governments. Payments come in several forms, variously calculated and referred to as general fund transfers, returns on investment, and/or franchise fees. Contributions can also be “in kind” as reduced costs or free services to the city, such as street lighting, and electric service/maintenance at city buildings. Other contributions can take the form of direct MOU funding of specific community activities like economic development.¹²⁵



Payments (transfers, ROI, franchise)
 Contributions In Kind (streetlighting, etc.)
 Contributions to Community Activities (economic dev., etc.)

According to a 2012 Texas Public Power Association survey of Texas MOUs, the median MOU payment and contribution to local government was 9.5 percent. For large MOUs, the median was 12.3 percent, 7.9 percent for mid-sized, and 12.1 percent for small. Typically, the types of local government revenue generated by MOU operations can be classified into 3 categories: payments, in kind services, and contributions to community activities. Most local government revenue streams are in the forms of payments; whereas, in kind or other contributions are small in comparison (see chart.) Community

activities are comprised of economic development, youth and elderly programs, as well as other civic endeavors.¹²⁶

Formal policies specifying how payments are calculated are more common in large and mid-sized systems than in small systems. In fact, a significant majority of large and mid-sized systems calculate payments based on some percentage of revenue. Additional methods include calculations based on kilowatt hour (kWh) or returns on investment or franchise fees. Other methods, like flat amounts and year-to-year determinations, are more common with smaller systems; however, some MOUs use a combination of methods.

Transparency and Functions

MOU payments and contributions to local government are set and regularly reviewed through a local process; however, transparency processes vary throughout MOU systems. Some maintain an annual city budget process and utility budget process, which can include public notices, public hearings, consideration of the governing body, and web/media information. Some include public presentations to city councils, utility boards, and advisory boards, or annual audits of the utility, its financial statements, and its monthly financial reports. Lastly, many systems communicate with their customers through newsletters, bill stuffers, and a utility website.¹²⁷

¹²⁵ Testimony of Mark Zion, Executive Director, Texas Public Power Association, before the Senate Committee on Business and Commerce, July 10, 2012.

¹²⁶ Ibid.

¹²⁷ Ibid.

Some MOU and general city functions do overlap like administrative, fleet, financial, and personnel activities. MOUs claim that shared functions are allocated on a costs basis, with apportioned costs accounted for on a relative basis by the MOU and general government departments, respectively. However, some functions are separate and analogous, but are not considered redundant by the MOUs. Larger MOUs have internal and utility-specific functions like billing, accounting, and information technology. Since these functions are performed by and for the utility, the city does not replicate these efforts for the utility on the same scale.¹²⁸

Governance Structures

Texas MOUs generally follow three types of governance models: city council governance, a legacy governing board, or a contemporary governing board. In total, most MOUs, 68 percent, are governed by a city council of locally elected officials. The other 32 percent chose a type of board governance. However, when compared by system size among large and mid-sized MOUs, city council and board governance are evenly chosen; but, this figure does not account for small MOU governance. Differences in governing structures include term limits, paid service, and salary amount. MOU board members typically serve longer terms with an average of 3.6 years, compared to city councils terms which average 2.4 years. Additionally, board members are more likely to be subject to term limits. Regarding paid service, both council and board governance members are equally likely to be paid. Lastly, the median compensation for MOU council members is \$1,025 per year and \$300 per year for board members.¹²⁹

City council governed MOUs enjoy strong authority and can set rates and utility budgets, issue bonds, exercise eminent domain, enter into purchase power agreements, and authorize utility investments. City Councils also have the authority to hire and set the salaries of key MOU executives. Interestingly, even in systems with board governed MOUs, city councils usually retain rate setting, bond issuance, and eminent domain authorities. Consequently, board governed MOUs exercise authority over setting the utility budget, determining MOU executives' salaries, entering into power purchase agreements, and approving utility investments.¹³⁰

Ratepayers Outside the City Limits

Since service territories were drawn by the PUC in the 1970s and were based mainly on where utility infrastructure was located at that time, most MOUs serve outside city ratepayers. These service territories were drawn irrespective of city limits and county lines; in fact, such demarcations were minor considerations in the process. Only the PUC can change service territory boundaries; and this rarely occurs, usually by mutual agreement between two adjacent utilities. Actually, some MOUs serve multiple suburban cities. Of those that do, 88 percent pay a franchise fee to suburban cities averaging 3.4 percent. All but one fund suburban franchise fees on a system-wide basis.¹³¹

¹²⁸ Testimony of Mark Zion, Executive Director, Texas Public Power Association, before the Senate Committee on Business and Commerce, July 10, 2012.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Ibid.

Outside ratepayers are charged the same rate as customers inside the city, and both parties' rates are dedicated to payments like general fund transfers and returns on investments.¹³² For example, Austin Energy serves approximately 55,000 out of town customers, but these customers cannot implement voting representation of their interests since they cannot vote on the Austin city council - the body responsible for setting rates. In addition, these outside ratepayers do not have the option to choose an alternative utility provider because MOUs did not join electric competition. If an MOU dedicates its general fund transfer or other revenue to civic and non-utility specific activities that occur inside the city only, such as parades, music festivals, and jogging trails, many outside ratepayers argue they never realize those benefits.¹³³ Nor do they have the voting opportunity to reject these expenditures. One outside ratepayer of Austin Energy estimates that outside ratepayers pay more than \$24 million a year for services in a city in which they do not live. However, some argue that outside ratepayers do see benefits of the municipal general transfer when they attend the city's cultural activities or use the city's parks, libraries, hospitals, and other social services.¹³⁴ Public Citizen of Texas claims that 57 percent of outside ratepayers served by Austin Energy work in Austin and use the streets and other services daily.¹³⁵ Even though outside ratepayers do not have an opportunity to vote for the governing body of the utility, MOUs argue that outside ratepayers have the same level of access to the public process as city ratepayers. Additionally, they cite that two out of the three MOUs with a board structure that can include outside city ratepayers actually do. Five MOUs have outside ratepayers in an advisory role participating in utility advisory commissions. Furthermore, state law provides that upon appeal, outside ratepayers can petition the PUC to set their rates instead of the MOU.¹³⁶

Austin Energy

As of July 2012, Austin Energy, the MOU serving Austin, Texas, and surrounding areas, transferred 9.1 percent of its gross revenue to the City General Fund, totaling \$105 million in 2011. During this time, the utility was in the midst of a two-year rate restructuring process. This consisted of approximately five public meetings of the Electric Utility Commission - an advisory board to the City Council. The process also included three public hearings for testimony to City Council, a six month long Public Involvement Committee of 14 members from different customer classes and 14 City Council work sessions. The goal of these meetings was to examine the Austin Energy governance structure and revise the financial policies between the electric utility and the city. Ultimately, the City Council approved a new transfer rate of 12 percent of non-fuel revenue to begin in the fall of 2012. The previous rate of nine percent was based on gross revenue, which included both fuel and non-fuel costs. In addition, to maintain a stable transition to the new rate structure, the General Fund transfer was frozen at the 2011 amount of \$105 million until the newly approved 12 percent rate reached at least that amount. Austin Energy states that excluding the fuel revenues in the new transfer rate will eliminate volatility that results from changing fuel costs.¹³⁷

¹³² Ibid.

¹³³ Testimony of Dick Brown, before the Senate Committee on Business and Commerce, July 10, 2012.

¹³⁴ Testimony of Tom "Smitty" Smith, Director, Public Citizen of Texas, before the Senate Committee on Business and Commerce, July 10, 2012.

¹³⁵ Testimony of Dick Brown, before the Senate Committee on Business and Commerce, July 10, 2012.

¹³⁶ Testimony of Mark Zion, Executive Director, Texas Public Power Association, before the Senate Committee on Business and Commerce, July 10, 2012.

¹³⁷ Testimony of the Honorable Lee Leffingwell, Mayor of Austin, Texas, before the Senate Committee on Business and Commerce, July 10, 2012.

Austin Energy's General Fund transfer supports city services like fire protection, public safety, roads, and libraries. The transfer also supports services that are shared among different city departments like fuel and vehicle maintenance, homeland security (power plant patrols), workers compensation and liability reserve, financial, purchasing, and legal services, as well as human resources. Austin Energy also designates a portion of the transfer to other services like street lighting, franchise fees for right-of-way use, economic development, and various community programs like the Greater Austin Chamber of Commerce.¹³⁸

Currently, Austin Energy has a council-governance which set rates, approves the utility budget, authorizes major utility investments, and approves bonds. The Council also has an advisory board, the Electric Utility Commission, which consists of seven members, three of whom live outside of Austin. While the City Council approved a new rate structure, the Council did not approve a new governance structure, but instead requested a study of alternative governance structures, as well as continued study of utility cost containment and reduction and possible general fund transfer and payment revisions.¹³⁹

CPS

CPS Energy, the municipally-owned utility that serves San Antonio, Texas, is the nation's largest MOU and provides not only electricity but natural gas as well. In 2011, the utility grossed \$2.3 billion in revenue. Like Austin Energy, CPS executes a general fund transfer, but instead has a board governance structure.¹⁴⁰

CPS transfers 14 percent of gross revenues, including both electric and gas service, to the city's General Fund, totaling approximately \$277 million in 2011. This transfer provides 25 to 30 percent of San Antonio's operating budget for activities like police and fire, infrastructure, libraries, streets, and parks - much like Austin Energy. CPS is governed by an independent Board of Trustees with four members representing each quadrant of the utility's service area while the mayor of San Antonio serves as the ex-officio fifth member. New members are selected and ratified by existing board members, then approved by the City Council. Trustees must reside within the CPS Energy quadrant they represent, can serve a term of five years, and are eligible to serve an additional term. They can receive an annual stipend of \$2,000 with the Chair of the Board receiving a stipend of \$2,500. The Board of Trustees handles most of the utility's operative and administrative duties, but the City Council must approve the issuance of debt, use of eminent domain, setting of rates, and ratification of board nominees. CPS also has a Citizens' Advisory Committee which acts a liaison between CPS and its customers as well as provides input to the CPS Board and staff. The Committee consists of 15 members, one from each San Antonio City Council district and the remaining five serving at large.¹⁴¹

CPS Energy boasts the lowest average residential electric and gas bills among the nation's ten largest cities. In addition, CPS proposed the New Energy Economy, a plan to support the city's 2020 vision to stimulate economic development through clean energy and efficiency choices for local businesses. In fact, the MOU plans to reduce peak demand by 200 megawatts (MW) and obtain 200 MW of clean coal, 800 MW of natural gas, and possibly 400 MW of solar energy.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Testimony of Doyle N. Beneby, President and CEO, CPS Energy, before the Senate Committee on Business and Commerce, July 10, 2012.

¹⁴¹ Ibid.

Furthermore, the utility procured an agreement for 25,000 LED lights and also made agreements with several businesses to relocate manufacturing and headquarters to San Antonio¹⁴²

City of Boerne Utilities

Boerne Utilities serves the City of Boerne, Texas, with electric, natural gas, water, and wastewater services. Currently, \$1.5 million is transferred from the utility's funds annually, with the majority coming from the Electric Fund. Like other MOUs, this general transfer funds police and fire code enforcement and park improvements. Since Boerne Utilities provides a variety of services, the transfer fund is also used for infrastructure investment like \$28 million for a Wastewater Treatment and Recycling Center. The utility also pays a franchise fee to the General Fund and this varies by service: 8.5 percent from electric sales, five percent from natural gas sales, five percent from water sales, and five percent from wastewater sales. Like Austin Energy and CPS Energy, Boerne Utilities transferred revenue for economic development - \$50,000 to the Kendall County Economic Development Corporation.¹⁴³

Boerne Utilities has a City Council governance. The Mayor provides oversight with the Council while the City Manager serves as the chief executive officer for the utility as well. They hold responsibilities similar to other council-governed MOUs such as rate setting, utility budget approval, and infrastructure approval.¹⁴⁴

CONCLUSION

MOUs share many characteristics, but as the three previous examples show, decisions and their implementation vary. For instance, CPS Energy has the lowest retail rates in the country among comparable cities. It has one of the higher general transfer rates but has been able to invest in substantial renewable energy and decrease traditional generation and peak demand. In fact, as one result of its New Energy Economy initiative, CPS predicts a three percent increase in renewable energy, an eight percent decrease in traditional generation sources, and a 5.5 percent increase in demand response.¹⁴⁵ Boerne Utilities has enjoyed success with a council-governance. As a city of smaller size, ratepayers and the councilmembers enjoy closer contact and a responsive relationship with the community served.¹⁴⁶

While Austin Energy's transfer rate was and still is lower than the CPS rate, during the rate restructuring process, customers complained that the marginal rate increase was too severe and that the utility used the transfer fund for activities inappropriate or greatly unrelated to the delivery of energy as well as collected revenues beyond the transfer fund from Austin Energy for city use. In fact, Shane Menking of data center service provider Data Foundry testified that the City of Austin uses Austin Energy to fund city functions above the level of revenues provided by the Austin Energy transfer. In addition to the General Transfer Fund, Austin Energy funds the Economic Growth and Redevelopment Services Office (EGRSO) with a \$10 million transfer, which is a significant portion of that office's budget. The theory behind electric utilities

¹⁴² Ibid.

¹⁴³ Testimony of the Honorable Mike Schultz, Mayor, City of Boerne, before the Senate Committee on Business and Commerce, July 10, 2012.

¹⁴⁴ Ibid.

¹⁴⁵ Testimony of Doyle N. Beneby, President and CEO, CPS Energy, before the Senate Committee on Business and Commerce, July 10, 2012.

¹⁴⁶ Testimony of the Honorable Mike Schultz, Mayor, City of Boerne, before the Senate Committee on Business and Commerce, July 10, 2012.

supporting economic development is that the new growth in kWh sales would off-set funds expended; but Data Foundry claims that these types of transfers are not as common or as large in other MOUs. They question if all ratepayers benefit through increased electricity consumption if the transfer amount is so large. Data Foundry also claims that Austin Energy includes civic and charitable program funding in electricity rates even though these programs, like parades and music festivals, are unrelated to the delivery of energy.¹⁴⁷

However, Austin Energy was able to reach consensus with churches, charitable organizations, and low-income residents regarding the new rate structure. Austin Energy also implemented community goals of increasing conservation and renewable resources. For example, through long-term savings of existing energy efficiency programs, Austin Energy avoided building an 800 MW power plant. In addition, high standard building code efforts helped reduce the high cost of peak energy. In fact, Austin Energy avoided raising electric rates for the 17 years prior to 2011. The two-year long rate restructuring process was public and included meetings in regions outside of Austin city limits, such as Lakeway, Texas, so that outside ratepayers could participate more conveniently.¹⁴⁸

RECOMMENDATIONS

1. The City of Austin should consider transitioning Austin Energy to a board of directors governance structure with outside ratepayer representation instead of its city council governance structure.
2. The City of Austin should consider more evenly allocating costs associated with economic development or other costs not directly associated with the generation or delivery of energy to other city of Austin departments in consideration of out-of-town customers.
3. Utilities should consider capping non-utility related expenditures.

¹⁴⁷ Testimony of Shane Menking, President and CFO, Data Foundry, Inc., before the Senate Committee on Business and Commerce, July 10, 2012.

¹⁴⁸ Testimony of Tom "Smitty" Smith, Director, Public Citizen of Texas, before the Senate Committee on Business and Commerce, July 10, 2012.

- 5. Analyze the state of the telecommunications market in Texas, including the costs and benefits of full deregulation of the market; the impact and viability of the Texas Universal Service Fund and Provider of Last Resort requirements; the impact of SENATE BILL 980, Regular Session, 82nd Legislature, relating to telecommunications regulation and rulemaking; the availability of broadband; telecommunications service discounts; and rights-of-way charges. Make recommendations to enhance services, support the industry, and ensure adequate and affordable access for consumers.**

BACKGROUND

Texas began the process of shifting telecommunications policy away from monopoly regulation toward competition in 1995 with the Texas Public Utility Regulatory Act, and in 1996 with the Federal Communications Act. Telecommunication deregulation continued in 2005 with Senate Bill 5 and most recently, Senate Bill 980 in 2011. If technology diversity and telecommunications service penetration are indicators of the success of competition, then Texas has made great improvements. For example, there are more wireline providers in Texas than in any other state. Texas has more Voice over Internet Protocol (voice telecommunication service transmitted over the Internet) than every state except Florida. Ninety-five percent of Texas zip codes have at least one wireline competitor and 75 percent of Texas zip codes have multiple competitors.¹⁴⁹

State of the Texas Telecommunications Market

Much of the change and increase in competition in the telecommunication market is sparked by technological advances and investment in mobile and broadband technologies. Mobile wireless companies continue to impact the voice and broadband market in Texas; consequently, there are over twice as many mobile wireless subscribers as land-line subscribers served by incumbent local exchange carriers (ILECs) and Non-ILECs. In fact, mobile wireless companies have the second largest market share of primary-use lines, after ILECs. Additionally, Voice over Internet Protocol is increasingly used by Non-ILECs to provide local telephone service.¹⁵⁰

Competition directly affects the availability and affordability of basic local telephone service for both residential and business customers in deregulated areas. Since regulated areas of the state are regulated by state laws and the Public Utility Commission of Texas (PUC), competition is

¹⁴⁹ Bill Peacock, Vice President of Research and Director of the Center for Economic Freedom, Texas Public before the Senate Committee on Business and Commerce, August 14, 2012.

¹⁵⁰ "Scope of Competition in Telecommunications Markets of Texas," Report to the 83rd Texas Legislature, Public Utility Commission of Texas, January 2013.

not as influential in the availability and affordability of basic local telephone service. In fact, rates for basic local telephone service in regulated areas served by the four largest incumbent local exchange carriers (AT&T, Verizon, CenturyLink, and Windstream-Valor) have increased to offset the decrease in subsidy for basic telephone service caused by the reduction in support from the Texas Universal Service Fund (TUSF). While the rural areas have not attracted strong local exchange competition, cable, wireless, and satellite competition are beginning to maintain a meaningful presence in these rural areas as alternative telecommunications services.¹⁵¹

Regarding broadband, subscription has increased from 2008 to 2011 by 233 percent due to a great increase in mobile wireless service subscription. In fact, mobile wireless has the largest share of the broadband subscribership; subsequently, wireless broadband options are now considered significant competition to landline broadband service.¹⁵²

Texas has seen rapid growth in the provision of video service. State-Issued Certificates of Franchise Authority streamlined new video entrants move into the video market. New entrants no longer have to obtain franchise authority from each municipality in which the provider intends to operate, but only one certificate from the state. This streamlined system of authority has fostered competition; 45 percent of Texas will be served by at least two video and cable providers. The improved competition has also enhanced the services provided in the video/cable market. New video market entrants are competing with cable providers and both are using services such as “triple play” bundles, which include voice telecommunications service, broadband Internet, and television programming.¹⁵³

Senate Bill 980, 82nd Regular Session

In 1995, the telecommunication market began deregulating and technology and competition have since proliferated. Consequently, many of the regulatory tools and requirements used to ensure competition are no longer needed. Senate Bill 980 of the 82nd Regular Legislative Session passed with the goal of updating or eliminating unnecessary regulatory tools and further encouraging competition. For example, the bill allowed telecommunication companies to lower residential rates. More specifically, transitioning telecommunication companies, those which have not yet elected to fully deregulate, were no longer required to price residential services at the Long Run Incremental Costs (LRIC), and were required to file residential or business LRIC studies. Simply put, long-run incremental costs are roughly the cost to provide service. However, the change in law still provided market protection that residential prices could not be anticompetitive, unreasonably preferential, prejudicial, discriminatory, or predatory. The bill also allowed for complaints and challenges at the PUC relating to pricing below business LRIC by affected parties. In fact, the PUC may require the transitioning company in question to provide a business LRIC study to investigate the complaint. In addition, Senate Bill 980 updated the competitive market test to reflect today's level of competition so that telecommunications markets with populations greater than 100,000 or markets with less than 100,000 that met specific criteria could qualify as adequately competitive. Specifically, a market with less than 100,000 could be deemed competitive by the PUC if the market had the presence of an ILEC and two or more unaffiliated local voice service providers, such as Internet protocol, satellite, or wireless providers. Lastly, since competitive markets provide for multiple options beyond just

¹⁵¹ Ibid.

¹⁵² "Scope of Competition in Telecommunications Markets of Texas," Report to the 83rd Texas Legislature, Public Utility Commission of Texas, January 2013.

¹⁵³ Ibid.

the incumbent service, Senate Bill 980 changed the statute so that incumbents were no longer required to offer Provider of Last Resort (POLR) services in deregulated markets. However, transitioning companies in regulated exchanges must still serve as the POLR.

TESTIMONY

Analysis of Complete Deregulation in the Texas Telecommunications Market

During legislative hearings to discuss the merits of Senate Bill 980 of the 82nd Regular Session, the Texas Public Policy Foundation (TPPF) suggested the state should look forward to completely deregulating the telecommunications market in Texas over the next 10 years. While Texas joins other states like Wisconsin and Michigan as leaders in the reform of telecommunications regulation, TPPF suggests there are many other subsidies, regulations, or taxes that need to be significantly reduced or eliminated before the state can be truly deregulated.

Specifically, right-of-way fees, telecommunications taxes, and some regulatory mechanisms prevent complete deregulation in Texas. For example, in 2011, the cost of local franchise or right-of-way fees to consumers and businesses in the 10 largest Texas cities was more than \$530 million. Since 2008, the costs have totaled more than \$2 billion. TPPF argues these fees are not a benefit to consumers, but serve as a bar to new competitive entrants into these markets. They argue charging a fee to cover the costs of providing right-of-way access is appropriate; however, charging Texas consumers over \$2 billion is not. TPPF suggests the Legislature should grant the PUC the authority to adjust right-of-way fees according to an assessment of the marginal cost of using the public right-of-way in order to benefit Texas consumers, not the Texas government. The PUC should also adjust right-of-way fees by assessing the physical occupation of the right-of-way, not the various services being transmitted through the wires. TPPF estimates that consumers who subscribe to cable, wireline, and wireless voice services pay an annual tax bill of \$318. In addition to these taxes, TPPF states certain telecommunications providers are appraised differently for the purpose of property taxes. In particular, wireline telephone companies are treated as "utility" companies, while other voice service companies are not. Also, the state sales tax is assessed on certain non-retail or higher-order telecommunications equipment like machinery, equipment, and software purchased by telecommunications companies that are used in delivering consumer-based products and services. TPPF claims the practice of applying sales tax on non-retail goods as well as applying taxes on taxes, i.e., the application of the state sales tax on utility gross receipts, the Texas Universal Service Fund (USF), the federal Universal Service Fund, and municipal franchise fees should be eliminated.

Despite recent reforms, price floors are still a part of the telecommunications market in Texas. Price floors prohibit an ILEC from charging less than its long-run incremental cost of service. While recent reforms relax this requirement, any providers that charge less than a price floor are subject to complaints that the rate is "anticompetitive or unreasonably preferential, prejudicial or discriminatory." TPPF recommends that price floor requirements should be removed. Other regulatory mechanisms that hamper competition in rural areas include USF support, artificially low regulated rates, and the inability of the PUC to deregulate markets under its own authority. For example, since only certain providers receive USF support, competitors participate in the market at different cost levels. Furthermore, TPPF reports that USF support is used to keep rural rates artificially low. Not only are current rural rates not reflective of the true cost of service, rural rates are often lower than urban rates. Lastly, only ILECs can initiate the deregulation of an exchange, but some ILECs may have incentive to maintain USF support and not deregulate

despite sufficient market conditions. TPPF recommends that the PUC should be given the authority to deregulate exchanges under their own initiative.¹⁵⁴

The Texas Cable Association points out that deregulation of retail rates and services should not be confused with the need for regulatory oversight of wholesale (company-to-company) services. They claim that competition will falter if service providers are not able to obtain wholesale services at fair and reasonable rates and conditions. They recommend that the PUC remain as the arbitrator of intercarrier disputes since this option allows all parties to receive fair and impartial decisions when company-to-company efforts fail.¹⁵⁵

Universal Service Fund and Provider of Last Resort

The concept of universal service promotes that all citizens should have access to basic telecommunication services. The cost to provide wired telephone services are very much a function of customer density. Cost models show that monthly costs per customer vary from under \$30 in urban exchanges to an average of several hundred dollars a month in many rural exchanges. Some rural line extension costs exceed \$10,000 (on a one-time basis).¹⁵⁶ Consequently, rural areas generally have much higher costs to provide service, and if the rates reflected those costs, they might be unreasonably high. Originally, long-distance rates subsidized rural local rates, but once telecommunications markets became open to competition, this became unsustainable and inefficient. Consequently, during the 1990s, universal service funds underwent reforms to convert implicit subsidies within long-distance rates to explicit subsidies through a surcharge. Support for large companies, or ILECs, was established through use of long-run incremental cost models. Support for smaller ILECs was calculated based on a then-existing subsidy. Overall support is provided on a per-line basis, with support provided on a competitively neutral basis, meaning if the customer chooses another telecommunication provider, that line's support follows the customer to the new company.¹⁵⁷

The TUSF exists outside the treasury and is authorized by Chapter 56 of the Public Utility Regulatory Act. The TUSF is composed of three different types of funding categories: subsidies for high cost service, social services programs for specific needs like low income rate discounts and communication services for the disabled, and administrative expenses used to cover implementation of the programs within the fund. Included in the high cost assistance programs are the Texas High Cost Universal Service Plan, the Small and Rural Incumbent Local Exchange Company Universal Service Plan, a program to implement Section 56.025 of the Public Utility Regulatory Act, the additional financial assistance program, and the Eligible Telecommunications Providers for Uncertificated Areas program. The Texas High Cost Universal Service Plan assists eligible telecommunications providers in high cost rural areas in providing basic telephone service at reasonable rates. This plan is available to providers in service areas of the four largest carriers: AT&T, Verizon, CenturyLink, and Windstream-Valor. Annual disbursements for the plan totaled \$265.8 million for fiscal year 2011. The Small and Rural Incumbent Local Exchange Company Universal Service Plan assists eligible small and

¹⁵⁴ Bill Peacock, Vice President of Research and Director of the Center for Economic Freedom, Texas Public Policy Foundation, before the Senate Committee on Business and Commerce, August 14, 2012.

¹⁵⁵ Ron McMillan, Regional Vice President, Time Warner Cable - Texas, before the Senate Committee on Business and Commerce, August 14, 2012.

¹⁵⁶ Charles Land, Executive Director, TEXALTEL, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁵⁷ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

rural telecommunications providers in high cost rural areas in providing basic telephone service at reasonable rates. The plan is available to providers in the areas other than the previously mentioned four largest companies. Annual disbursements totaled \$79.9 million in fiscal year 2011. The TUSF also funds a program used to implement Section 56.025 of the Public Utility Regulatory Act. Under this program, telephone cooperatives and local exchange companies serving exchanges with less than 31,000 access lines can petition the Commission for additional TUSF funding in order to maintain reasonable rates. Eligible companies can also petition the Commission, using Section 56.025 as a recourse, to replace reasonably projected reductions in high cost assistance revenue caused by a PUC or Federal Communications Commission (FCC) order, rule, or policy. The additional financial assistance program assists ILECs by providing additional funds from the TUSF; but only those ILECs that are classified under Chapter 53 of the Public Utility Regulatory Act are eligible. Chapter 53 ILECs are regulated and apply to the PUC to make changes to their rates. Additionally, they must show a need to the Commission. A company could show need by demonstrating that raising basic local rates instead of receiving additional financial assistance under the TUSF program would adversely affect universal service. This program did not receive any disbursements for fiscal year 2011. The Eligible Telecommunications Providers for Uncertificated Areas program allows a provider to volunteer to serve an uncertificated area. These are areas in which neither an incumbent nor a competitor have applied and received approval to provide service from the PUC, also known as a certificate of convenience and necessity. The program also allows the PUC to designate a provider for uncertificated areas and allows providers to recover costs from providing uncertificated service from the TUSF, as deemed appropriate by the Commission by consideration of the designated provider's cost to provide service to the area, the number of access lines, and the geographic size of the territory, among other considerations. This program received annual disbursements of \$161,000 for fiscal year 2011.¹⁵⁸

The fund's social services programs include: reimbursement for certain IntraLATA service, the Lifeline Service program, the Telecommunications Relay Service program, the Specialized Telecommunications Assistance program, and the audio newspaper program. The program that provides reimbursement for certain IntraLATA service allows reimbursement for provisions of discounted IntraLATA interexchange high capacity services to certain non-profit entities. IntraLATA high capacity services are broadband services to rural school districts. This program allows regulated ILECS under Chapter 53 of the Public Utility Regulatory Act to apply for USF support to provide high speed broadband to schools that do not receive discounted service from providers that participate in the telecommunication service discounts extended with the passage of Senate Bill 773 of the 82nd Regular Session. Annual disbursements for the program in fiscal year 2011 were \$2.7 million. The Lifeline Service program provides for discounted local phone service to qualified low-income customers and households. Customers whose income is not more than 150 percent of the applicable income level established by the federal poverty guidelines or a household with a resident eligible for Medicaid, food stamps, federal public housing assistance, among other requirements outlined in Section 55.015 (d-1) of the Public Utility Regulatory Act are eligible for the Lifeline discount. This program's annual disbursements for fiscal year 2011 were \$43.1 million. The Telecommunication Relay Service program provides telecommunications service for the hearing-impaired or speech-impaired and had annual disbursements of \$4.2 million in fiscal year 2011. The Specialized Telecommunications Assistance program provides reimbursement to providers of specialized

¹⁵⁸ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

telecommunications equipment or services like devices that amplify sound for the hearing impaired or help minimize stuttering. The Audio Newspaper program provides access to spoken newspapers for the visually-impaired and had annual disbursements of \$453,000 in fiscal year 2011. Lastly, the expenses to administer the fund, including cost of program implementation, low income enrollment, and audits are covered by the TUSF and this totaled \$1.3 million in fiscal year 2011. In total, the TUSF expended \$426.1 million over fiscal year 2011.¹⁵⁹

The TUSF surcharge is funded by a fee assessed on telecommunications providers' receipts for intrastate telecommunications services. The TUSF fee is assessed on traditional land-line and wireless providers. It is bypassable as all providers are allowed to pass the surcharge through to customers as a line item on bills. The PUC sets this rate, which is currently 4.3 percent of assessable receipts. The fee has fluctuated since 2004. Telecommunications revenue grew through 2008, but declined rapidly from 2008 through 2011. A combination of declining revenue and assessment rates meant Texas telecommunication consumers paid about \$300 million less in 2011 than in 2006. Expenses also fell by \$140 million from 2006 through 2011, a 25 percent decrease, but not as fast as revenue.¹⁶⁰

The two high cost TUSF programs assisting large companies and small companies are designed to work in tandem with federal USF high cost programs administered by the FCC. Currently, the FCC is in the process of reforming the federal USF. In its recent order related to these reforms, the FCC articulated its understanding of the concepts of universal service and rate comparability: the USF program should ensure that rates in rural areas are not significantly higher than rates in urban areas. This means that while a rural exchange may be very costly to serve, federal and state high cost subsidies should keep the rate paid by the rural customer lower than the cost of serving that customer. Also, the rate paid by a rural customer should not be much higher than the rate paid by an urban customer. In Texas, however, the opposite is true. The rates charged in urban areas for basic local telephone service are as high as \$21 per month, yet rural rates are consistently lower than \$21. The Universal Service Administrative Company (USAC), the independent, non-profit administrator for the federal USF fund, provided a report of companies across the nation charging less than \$10 per month for basic local telephone service. The report shows that rates in 15 TUSF study areas in Texas fall below this \$10 benchmark, with one carrier charging just \$1 per month. The rate rebalancing process assesses what is a reasonable rate for customers and permits measured increases in basic local rates to reduce TUSF support payments to local telephone companies. This could bring more parity between urban and rural basic local telephone service rates in Texas.¹⁶¹

Impact of 82R Senate Bill 980

Senate Bill 980 required the PUC to evaluate all TUSF programs, make changes if necessary, and report to the Legislature whether the fund was meeting its purpose. This resulted in numerous projects at the PUC, many of which are currently under the rulemaking process. Project 39937 evaluated the level of funding for the High Cost Universal Service Plan. The PUC set a "reasonable rate" for each ILEC so that if each company's rates were below the rate determined to be reasonable, TUSF funding support would be reduced by that incremental

¹⁵⁹ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁶⁰ Ibid.

¹⁶¹ Nathan Benedict, Assistant Director of Regulatory Analysis, Office of Public Utility Counsel, before the Senate Committee on Business and Commerce, October 9, 2012.

difference. Consequently, the large companies could raise local rates to match the difference. The project also increased low income support to offset a portion of the local rate increase. The contested case proceedings to determine the guidelines under which ILECs can raise rates are complete and will be implemented in January 2013. Project 39938 evaluated the level of funding for the Small and Rural ILEC Universal Service Plan. This project is ongoing, and much like the High Cost plan, it provides for a rate rebalancing, so that TUSF support will be reduced and companies will be able to raise local rates by the amount determined reasonable by the PUC. After contested cases conclude, the projects' guidelines will become effective January 2014. Project 40342 evaluates the eligibility requirements and high cost funding needs to providers. This project may also consider revisions to the Additional Financial Assistance program as well, but that has not been determined. Project 39939 evaluates the administration of the TUSF to ensure it is transparent and accountable. Project 39717 evaluates whether TUSF assessment should be placed on Voice over Internet-Protocol, an application that uses broadband Internet connection to transmit voice data (telephone calls.) The PUC will also issue a report to the Legislature on the TUSF, as required by Senate Bill 980 and the consideration of this report is discussed in Project 39936. The report will include evaluation of social programs and a summary of results for the other proceedings previously discussed. Lastly, the PUC will consider requests for TUSF replacements due to reductions in the federal USF under guidelines described in Section 56.025 of the Public Utility Regulatory Act. The FCC recently reduced support from the federal USF and Section 56.025 allows certain companies to request additional funds from the TUSF to offset these reductions.¹⁶² While the overall effect of these initiatives remains to be seen, the FCC's reforms to universal service will result in an overall reduction in federal universal service support to eligible telecommunication providers. Since Section 56.025 can be used as a supplement to federal USF actions, reductions to federal high-cost support could result in additional funds being drawn from the state USF fund. This could increase pressure on the surcharge and negate reductions made to the state high cost assistance programs.¹⁶³ For example, CenturyLink estimates it will lose five million dollars in federal support over the next few years.¹⁶⁴ The PUC anticipates they will evaluate 25 to 30 Section 56.025 petitions total, but currently, only one is in process.¹⁶⁵

High Cost Universal Service Plan

The High Cost Universal Service Plan is a program that assists the four largest providers in high cost rural areas, AT&T, Verizon, CenturyLink, and Windstream-Valor with providing basic telephone service at reasonable rates. Project 39937 adopted a plan to reduced TUSF funding for eligible telecommunication providers over a four-year period from 2013 through 2017. The project's proceedings included a rate rebalance which resulted in a settlement with the PUC between the ILECs. The settlement determined that \$24.00 was a reasonable rate for customers of AT&T, Verizon, and CenturyLink; but, \$23.50 was determined as the reasonable rate for Windstream-Valor customers. The settlement also provided that reductions in TUSF support for each of the four large companies would be phased in over four years and that the large companies would be allowed to make corresponding increases to their residential basic local

¹⁶² Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁶³ Nathan Benedict, Assistant Director of Regulatory Analysis, Office of Public Utility Counsel, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁶⁴ Scott Stringer, Director, State Regulatory and Legislative Affairs for TX, LA and MS, CenturyLink, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁶⁵ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

rates. Specifically, each of the four large companies can increase local rates by a maximum of \$2.00 per month to supplement each company's respective lost revenues from decreased TUSF subsidies. In fact, the chart below shows how current basic local telephone service (BLTS) rates compare to the rate determined reasonable by the PUC. The incremental difference that results is the amount that each company's TUSF support will be reduced by, factoring in the number of residential lines they have. This process is rate rebalancing, designed to increase prices for local telephone service subsidized by long-distance revenues and reduce the subsidies paid by long-distance service providers. The reduction in TUSF and the increase in rates will be a gradual process taking place over the next four years, from 2013 through 2017. AT&T and Verizon both elected to apply for deregulation where market competition meets the standard, i.e. markets with populations greater than 100,000 or markets with less than 100,000 but with the presence of an ILEC and two or more unaffiliated local voice service providers, such as Internet protocol, satellite, or wireless providers. Consequently, AT&T and Verizon elected to completely eliminate TUSF support in all eligible exchanges by January 2017.¹⁶⁶ CenturyLink and Windstream-Valor elected to continue TUSF support, but at a reduced level. AT&T will have a total reduction of \$30 million in TUSF support over the next four years. Verizon will reduce TUSF support by \$40 million; CenturyLink will reduce by \$8.7 million; and Windstream-Valor will reduce by \$17.2 million over the next four years. In total, the High Cost Universal Plan will be reduced by \$96 million by 2017.¹⁶⁷

	AT&T Texas	Verizon SW	CenturyLink	Windstream	Total THCUSP
Current BLTS Rate	\$ 16.15	\$ 17.00	\$ 18.00	\$ 15.50	
Reasonable Rate	\$ 24.00	\$ 24.00	\$ 24.00	\$ 23.50	
Incremental Revenue	\$ 7.85	\$ 7.00	\$ 6.00	\$ 8.00	
Regulated Res Lines	293,516	114,667	120,614	178,746	707,543
Total Support Reduction	\$ 27,649,207	\$ 9,632,028	\$ 8,684,208	\$ 17,159,616	\$ 63,125,059
Annual Support Reduction	\$ 6,912,302	\$ 2,408,007	\$ 2,171,052	\$ 4,289,904	\$ 15,781,265
Current Annual Support	\$ 30,623,749	\$ 39,953,016	\$ 36,149,020	\$ 72,329,874	\$ 179,055,660
2013 Support Amount	\$ 23,711,448	\$ 37,545,009	\$ 33,977,968	\$ 68,039,970	\$ 163,274,395
2014 Support Amount	\$ 16,799,146	\$ 35,137,002	\$ 31,806,916	\$ 63,750,066	\$ 147,493,130
2015 Support Amount	\$ 9,886,844	\$ 32,728,995	\$ 29,635,864	\$ 59,460,162	\$ 131,711,865
2016 Support Amount	\$ 2,974,542	\$ 30,320,988	\$ 27,464,812	\$ 55,170,258	\$ 115,930,600
2017 Support Amount	\$ -	\$ -	\$ 27,464,812	\$ 55,170,258	\$ 82,635,070

Source: Public Utility Commission of Texas

Senate Bill 980 was not the first legislative initiative to review the TUSF which resulted in funding reductions for the High Cost Universal Service Plan. In fact, Senate Bill 5 of the 2nd Called 79th Legislative Session initiated a review of the TUSF by the PUC; consequently, an agreement was reached that reduced TUSF support in the High Cost Universal Service Plan, similar to the reductions initiated by Senate Bill 980. The effect of TUSF reduction settlements from Senate Bill 5 and Senate Bill 980 is that some ILECs will go from receiving millions in TUSF support to none. For example, AT&T initially drew more than \$180 million from the TUSF in 2001, but due to these two settlements, TUSF support declined over time and AT&T reports it will no longer receive support from the fund by 2016.¹⁶⁸

¹⁶⁶ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012. Business and Commerce, October 9, 2012.

¹⁶⁷ Doug Fulp, Vice President of Regulatory and Governmental Affairs, Verizon, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁶⁸ Bob Digneo, Assistant Vice President, AT&T Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

As stated, CenturyLink and Windstream-Valor chose to continue USF support but at a reduced level. Both companies claim the competition in the market in their exchanges and federal USF changes do not eliminate or diminish the need for USF support. CenturyLink asserts that sparsely populated markets are difficult and costly to serve with any technology, be it wireline or wireless, fixed, or mobile service. As customer density increases, network costs increase as well. For example, in parts of Goliad County, (within CenturyLink service territory) population is so sparse that the true cost of providing basic telecommunications service is 10 times the price charged to customers. Furthermore, CenturyLink claims that cost of service is so high that competitors have not entered the market. CenturyLink offers that competitors in other rural markets have aggravated the need for high cost support by selectively serving only the lowest-cost portions of the market. They state the accumulation of selective competition, market characteristics, the loss of federal USF, and the decline of access charge revenues will hurt the carrier's ability to maintain their telecommunication networks to provide basic voice service and broadband services.¹⁶⁹

Windstream's household density is not only the lowest in the High Cost Universal Service Plan, it is also lower than many companies in the Small and Rural Plan as well. In fact, Windstream ranks as the 28th most remote when compared to the 48 providers in the Small and Rural fund. Low density means that costs significantly outweigh revenues when a provider is contemplating any type of maintenance or investment project. Due to sparse populations and high maintenance costs, Windstream claims that network infrastructure might not exist without ongoing financial support provided through the High Cost Universal Service Plan. Loss in USF support could affect wireless coverage as well. If the infrastructure used to support wireless traffic, such as towers and wires in the ground are not maintained, wireless signals that must travel this infrastructure at some point during telecommunication traffic will be affected. In order to maintain USF support, Windstream will be required to maintain all Provider of Last Resort obligations; but the provider argues that cuts to their USF funding, on average, 24 percent in residential service, will make this difficult.¹⁷⁰ Provider of Last Resort obligations generally require an ILEC to offer continuous and adequate basic local telecommunications service throughout a defined geographic area.¹⁷¹ Windstream claims that since AT&T and Verizon are choosing to deregulate exchanges and forego TUSF funding, they will no longer be held to Provider of Last Resort obligations; consequently, they can cherry pick areas of service and choose to only serve dense or low cost areas, thereby decreasing their cost of service significantly. Furthermore, while the High Cost Plan will decrease disbursements by \$96 million by 2017, Windstream claims that typical urban customers with a \$30 intrastate retail telephone bill will see a reduction of only 62 cents per year on their bill from reduced TUSF fees. Conversely, Windstream claims that their customers could pay as much as \$100 more per year for basic local telephone service due to reductions in TUSF subsidy.¹⁷²

¹⁶⁹ Scott Stringer, Director, State Regulatory and Legislative Affairs for TX, LA and MS, CenturyLink, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁷⁰ Jennie Chandra, Vice President of Government Affairs, Windstream, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁷¹ Joe Gillan, Economic Consultant, Texas USF Reform Coalition, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁷² Jennie Chandra, Vice President of Government Affairs, Windstream, before the Senate Committee on Business and Commerce, October 9, 2012.

Similar to claims that ILECs who choose to no longer receive TUSF funds and deregulate can cherry-pick low cost service areas, Windstream claims the same is true for competitors like cable and wireless providers. They claim cable and wireless broadband providers have shown a willingness to serve more densely populated areas like city-centers or suburban areas, but parts of exchanges or more rural areas that have sparse population can be left without alternative providers despite sharing the same exchange territory with a larger city like Amarillo or Midland. Windstream states that if it or CenturyLink did not serve the high cost areas on the outskirts of town, consumers in these rural areas would be without service and reductions to the TUSF continue to make maintaining this type of service more difficult.¹⁷³

TUSF funding is portable, meaning funding follows the customer. Competitive Local Exchange Carriers (CLECs) also receive TUSF support from the High Cost Universal Service Plan. For example, when a customer located in an area receiving high cost TUSF support changes telecommunication providers, that TUSF funding follows the customer to the new provider or competitor. CLECs received about \$25 million in support from the High Cost Plan. The amount in their reductions will vary depending on which ILEC's service territory they serve and whether that ILEC chooses to stop TUSF support or continue reduced levels of funding.¹⁷⁴ For example, the Texas Rural Cooperative CLECs consisting of Cumby Telephone Co-op, Panhandle Telecommunications Systems, Santa Rosa Telephone Co-op, WT Services, and XIT Telecommunications and Telephone, Ltd., provide telecommunications service to rural Texas areas through their own facilities. These CLECs invested millions in new facilities to serve rural exchange areas that were previously underserved. Previous to Texas Rural CLECs providing service, some of these areas lacked reliable service or experienced substandard service. In some cases, party lines were still in use. Texas Rural CLECs provide telecommunications service for anchor institutions like schools, government facilities, hospitals, and other local businesses. The facilities and infrastructure making these high-quality services possible is supported by the High Cost Universal Service Plan.¹⁷⁵

Texas Rural CLECs claim the need for continued High Cost Plan support is compounded by the November 2011 FCC order that eliminated the identical support provided by the state high cost USF. Access revenues from intercarrier compensation, charges that one carrier pays to another carrier to originate, transport, and/or terminate telecommunications traffic on another provider's infrastructure, were a main component in the Rural CLEC business plan when they made their business decisions to invest in the rural communities they serve. Texas Rural CLECs claim that without access revenues and federal USF support, additional reduction in high cost TUSF support will likely result in the Texas Rural CLECs having to exit these exchanges and leaving customers without the quality service on which they rely since many of the rural areas in these CLECs service areas do not have comparable, alternatives in the area. In special circumstances where the majority of customers are served by a CLEC rather than the ILEC, new competitive market test standards and deregulation incentives created by Senate Bill 980 may be problematic for Texas Rural CLECs. Under Senate Bill 980 and the Commission's rules, the discretion regarding whether or not TUSF support may continue in an area appears to lie solely within the discretion of the ILEC. For example, if an ILEC chooses to forgo its Provider of Last Resort

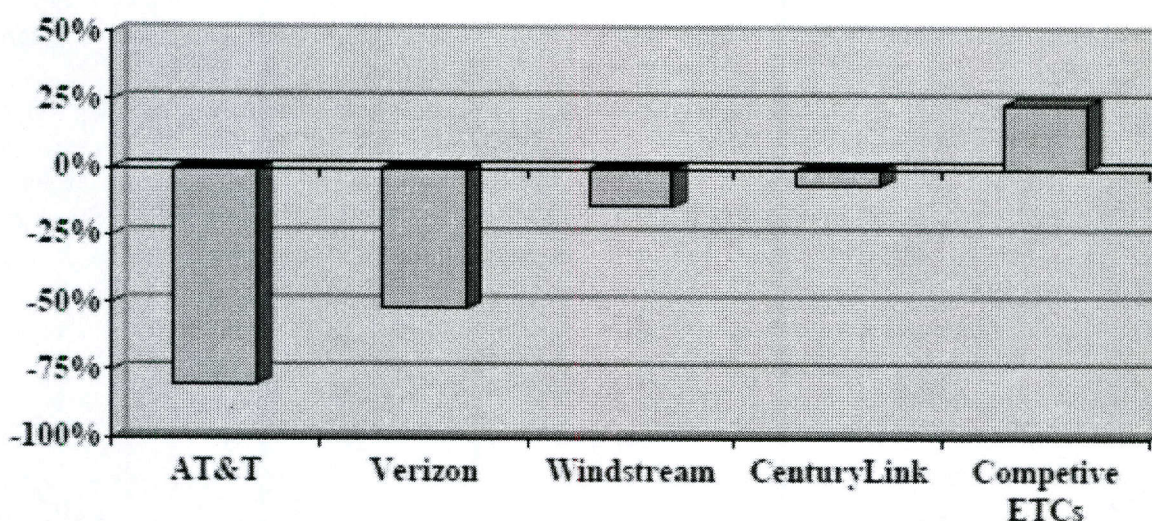
¹⁷³ Ibid.

¹⁷⁴ Doug Fulp, Vice President of Regulatory and Governmental Affairs, Verizon, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁷⁵ Cathy Webking, Attorney, Texas Rural Cooperative CLECs, the Senate Committee on Business and Commerce, October 9, 2012.

obligations and seeks to deregulate an exchange serving less than 30,000, the community that is significantly served by a facilities-based CLEC would no longer receive support, nor have Provider of Last Resort obligations that would ensure service if the facilities-based CLEC was no longer able to provide service due to elimination of TUSF support at the will of the ILEC that possibly never provided service to that community.¹⁷⁶ AMA Tech Tel, a rural CLEC that also owns its own facilities, faces a similar situation with comparable results. However, it should be noted that while large company ILECs have seen reductions in TUSF support since 2008, CLECs in the large company service territories have received increased support until the present. See the chart below.

Figure 2: Percent Change in USF Support From Large Carrier Fund (2008-2012)⁸



Source: "PUC Project No. 36136 Filing" Joe Gillan, TUSF Reform Coalition, Before the Senate Committee on Business and Commerce, October 9, 2012.

Small and Rural Incumbent Local Exchange Plan

The Small and Rural Incumbent Local Exchange Company Universal Service Plan assists eligible small and rural telecommunications providers in high cost rural areas in providing basic telephone service at reasonable rates. The plan is available to providers in the areas other than the four large carriers: AT&T, Verizon, CenturyLink, and Windstream.¹⁷⁷ The 46 rural companies, which include telephone cooperatives and independent companies with access lines under 31,000 and which receive support from the Small and Rural USF Plan, collectively receive less than \$70 million. Interestingly, that amount is less than is paid to support the five social programs funded by the TUSF.¹⁷⁸ PUC Project 39938 evaluated the level of funding for the Small and Rural ILEC Universal Service Plan. This project is ongoing, and much like the High Cost plan, it provides for rate rebalancing, so that TUSF support will be reduced and companies will be able to raise local rates by the amount determined reasonable by the PUC. The PUC may include the concept of an urban price floor in the Small and Rural rate rebalancing. The urban

¹⁷⁶ Cathy Webking, Attorney, Texas Rural Cooperative CLECs, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁷⁷ Michael Shultz, Vice President of Regulatory and Public Policy, Consolidated Communications, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁷⁸ Delbert Wilson, General Manager, Hill Country Telephone Cooperative, Inc., before the Senate Committee on Business and Commerce, October 9, 2012.

price floor, suggested to be around \$24 - the rate found reasonable for most of the carriers in the High Cost Universal Service fund, will offset a small company's previous TUSF support. It will probably have a phase in period of four years as well. Since the national urban benchmark price the FCC has imposed is \$14, small carriers will experience a \$10 increase to reach the PUC recommended \$24 urban floor. This means small company TUSF support would be reduced by \$10 over a four year period, or \$2.50 per year. To illustrate this, the Fort Bend ILEC of Consolidated currently receives \$9.60 in TUSF support per line. Under proposed PUC rebalancing guidelines, Fort Bend would receive \$7.10 in support in 2014 (\$2.50 less than \$9.60,) \$4.60 in support in 2015, \$2.10 in 2016 and no longer receive support by 2017. When combined with reduced federal USF support, Consolidated claims that local rates in rural areas are going to increase significantly over the next two to three years. They recommend that the Legislature should prohibit the PUC from implementing these rebalancing changes and other changes to TUSF. They anticipate that rates could increase to \$30 per line for basic local telephone service.¹⁷⁹In fact, the Texas Statewide Telephone Cooperative, Inc., an organization of small and rural telecommunications companies claims that recent actions taken at the PUC have ensured that the amount of TUSF received by the larger companies will continue to decline and this reduction should allow for a stable fund that is able to provide a sufficient level of support to the small companies without raising the assessments that every Texas telecommunications customer pays and without reducing support to the Small and Rural Plan.¹⁸⁰

Many small and rural carriers have sparsely populated exchanges, making cost of service higher. In addition, some small and rural carriers claim competition does not exist in areas of their service territory. Consolidated Communications claims neither wireline nor wireless competition exists in its market areas and cable competition follows municipality boundaries mainly due to past municipal franchise agreements. Consequently, rural areas may not have alternative provider choices. Consolidated has two local exchange companies in Texas: Consolidated Communications of Fort Bend Company and Consolidated Communications of Texas Company. The two Consolidated ILECs receive TUSF funding from two sources, the Small and Rural Incumbent Local Exchange Company Universal Service Plan and the Texas High Cost Assistance Universal Service Plan. Together, Consolidated currently receives a fixed total of roughly \$14 million. Consolidated claims to use both the Texas and federal USF support for maintenance of the network and capital expenditures, but invests over four times as much in capital and maintenance expenses than revenues received from USF support. Like other carriers, Consolidated is affected by the FCC's decision to eliminate access revenues from intercarrier compensation and reduced USF support.¹⁸¹

Big Bend Telephone Company's service territory is one of the most sparsely populated exchange areas in the state. Big Bend covers eight rural counties in and around Big Bend National Park and has just 0.3 customers per square mile. Sparse population combined with rugged terrain, poor roads, and extreme weather conditions, result in a service territory for Big Bend with exceptionally high cost areas. Like other eligible telecommunications providers, the company uses the TUSF to subsidize these costs. Currently, Big Bend's residential customers pay \$10.50

¹⁷⁹ Michael Shultz, Vice President of Regulatory & Public Policy, Consolidated Communications, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁸⁰ Delbert Wilson, General Manager, Hill Country Telephone Cooperative, Inc., before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁸¹ Michael Shultz, Vice President of Regulatory and Public Policy, Consolidated Communications, before the Senate Committee on Business and Commerce, October 9, 2012.

per month for basic local telephone service, before taxes and fees. Due to the FCC revisions to federal USF, these rates will increase to \$14 by 2013 and \$16.50 by 2014. Conversely, Big Bend receives about \$52 per line per month in Texas USF support. Aside from using the USF support to maintain the network, upgrade facilities with fiber optic lines, and add wireless and satellite systems, Big Bend also uses USF support to comply with numerous Provider of Last Resort requests. Big Bend's growing number of Provider of Last Resort requests is not typical for most providers and the capital investment requirements to meet the Provider of Last Resort obligations have averaged 68 percent of the TUSF average annual support over the last six years. Consequently, Big Bend contends that cuts to TUSF support will impede the company's ability not only to fulfill Provider of Last Resort obligations, but will also hinder options to upgrade the system and maintain current network. Furthermore, Big Bend maintains the infrastructure many wireless providers use to traffic communication services. Big Bend contends that anyone driving the two hours it takes on Interstate Highway 10 to go through the Big Bend territory will use the company's infrastructure when they make a wireless call. Without TUSF support, Big Bend claims this service will no longer be available. Among the entities that rely on Big Bend's advanced network are numerous law enforcement agencies that patrol the 485 miles of the Texas/Mexico border in Big Bend's service area. This constitutes about a quarter of our nation's border with Mexico and half of our state's border with Mexico, including two homeland security ports of entry to Mexico. Thus, while all rural local exchanges provide telecommunications services to crucial public institutions like hospitals and libraries, there are unique national security issues tied to the TUSF funding that Big Bend receives in particular.¹⁸²

House Bill 2603 of the 82nd Regular Legislature increased the TUSF disbursements to small and rural phone companies through September 1, 2013. Specifically, Small and Rural Plan companies may receive monthly per line TUSF support based on 1999 levels of funding. This provided a funding boost of \$40 million to small and rural companies; however, this fixed funding level expires in 2013 and the PUC is still determining how to rebalance each company's rates, but a reasonable rate of \$24, similar to that of the four large companies in the High Cost Assistance Plan, is anticipated. Texas Statewide Telephone Cooperative Inc. claims that this would provide an inadequate level of TUSF support to its members and force many companies to seek additional support at great cost.¹⁸³

Poka Lambro Telephone Cooperative, Inc. is a small and rural telephone cooperative that serves nine counties south of Lubbock and north of Midland and Odessa. Poka Lambro also has an extremely sparse service territory; in fact, it does not serve the more populated cities of Lamesa, Brownfield, and Tahoka, but instead serves the most rural areas outside of these communities. The company serves about one customer per every two miles of network infrastructure or every two square miles. Poka Lambro contends TUSF support has been greatly reduced but the current per line funding model to support small and rural companies has not kept up with funding needs. Specifically, for over ten years, the TUSF was based on a fixed amount received per access line. Poka Lambro states that this worked well initially, but as ILECs began to enhance their networks to support the demand for high speed Internet connections, these high speed connections resulted in a reduced need for dial up access lines. Also, e-mail replaced fax lines, largely. These network enhancements have resulted in loss of access lines due to broadband replacement of second lines. Consequently, TUSF support, which was strictly tied to access lines, has been

¹⁸² Big Bend Telephone Company, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁸³ Delbert Wilson, General Manager, Hill Country Telephone Cooperative, Inc., before the Senate Committee on Business and Commerce, October 9, 2012.

significantly reduced. Poka Lambro contends that once the PUC reverts back to the access line funding methodology due to the expiration of House Bill 2603, small and rural cooperatives will be penalized by reduced funding for improving the availability of advanced services. Conversely, some competitors claim local rates have been maintained at artificially low rates, especially compared to wireless rates; but Poka Lambro states this argument is not comparable since local basic telephone customers must pay various fees that are not optional, and thereby, raise the basic charge a customer must pay. In fact, wireless rates initially included enhanced services like voicemail, which once were optional, but became required service fees through improved marketing and regulations. Therefore, Poka Lambro argues that proposals to increase local rates to levels comparable to wireless rates are not well founded because local companies don't have the authority to mandate similar features of wireless into local base rates. Furthermore, Poka Lambro claims if wireless had basic components similar to those of local wireline service, the rates would be near the same level.¹⁸⁴

The loss of access lines and related TUSF support over the preceding decade has resulted in Poka Lambro achieving a significant negative intrastate return on investment. Current law allows for the opportunity to earn a reasonable return, and Poka Lambro claims the decline in support and revenues achieved has become insufficient to maintain the network and provide the required services to its customers. Consequently, Poka Lambro initiated a proceeding before the PUC in order to restore some of its lost TUSF support. The PUC denied the request but suggested a more proper avenue of relief would be an application under the additional financial assistance program of the TUSF (PUC Substantive Rule 26.408); but Poka Lambro claims this rule needs further clarification. It notes its loss of funding not only affects its ability to maintain service, but it also effects Poka Lambro's unique customers, like wind farm generators, schools, telemedicine services, and cellular providers using the infrastructure. Since the company realizes loss of funding could have significant effects, Poka Lambro has taken some cost cutting measures acquiring more efficient software and technology such as replacing old and inefficient copper wiring with fiber optic cables.¹⁸⁵

Provider of Last Resort

ILECs designated as Providers of Last Resort are required to offer continuous and adequate basic local telecommunications service throughout a defined geographic area. An ILEC with these responsibilities, also known as a POLR, must offer and provide service to all areas within the designated exchange, including areas that are high cost or without infrastructure. The theory is that no other telecommunications provider company can provide these services because the cost would be too high or the competition simply doesn't exist for an alternative provider. TUSF Reform Coalition, consisting of the Texas Cable Association, TW Telecom, and Sprint Communications, argues that some large ILECs serving as POLRs would rather receive subsidies and embrace these obligations than file with the PUC to deregulate the exchange and lose the TUSF support, despite adequate competitive conditions within the exchange.¹⁸⁶ However, ILECs like Windstream argue that if POLRs do not receive TUSF support to service these rural areas, no other providers will provide in their absence. They argue competitors

¹⁸⁴ David McEndree, General Manager and CEO, Poka Lambro Telephone Cooperative, Inc., before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁸⁵ Ibid.

¹⁸⁶ Joe Gillan, Economic Consultant, Texas USF Reform Coalition, before the Senate Committee on Business and Commerce, October 9, 2012.

cherry-pick their service areas and ignore sparsely-populated or other high cost areas; consequently, an unsubsidized competitor's presence in an exchange with POLR obligations does not mean all consumers have the same exposure and access to competition without those obligations in place.¹⁸⁷ The TUSF Reform Coalition also argues that for locations serviced by existing network, there are virtually no additional costs to provide service to additional customers; consequently, they do not see a justified need for USF support. However, in order to provide service to places where network is not currently built out, the POLR obligation would require the ILEC to incur new costs and the TUSF subsidy could remedy some of those costs.¹⁸⁸ But many ILECs with POLR obligations claim this argument assumes that existing network is paid off. These ILECs contend TUSF support helps them fulfill POLR obligations by maintaining and upgrading existing network as well as building out new network infrastructure.¹⁸⁹ Please note, Texas law currently permits an ILEC to be relieved of traditional wireline or landline POLR obligations when it can show an alternative technology can provide adequate service.¹⁹⁰ The TUSF Reform Coalition argues this same standard of alternative technology service for POLR obligations should be applied to eliminate TUSF support in general, so that an ILEC must show that its POLR obligation creates a need for subsidy to ensure reasonable and affordable rates for local service.¹⁹¹ TEXALTEL suggests that POLR requirements should be changed to eliminate requirements to provide wired services where customers have lower cost options that are of acceptable quality. Specifically, TEXALTEL argues that ILECs should only provide wireline extensions to applicants when it makes business sense to do so and without automatic TUSF subsidy. Furthermore, requirements under the law should be changed so that ILECs are not prohibited from requiring a line extension charge of the applicant. TEXALTEL also suggests that an ILEC could direct the applicant to alternative wireless options. If there are no other options to provide the services the customer needs, only then should the excess costs of the build-out be paid by the Texas High Cost USF fund.¹⁹²

The Texas Legal Service Center reports that POLR obligations are still a very necessary component of telephone regulation since basic local telephone service provides consumers with a flat rate telephone line, access to operator and directory assistance services, access to 911 service, ready access to the utility to report problems, and the ability to obtain Lifeline and telephone assistance services, if eligible. The Center believes ubiquitous access is essential to the social and economic commerce of Texas and for our health and safety. It is concerned about the absence of POLR obligations in areas of Texas that have been deregulated. Data concerning whether subscriber penetration rates have been affected is not readily available and there is limited state data available about subscriber penetration rates for the low income populations in those areas. At the federal level, Texas USF subscribership has decreased three percent in 2010 from a high in 2008. While these time periods are outside the effective date of Senate Bill 980, Texas Legal Services Center claims this data may be an indicator that universal service is

¹⁸⁷ Jennie Chandra, Vice President of Government Affairs, Windstream, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁸⁸ Joe Gillan, Economic Consultant, Texas USF Reform Coalition, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁸⁹ Jennie Chandra, Vice President of Government Affairs, Windstream, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁹⁰ §54.251 (c) of the Public Utility Regulatory Act.

¹⁹¹ Joe Gillan, Economic Consultant, Texas USF Reform Coalition, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁹² Charles Land, Executive Director, TEXALTEL, before the Senate Committee on Business and Commerce, October 9, 2012.

eroding as competition increases. For each of those areas deregulated they encourage the Legislature to consider gathering data on subscribership penetration, USF and TUSF Lifeline penetration, how access to 911 has been affected, and how access to reliable broadband service is achieved. They also encourage the Legislature to maintain this data on an ongoing basis through regular monitoring reports to ensure affordable and reliable basic telecommunications service is available and accessible, both now and in the future. Lastly, until data can assure that affordable basic and reliable telecommunications service is readily available and accessible in the deregulated areas of the state, the Texas Legal Services Center recommends that POLR obligations remain for all areas in Texas not currently deregulated and that the Legislature provide funding, if necessary, to support this obligation throughout all currently regulated areas of the state. Furthermore, to ensure access is available to all segments of Texas' population, they recommend that the POLR obligation be met through wireline telephone service availability instead of alternative technology.¹⁹³

Consumers and Competition

Due to PUC settlements and negotiations, reductions to high cost assistance programs within the TUSF means that telecommunications companies have the option to raise rates. While rate increases affect all consumers, they can affect low income consumers disproportionately; consequently, the Office of Public Utility Counsel (OPUC) advocates for an increase in the Lifeline discount program within the TUSF. Lifeline is the program by which low-income households receive discounted phone service. For each \$1 increase in local rates, OPUC advocates for a \$0.25 increase in the program to help maintain the value of the Lifeline discount for low-income customers.¹⁹⁴ The Texas Legal Services Center states the penetration rate for the Lifeline program is low and more effort should be put forth to ensure all qualified Texans receive the benefit. There are approximately two million Texas households whose family incomes qualify for the Lifeline discounts, but only approximately 560,000 enrolled during summer 2012. Lower income households are less likely to have a telephone than higher income households and Texas Legal Services Center attributes this to a low subscriber penetration rate for the Lifeline program. Low income households may have a difficult time maintaining telephone service once the service is initiated and Texas Legal Services Center states the Lifeline discount could help lower income households not only initiate service, but also maintain it.¹⁹⁵

To increase Lifeline subscribership, Texas Legal Services Center also recommends the Legislature direct the PUC to more actively promote the Lifeline program in Texas. They recommend the Legislature direct state agencies to educate both their employees and clients about the Lifeline discount and present application opportunities to those clients likely to qualify for the program. Regarding more active promotion of the Lifeline program by the PUC, Texas Legal Services Center suggests that the PUC maintain an email list of nonprofit organizations who work with the elderly and low income populations of this state and email information about Lifeline and the application form to members of the email list on a quarterly basis. Next, Texas Legal Services Center advises that the PUC should monitor the marketing activities of telecommunication utilities to ensure that basic service is provided on a stand-alone basis. They

¹⁹³ Lanetta Cooper, Staff Attorney, Texas Legal Services Center, before the Senate Committee on Business and Commerce, August 14, 2012.

¹⁹⁴ Nathan Benedict, Assistant Director of Regulatory Analysis, Office of Public Utility Counsel, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁹⁵ Lanetta Cooper, Staff Attorney, Texas Legal Services Center, before the Senate Committee on Business and Commerce, October 9, 2012.

believe the PUC, or other capable organizations, should explain the Lifeline program to applicants. In addition, the PUC should enter into memoranda of understanding with state agencies that work with public housing authorities or provide services to the low income and elderly to improve the enrollment rates in the Lifeline Service program. The PUC should also form a working group with these agencies and the public housing authorities to regularly review progress and make recommendations to improve activities to increase Lifeline enrollment. Regarding state agency education and application assistance for the Lifeline program to clients, the Texas Legal Services Center suggests state agencies should provide clients with educational materials about Lifeline at the time they apply for relevant benefits, similar to what is required in the state of Florida. Florida also mandates that if a state agency determines a person is eligible for Lifeline, the agency must immediately forward the information the PUC to ensure the client is automatically enrolled in the program. In order to make basic telephone service more accessible and useful for certain populations, the Texas Legal Services Center recommends the following changes: including Caller ID as part of basic local service for those 65 years of age or older; including texting as part of basic service so that members of the deaf, hard of hearing community, and people with speech disabilities are provided with comparable Lifeline service; and allowing access to 911 emergency services by text messaging.¹⁹⁶

In terms of proposals to eliminate Provider of Last Resort obligations, consumer representative groups like AARP argue that such actions would harm rural exchanges, especially since they likely have the fewest alternatives and the least reliable wireless service. Furthermore, AARP argues a premature elimination of POLR obligations could eradicate an affordable way for consumers in rural communities to have broadband wireline access to the Internet. As previously mentioned, wireless and broadband services use wireline infrastructure to transport telecommunication traffic, hence these alternative services would be in jeopardy if ILECs, who maintain much of the wireline network, were relieved of obligations to maintain these networks in high cost or rural areas. Furthermore, AARP argues that while wireless broadband is an alternative option to digital subscriber lines that use copper line to traffic broadband data, wireless broadband is more costly for consumers since it is metered so that consumers pay monthly bills based on how much they access the Internet. However, if the competition does not exist to offer wireless broadband, many rural consumers may be left without access.¹⁹⁷ The Texas Legal Services Center underscores the importance and relevance of wireline service and Provider of Last Resort obligations for senior citizens in particular. They claim that 25 percent of a focus group consisting of 100 low income seniors aged 60 to 80 years old in Dallas, Texas, only used wireline telephone service. But of those seniors 80 or older, approximately 67 percent used only wireline telephone service; consequently, for this segment of Texas consumers, especially the advanced elderly, access to wireline service is essential to their health and welfare.¹⁹⁸

Competitors like cable and broadband providers as well as other competitive local exchange companies argue that despite the recent changes made to the TUSF by the PUC to reduce support, more reductions can be made. The TUSF Reform Coalition contends that the fund will still disburse a significant amount of revenue, citing that the High Cost Assistance Plan for large

¹⁹⁶ Ibid.

¹⁹⁷ Tim Morstad, Associate State Director for Advocacy, AARP Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

¹⁹⁸ Lanetta Cooper, Staff Attorney, Texas Legal Services Center, before the Senate Committee on Business and Commerce, October 9, 2012.

companies will still transfer approximately \$100 million without the requirement for a needs test to demonstrate that subsidies are required to ensure affordable telephone service. Some ILECs claim the current law absolves them of having to demonstrate their need for a subsidy, citing language in Section 56.026 of the Public Utility Regulatory Act which states a "full revenue requirement showing" is not necessary for a disbursement from the TUSF. The TUSF Reform Coalition and other competitors like TEXALTEL also advocate that the remaining ILECs in the High Cost Plan, CenturyLink and Windstream-Valor, should be required to demonstrate need in any area that is served by an unsubsidized competitor, otherwise TUSF should be phased out completely in exchanges where two unsubsidized competitors exist, regardless of whether the ILEC has petitioned the PUC to deregulate. They argue the presence of an unsubsidized competitor is compelling market evidence that a private-sector business plan exists and that public subsidy is unnecessary.¹⁹⁹ TEXALTEL suggests the needs test could be based on cash flow to assess whether the ILEC has enough cash flow to pay its bills.²⁰⁰ But Windstream argues that before additional, significant changes are made to the High Cost Plan, legislators and regulators should consider the implications of the most recent reductions. Then, if additional changes like instituting a needs test to determine eligibility for high cost TUSF assistance are considered prudent, Windstream advocates that these tests should be constructed in a manner that truly determines need, not so that the sole purpose is to reduce TUSF support.²⁰¹

The TUSF Reform Coalition suggests TUSF support should be reduced for the Small and Rural Plan as well. First, to encourage urban and rural rate parity, they suggest small and rural companies should be required to implement a rate rebalancing. Second, the Reform Coalition advocates that the provisions of House Bill 2603 should be allowed to expire in 2013. Third, they advise that Section 56.025 of the Public Utility Regulatory Act, which allows eligible ILECs to petition the PUC to supplement USF funding that has been reduced due to recent policy or rule changes by the PUC or FCC, should be eliminated. Lastly, there are three large companies, i.e. those with more than 31,000 access lines, that draw TUSF support from the Small and Rural Plan and the TUSF Reform Coalition and TEXALTEL suggest they should be held to a similar needs tests as that suggested for the two large companies (CenturyLink and Windstream) in the High Cost Assistance Plan. Specifically, the TUSF Reform Coalition advocates that small and rural carriers should undergo a rate rebalancing to reduce TUSF support and increase local rates. Since \$24.00 was found to be a reasonable rate for the large companies in the High Cost Assistance Plan, the Reform Coalition argues it should be considered reasonable for the small companies as well highlighting that many small ILECs still have local rates below \$10. In addition, the Reform Coalition advocates that the provisions of House Bill 2603, which increase TUSF disbursements to small and rural ILECs should not be extended; and thereby allowed to expire in 2013. In addition, the Coalition suggests that the TUSF program, which implements Section 56.025 of the Public Utility Regulatory Act allowing ILECs to petition for supplemental support, should be eliminated or modified. They claim this program immunizes companies from the decisions of other agencies because it guarantees that the state will always provide replacement subsidies, even when another agency has determined those subsidies are no longer justified. Lastly, the TUSF Reform Coalition claims that some large

¹⁹⁹ Joe Gillan, Economic Consultant, Texas USF Reform Coalition, before the Senate Committee on Business and Commerce, October 9, 2012.

²⁰⁰ Charles Land, Executive Director, TEXALTEL, before the Senate Committee on Business and Commerce, October 9, 2012.

²⁰¹ Jennie Chandra, Vice President of Government Affairs, Windstream, before the Senate Committee on Business and Commerce, October 9, 2012.

ILECs use the Small and Rural Plan without true need since one such company reported returns on equity of their regulated operations in Texas for the two ILECs they own of 59 percent and 45 percent, respectively. Despite those significant returns, the company reported receiving \$14 million in TUSF support. The Reform Coalition suggests these types of large companies using the Small and Rural Plan should have to submit to a needs test as well.²⁰²

Availability of Broadband

A review of the state's telecommunication landscape in 2010 revealed that more than 96 percent of Texas households had access to home broadband service. Mobile broadband access is on the rise as well. Currently, 55 percent of cell phone owners use their phone to go online and one third of cell phone owners use their phone to go online more often than with other devices, including computers.²⁰³ However, a quarter of a million households in Texas still lack access to broadband. In an effort to close the digital divide, the Texas Department of Agriculture partnered with the non-profit group, Connected Nation, to launch Connected Texas, an initiative to create detailed maps of broadband coverage. The resulting map illustrates the state's broadband landscape, pinpoints unserved areas, and identifies types of service to assist broadband service providers with targeting future investment.²⁰⁴ Since the start of Connected Texas, the project has continued to develop and map the broadband data to reflect services available to public entities, as well as businesses and households. These maps help Connected Texas develop statistics for accessibility and adoption of broadband throughout the state. At the start of the project in 2010, statewide broadband availability was estimated at 93 percent and Texas currently ranks 21st in the nation for broadband availability. In terms of access at download speeds of six megabits, nearly 89 percent of non-rural areas in the state have access; but this only includes fixed wireless technology access (digital subscriber lines, also known as DSL, cable, fixed wireless, satellite, etc.). When mobile wireless technology (wireless card/Wi-Fi) is included, the average rises to 93 percent of non-rural areas in the state. Those numbers increase for broadband availability at the lowest speed, 768 kilobits, and nearly 94 percent of non-rural areas of the state have access to fixed wireless while 99 percent of non-rural areas of the state have access to both fixed and mobile wireless broadband. Connected Texas found that particular regions of the state have more severe needs for broadband expansion, these include the southern Valley along the I-10 corridor, between Dallas and Midland/Odessa, and all of East Texas north of Houston to the Oklahoma and Arkansas borders with Texas. Connected Texas provided specific access numbers grouped by Council of Government (COG) designations, signifying varying degrees of access to the benchmark speed of broadband (downloads of 6 megabits with uploads of 1.5 megabits.) These included the Concho Valley COG with only 0.08 percent with access to the benchmark speed, Deep East Texas COG at 49.23 percent, West Central Texas COG at 53.79 percent, East Texas COG at 59.95 percent, and the Ark-Texas COG at 67.22 percent with access to the benchmark speed of broadband. However, access does not equate to adoption and only 62 percent of the state is adopting broadband; but the adoption rate in rural areas is lower than non-rural areas with 48 percent of rural households adopting broadband and 64 percent of non-rural households adopting broadband. Regarding mobile or

²⁰² Joe Gillan, Economic Consultant, Texas USF Reform Coalition, before the Senate Committee on Business and Commerce, October 9, 2012.

²⁰³ Bob Digneo, Assistant Vice President, AT&T, before the Senate Committee on Business and Commerce, August 14, 2012.

²⁰⁴ Texas Department of Agriculture website, "Commissioner Staples Releases Statewide Map To Identify Broadband Needs Across Texas, June 6, 2010, <http://www.texasagriculture.gov/tabid/76/Article/393/commissioner-staples-releases-statewide-map-to-identify-broadband-needs-across.aspx> .

fixed broadband adoption, 48 percent of adults use mobile broadband service while 62 percent of Texas households adopt home broadband service. Lastly, 83 percent of Texas businesses subscribe to broadband service.²⁰⁵

Connected Texas reports that most consumers say they do not use broadband because they do not know how to or they do not know what it is good for.²⁰⁶ Comcast Cable Company confirms these reasons citing the main three barriers to improving broadband adoption rates are a lack of understanding of basic computer skills or failure to realize the relevancy of having access, affordability, and lack of a computer in the home. In an effort to address these barriers, Comcast launched Internet Essentials, the largest and most comprehensive broadband adoption program in the nation. The program helps Comcast provide low rates for broadband service, the opportunity to purchase Internet-ready computers for under \$150, and multiple options for digital literacy training to eligible families.²⁰⁷ For the purpose of education and broadband expansion, Connected Texas has created partnerships with various organizations including the Texas State Library. Through these partnerships, Connected Texas aims to achieve what it believes are the two most important needs to improve broadband availability: digital literacy training programs and economic development. Specifically, libraries have started providing digital literacy training programs and Connected Texas has begun demonstrating to businesses how they can use broadband to increase productivity. In fact, in terms of broadband use, Texas businesses that subscribe to broadband earn median annual revenues of \$100,000 more than businesses that do not. The median Texas household income using broadband earns \$40,000 more than household that do not.²⁰⁸

The FCC recently adopted comprehensive reforms of the federal USF and intercarrier compensation systems to accelerate broadband build-out to the 18 million Americans living in rural areas who currently have no access to robust broadband infrastructure. With these reforms, the FCC concluded that providers only offering voice services are no longer adequate. The goal of the reform is to include broadband service as a component of universal service, so that high-speed Internet is expanded and made available to millions of consumers throughout country. Consequently, the current federal USF will become the new Connect America Fund, which is focused on broadband expansion.²⁰⁹ Funding from the “legacy” high-cost mechanisms are capped at fiscal year 2011 levels for the next six years and the new Connect America Fund will ultimately replace all high-cost mechanisms at the federal level. Since eligible telecommunications carriers will be required to offer broadband services, Texas telecommunication providers could see significant decreases in federal USF subsidies under the

²⁰⁵ Don Shirley, Executive Director, Connected Texas, before the Senate Committee on Business and Commerce, August 14, 2012.

²⁰⁶ Don Shirley, Executive Director, Connected Texas, before the Senate Committee on Business and Commerce, August 14, 2012.

²⁰⁷ Jim Lewis, Vice President of Government Affairs, Comcast - West Division, before the Senate Committee on Business and Commerce, August 14, 2012.

²⁰⁸ Don Shirley, Executive Director, Connected Texas, before the Senate Committee on Business and Commerce, August 14, 2012.

²⁰⁹ Federal Communication Commission <http://www.fcc.gov/encyclopedia/connecting-america> .

new Connect American Fund. The goal is to target funding to those areas that truly need it while at the same time requiring broadband commitments from ILECs.²¹⁰

Various industries important to the state such as healthcare and education have also increased dependence on broadband. The healthcare industry utilizes telecommunications not only to communicate, but also to dispense services. Lack of broadband or unaffordable broadband hampers many healthcare facilities and those they serve. For instance, the FCC rural health care pilot program in Texas participates in a public bidding process for broadband for Texas' rural hospitals. The most recent bid process resulted in quotes of \$10,000 per month for a broadband circuit for many rural hospitals. Furthermore, some residents in South Texas depend on a mobile van as their only health care provider. This is problematic since many rural communities, like those in South Texas, and even some urban areas are what are considered "broadband desserts." The state's largest non-public health care system, CHRISTUS, states they would not be able to provide the access or the amount of care to these rural communities without affordable broadband. CHRISTUS argues that the state should work to bring rural communities to parity with urban Texas pertaining to broadband access and cost.²¹¹ The demand for broadband connectivity has increased within the Texas education system as well. Many Texas schools rely on online networks to facilitate collaboration among educators and students. In addition, teachers and students are using web applications, video conferencing, and mobile apps to make communication and learning more efficient and convenient. Online courses make education accessible from school or home and digital content can enhance the education system. Consequently, the Texas Computer Education Association (TCEA) reports that not only is it important to provide enough broadband connectivity to schools, but it is equally important to have access for students outside of schools since home access can extend learning time. Furthermore, TCEA argues that broadband needs vary depending on the number of concurrent network users, patterns, types of content, and traffic on the network. Because of this, no one model fits all since the needs vary from school to school. TCEA references the State Educational Technology Directors Association's report, "The Broadband Imperative: Recommendations to Address K-12 Education Infrastructure," which outlines steps that districts and government could take to provide robust telecommunications infrastructure for schools. According to the national FCC broadband map, Texas schools only have an average of ten to 25 megabits coming into their network. The broadband report suggests that schools should have a target of at least 100 megabits per 1,000 students/staff for the 2014/15 school year and at least one gigabit per 1,000 students/staff for the 2017/18 school year for an external Internet connection to the Internet Service Provider. The report also recommends at least one gigabit per 1,000 students/staff for the 2014/15 school year and 10 gigabits per 1,000 students/staff for the 2017/18 school year for internal wide area network connections from the district to each school and among schools within the district. Lastly, the report recommends that districts, states, and the federal government should work together to ensure that students have access to broadband outside of school, preferably home access, but other solutions could include creating Internet hot spots within the community that students can easily access.²¹²

²¹⁰ Nathan Benedict, Assistant Director of Regulatory Analysis, Office of Public Utility Counsel, before the Senate Committee on Business and Commerce, October 9, 2012.

²¹¹ Hank Fanberg, Technology Advocacy Specialist, CHRISTUS Health, before the Senate Committee on Business and Commerce, August 14, 2012.

²¹² Jennifer Bergland, Director of Government Relations, Texas Computer Education Association, before the Senate Committee on Business and Commerce, August 14, 2012.

Some Texas providers, like Windstream, have submitted multiple proposals to attain federal broadband funding. In fact, Windstream plans to combine Connect America funds with its own private sector investment for broadband maintenance and expansion. As a result, Windstream is currently building out first-time broadband service in four counties, a \$2.2 million effort funded in part by the U.S. Department of Agriculture. In addition, the FCC is reviewing a Windstream application to invest \$30.3 million in 36 counties to provide broadband to more than 18,000 Texans within a three-year period. Windstream's broadband investments in rural Texas are enhancements and add-ons to the same network used to provide telephone service; subsequently, Windstream stresses that reductions in TUSF support hinders its ability to support the underlying voice network infrastructure. Consequently, if costs rise too much and the infrastructure is no longer affordable to maintain, Windstream states there will be no independent platform or infrastructure for broadband in these high cost areas. The costs challenges would be more severe for wireless broadband providers or cable companies, ruling out the possibility of alternate providers.²¹³

The Texas Statewide Telephone Cooperative, Inc. reports that over 97 percent of their members' combined service areas have broadband service available despite largely rural territory. They provide these services to not only rural residences, but schools, hospitals and businesses. In some instances, the telephone cooperative may be the only broadband providers. For example, Central Texas Telephone Cooperative provides broadband service to the Texas Parks and Wildlife training facility where no other service is available. They claim this is largely due to the fact that as the rural telecommunications network has been expanded and upgraded, the support that has gone into these high cost areas has been utilized to create an advanced reliable network so that voice services infrastructure can also serve or assist broadband service. As previously stated, TSTCI as well as other providers believe that if the ability to maintain the network is threatened, rural customers face not only the threat of a loss of voice and wireless service, but the availability of broadband as well. Since federal telecommunication support programs are moving away from supporting a network that is only voice capable, TSTCI recommends the state should consider revising its support mechanisms for high cost areas to include broadband as a basic service to qualify for support.²¹⁴

The Texas Legal Services Center (TLSC) agrees with using TUSF support for broadband service. TLSC claims social services and both education and employment opportunities are becoming increasingly dependent on access to the Internet. Consequently, the lack of infrastructure to support Internet access is placing the rural parts of the state at an economic and social disadvantage. TLSC states universal support is necessary to level the playing field for all Texas citizens and recommends using TUSF funds to support broadband build-out. Furthermore, TLSC claims lack of infrastructure is not the only barrier to the availability of broadband.

²¹³ Jennie Chandra, Vice President of Government Affairs, Windstream, before the Senate Committee on Business and Commerce, October 9, 2012.

²¹⁴ Daniel Gibson, Attorney, Texas Statewide Telephone Cooperative, Inc., before the Senate Committee on Business and Commerce, August 14, 2012.

Low income consumers have financial difficulty accessing the Internet; subsequently, TUSF should be used for the deployment of broadband as well. TLSC also suggests that the PUC should establish a task force comprised of rural areas, urban areas, low income consumers, public libraries, schools, and non-profit organization advocates to deliberate and provide the Legislature with proposals on USF support of Internet access for low income consumers.²¹⁵

Telecommunications Service Discounts

House Bill 2128 of the 74th Legislative Regular Session provided that telecommunications companies opting into incentive regulation were required to offer broadband digital services to certain public entities, primary schools, universities, hospitals, and libraries, at a price of 105 percent of the company's long-run incremental cost or, simply put, the wholesale cost to provide service. When these discounts were set to expire in 2006, Senate Bill 5 of the Second Called Session of the 79th Legislature renewed the discounts until 2012. Then, Senate Bill 773 of the 82nd Legislative Regular Session extended the requirement to offer these services through January 1, 2016. It also increased the price from 105 percent of long-run incremental cost to 110 percent of long-run incremental cost.²¹⁶

Many university, public school, library, and hospital representatives advocate for the extension of these service discounts, citing that they allow these entities to maintain connectivity to the Internet and, in some cases, between school campuses. Specifically, the discounts allow schools to purchase high speed services from local exchange carriers, services needed in public schools to provide students with a technologically relevant education, at the specified discount rather than the higher commercial rate that varies from city to city. In 2010, the Texas Computer Education Agency estimated that 866 public entities were utilizing the telecommunications discounts and some entities could see their costs triple or quadruple if the discounts were not continued.²¹⁷ Region XIII estimates that under the current telecommunications service discount, one school district pays \$257.71 per month, per circuit; but without the discounts, the same telecommunication services would cost \$2050 per month, per circuit.²¹⁸ Texas School Alliance, representing 38 percent of the state's total student enrollment, claims the telecommunication service discount helped member districts save over \$1.5 million per year and that continuation of the discount will help districts deliver high-quality educational content at an affordable price.²¹⁹ While most metropolitan school districts have choices in local exchange carriers, those in more rural communities only have one choice for local exchange carriers; consequently, rural schools might experience a significant increase in rates should the discounts expire.²²⁰

²¹⁵ Lanetta Cooper, Staff Attorney, Texas Legal Services Center, before the Senate Committee on Business and Commerce, October 9, 2012.

²¹⁶ Jennifer Bergland, Director of Government Relations, Texas Computer Education Association, before the Senate Committee on Business and Commerce, August 14, 2012.

²¹⁷ Ibid.

²¹⁸ Paul Chavez, Region XIII Education Service Center, Texas Association of Community Schools, before the Senate Committee on Business and Commerce, August 14, 2012.

²¹⁹ Maria Whitsett, Consultant, Texas School Alliance, before the Senate Committee on Business and Commerce, August 14, 2012.

²²⁰ Paul Chavez, Region XIII Education Service Center, Texas Association of Community Schools, before the Senate Committee on Business and Commerce, August 14, 2012.

The University of Texas System claims savings of over \$22.6 million a year due to the discounts. If the discounts are not extended beyond 2016, testimony suggests the UT System will have only a few options like reducing costs by decreasing the amount of bandwidth available to campuses and clinics for students, researchers, and healthcare professionals, seeking additional appropriations to pay for the increased costs for telecommunications infrastructure, or increasing costs to students and patients.²²¹

Libraries and hospitals rely on the telecommunication service discounts to provide public access to the Internet and improve the reach of healthcare, respectively. There are currently over 550 public library systems and over 300 branch libraries in Texas offering Internet services to the public at large. Specifically, 64 percent of Texas libraries report they are the only source of free Internet access in their communities. Ninety-three percent of Texas public libraries report they provide workforce training and employment services through public access to online resources. Specifically, the Houston Public Library provides over 2,800 public access computers with over 1.2 million computer users. They estimate a savings of over \$500,000 every year due to the discounts.²²² Many other libraries rely on the savings afforded by this discount program to maintain Internet connectivity and to provide instructional technologies for the public.²²³

Some competitors and opponents argue these telecommunication service discounts stifle competition and hamper business. Specifically, the Texas Public Policy Foundation (TPPF) claims these discounts are poor public policy and they do not understand the need to provide them. The manner in which the discounts are provided places the burden on employees, shareholders, and customers of only a few telecommunication providers instead of placing the burden on all taxpayers. TPPF believes these discounts hinder competition, distort business and investment decisions, and harm consumers. TPPF suggests these discounts should be eliminated in 2013 despite their current expiration date of 2016.²²⁴ TW Telecom agrees that these discounts harm competition and asserts that the telecommunications market has changed since these discounts were first implemented 17 years ago; consequently, their need is outdated. All of the services provided under these discounts, like broadband and digital services, are now provided by competitors. However, because the prices ILECs must offer these services to schools, hospitals, etc. are so low due to mandated discounts, they result in lack of competition for alternative providers since competitors cannot compete with the capped prices. TW Telecom adds that small companies who are required to offer the discounts actually get TUSF reimbursements for the difference of the discounted rate and the market (competitive) rate, further hampering competition.²²⁵

Right-of-Way

Access Line Charges. Chapter 283 of the Local Government Code outlines right-of-way compensation. The guidelines set forth were enacted in response to two federal court decisions

²²¹ Wayne Wedemeyer, Director of Telecommunication Services, University of Texas at Austin, before the Senate Committee on Business and Commerce, August 14, 2012.

²²² Roosevelt Weeks, Deputy Director, Houston Public Library, before the Senate Committee on Business and Commerce, August 14, 2012.

²²³ Gloria Meraz, Director of Communications, Texas Library Association, before the Senate Committee on Business and Commerce, August 14, 2012.

²²⁴ Bill Peacock, Vice President of Research and Director of the Center for Economic Freedom, Texas Public Policy Foundation, before the Senate Committee on Business and Commerce, August 14, 2012.

²²⁵ Kristie Ince, Vice President of Regulatory Affairs, TW Telecom, before the Senate Committee on Business and Commerce, August 14, 2012.

rendered in litigation against the City of Austin and the City of Dallas in which the federal courts ruled that a municipality was not authorized to impose a franchise fee on a telecommunications provider that did not "physically occupy" public rights of way. Consequently, if a telecommunications provider did not install facilities such as wires and poles on the right-of-way, the municipality was enjoined from requiring a franchise and franchise fees from the telecommunications provider. At the time, many new telecommunications entrants were reselling the incumbent provider's service or using the incumbent's network, so there was not a need to install facilities. Municipalities were concerned that if a significant amount of customers chose service from telecommunications providers who did not own their facilities and therefore did not pay franchise fees, the municipalities' revenues from franchise fees would decline severely. Consequently, to prevent declining revenues, the Legislature enacted Chapter 283, which abolished franchising requirements for new entrants and allowed all existing franchise holders to terminate their franchises. This ensured compliance with the federal court decisions while allowing facilities-based providers the opportunity to shed their franchise and compete with the new providers on equal terms. Chapter 283 also imposed right-of-way fees on all certificated providers that served end-use retail customers through the use of transmission media that was physically located with a public right-of-way.²²⁶

Regarding the fee structure for using the right-of-way, a percentage of gross revenues was the structure used in the past, but the Legislature instead decided to structure right-of-way fees based on compensation per each access line provided by the telecommunications company. Chapter 283 right-of-way fees are structured so that companies collect and remit the fees to the municipality, but the amount of fees are based on the definition or category of access lines. Telecommunications providers determine the number of access lines provided to each customer, calculate the fee for each line, and bill the customer accordingly. The company remits the fees to the municipality on a quarterly basis. Since "access line" was broadly defined in Chapter 283, the PUC adopted clarifying rules and established a methodology for counting and reporting lines, but there is still disagreement about the intent. TW Telecom argues the term is not being interpreted and applied evenly and this raises competitive advantage issues among providers as well as concerns for adequate compensation among municipalities. Specifically, there are three categories for access lines as defined by statute. Category 1 includes residential switched access lines and any other access lines that provide residential voice service. It also includes point-to-point lines, whether residential or non-residential. Category 2 includes non-residential switched access lines and any other access line that provides non-residential voice service. Category 3 includes all other point-to-point private lines not otherwise included in Category 1, whether residential or non-residential. The rate paid by Category 1, 2, and 3 access lines varies from city to city. Base rates for access lines were established in 1999 by the PUC according to a statutory formula. Each municipality set its own amount for revenue received in franchise, license, permit, and application fees, and in-kind services or facilities from certificated telecommunications providers in 1998. During this time, all certificated providers were required to report the number of access lines, by category, currently provided in each municipality. After the base amounts and access line totals were calculated, municipalities were authorized to enact an allocation of their base amount over each access line category; consequently, nearly all cities elected to allocate a lower rate for the residential class, Category 1. Higher rates were allocated

²²⁶ Kristie Ince, Vice President of Regulatory Affairs, TW Telecom, before the Senate Committee on Business and Commerce, August 14, 2012.

to Category 2 and 3. The PUC then adjusted the access lines rate upward by 50 percent of the annual change in the consumer price index, if there was a change.²²⁷

Competition and technology efficiencies are driving the cost to provide service down, but right-of-way fees have increased. Since there is no correlation between the cost of service and the amount of the access line fees assessed, the right-of-way fees paid by telecommunication providers (which is passed through to customers) exceeds the right-of-way fees paid by other utilities like cable and electricity. Cable and electricity utilities pay right-of-way based on gross revenues. Particularly for TW Telecom, a facilities-based company that provides telecommunication, data, and Internet services to small, medium, and large business customers, Category 2 access line right-of-way fees are significant costs to customers. For example, a TW Telecom business customer with a Category 2 line is charged a base rate in the City of Austin of \$5.18, but the access line right-of-way fee totals \$119.14. TW Telecom reports the cost of service for the customer is \$420 and that the right-of-way fees total to 28 percent of the cost of service. Because of this, companies are incentivized to sell services not based on the cost or quality of services but rather on how the company categorizes the access lines provided. TW Telecom believes Chapter 283 access line fees create a competitive disparity and results in a system where the amount of a fee on the bill is directing the competitive market.²²⁸

TW Telecom believes there should be a correlation between right-of-way fees and the actual burden imposed on the right-of-way or the actual cost the city incurs to manage the right-of-way. Conversely, if a value of service cost methodology is favored, then TW Telecom believes fees should correspond to the cost of service. Under the current Chapter 283 methodology, cost of service is not applied to the amount of the fee. TW Telecom favors the franchise fees applied to video and cable companies using public right-of-way. Under Chapter 66 of the Public Utility Regulatory Act, cable and video providers pay municipalities five percent of their gross revenue and TW Telecom proposes that companies that currently pay access line fees convert to new gross revenue compensation similar to those paid by cable and video providers. Alternatively, if the access line fee structure were to remain, TW Telecom suggests the following changes: reasonable deadline for timely completion of authorized reviews; reasonable limitation on the period of assessment for unpaid access line fees; a mechanism to recoup overpayment of access line fees; and a safe harbor mechanism for companies to obtain direction on how to count and report services. Regarding an authorized review deadline, the PUC adopted rules that cities must review a companies' access line report within 90 days of their filing, but the rule did not establish a time frame in which cities must complete the audit. Some cities currently request audits dating back several years and TW Telecom feels this is unreasonable. Regarding reasonable limitations on the period of assessment for unpaid access line fees, some cities claim there is no time period limit to assess payment of access line fees. In fact, some cities contend if they find errors in an audit of fees, they can request payment for fees dating back several years. TW Telecom reports municipalities want to assess fees for mistakes discovered in an audit for a period of years even though the city did not audit the provider at those times. Consequently, TW Telecom suggests a reasonable limitation be determined to assess unpaid access line fees unless there is evidence of fraud or gross error. Regarding a mechanism to recoup overpayment, TW Telecom reports they were not initially refunded an overpayment in access line fees even though the municipality acknowledges the overpayment. Through extended negotiations, the city allowed the company

²²⁷ Ibid.

²²⁸ Kristie Ince, Vice President of Regulatory Affairs, TW Telecom, before the Senate Committee on Business and Commerce, August 14, 2012.

to recoup the overpayment, but it was done over a period of years. While other parts of the statute do provide for refund of overpaid taxpayer money from taxing entities, the city maintains they were not legally bound to have repaid the overpayment since the law does not expressly provide for refund of overpayment of the Texas municipal fee. Regarding safe harbor, TW Telecom believes companies like them do not have recourse to clear up confusion on how to count new technology access lines since the law is not favorable to them in respect to access line fees. They feel they cannot approach the PUC because it leaves them open to audits going back to the inception of the law; consequently, they favor a process where they can approach the PUC with a safe harbor from such far reaching audits.²²⁹

Conversely, The Texas Municipal League (TML) reports that telecommunication access line fees have decreased roughly 20 percent since its implementation in June 2000. They believe the decrease may be attributed to market trends of customers switching from landlines to wireless, unexpected use of high capacity lines and new wireline service technologies like Voice over Internet Protocol, which does not pay access line fees. TML also reports that cities cannot increase access line fee rates; only the PUC can raise rates and this is done by indexing rates according to the consumer price index. In addition, TML argues administrative remedies are available to apply access line fees more fairly to Category 2 lines.²³⁰ Specifically, the PUC has the authority to redefine access line and the categories "as necessary to ensure competitive neutrality and nondiscriminatory application to maintain consistent levels of compensation, as annually increased by growth in access lines and the consumer price index, as applicable, to the municipalities."²³¹ The PUC has the authority to redefine or add formerly excluded providers or services; therefore, Category 2 lines could be redefined to apply more equitable access line fees. Furthermore, TML reports that city allocation for access line fees may be challenged by a provider and not implemented if the PUC determines the allocation is not just and reasonable, competitively neutral, or is discriminatory.²³²

Utility Pole Attachments. In order to provide service, cable companies in Texas attach their wires to existing utility poles. In fact, installing duplicate sets of poles in the public right-of-way is usually forbidden by the Local Government Code. Currently, no legislation or regulation exists that governs access to electric cooperative poles in Texas; telecommunication providers attach wires to poles owned by electric cooperatives on a contract basis. The Texas Cable Association (TCA) reports the lack of statutory guidance creates conflicts between the parties since there is not a requirement for cooperatives to provide access, nor are there requirements that cooperatives provide reasonable rates, terms, and conditions to telecommunications providers. Conversely, investor-owned utilities are required by federal law to allow nondiscriminatory access to their poles at just and reasonable rates, terms, and conditions. Municipally-owned utilities are subject to cost-based pole attachment rent price caps and are required to make their poles available on a nondiscriminatory basis. While investor-owned utilities are subject to regulatory oversight, electric cooperatives are not, for the most part. TCA believes the ability of electric cooperatives to deny access and expel telecommunications providers from poles is to the detriment of Texas consumers. TCA reports that cooperatives often charge pole rental rates two to three times higher than those charged by investor-owned

²²⁹ Ibid.

²³⁰ Snapper Carr, Attorney, Texas Municipal League, before the Senate Committee on Business and Commerce, August 14, 2012.

²³¹ §283.003 (b) of the Local Government Code.

²³² §283.055 (d) of the Local Government code, also see PUC Substantive Rule 26.467.

utilities. Consequently, TCA believes legislation is needed. Such legislation should contain provisions to ensure that rates, terms, and conditions required by electric cooperatives are just, reasonable, and nondiscriminatory. It should mandate access to cooperative poles providing that access may only be denied for objective and nondiscriminatory reasons related to capacity and engineering limitations. Legislation should contain a cost-based rate formula similar to the FCC's cable rate formula used by investor-owned utilities and municipally-owned utilities. It should also contain an access and make-ready timeline to ensure that attachers can serve their customers in a cost-effective, efficient, and predictable manner. TCA recommends an equitable process for the detection and correction of safety violations so that telecommunications attachers are not forced to pay to correct violations they did not cause as well as a reasonable, cost-based penalty when attachers fail to obtain the requisite permission to attach to cooperative poles. Lastly, TCA recommends legislation should require an efficient, cost-effective, and experienced forum to resolve disputes that the parties are unable to resolve and enforce applicable law.²³³

Texas Electric Cooperatives (TEC), a statewide association for the 66 distribution cooperatives and nine generation and transmission cooperatives in Texas, reports that cooperatives conduct several procedures to evaluate pole attachments. These include verifying adequate space and mechanical strength to safely accommodate the proposed attachments, and verifying that proposed attachments do not reduce the integrity and reliability of the cooperative's electric system. They also include verifying that attachments installed on the poles comply with the National Electric Safety Code requirements and construction standards as well as consideration of costs for any modifications to the facilities necessary to accommodate the proposed attachments. The statewide average annual rate per attachment for cooperatives is \$8.47 and these rates are the lowest in the areas of the state with the lowest population density. TEC reports that Congress determined that cooperatives were better positioned than the FCC to establish fair and reasonable attachment agreements, hence the lack of federal regulation for pole attachments. A cable provider has not been denied access to a Texas cooperative's pole. Regarding legislative action for pole attachments, TEC focuses on seven issues and points out that all of these are currently handled by contracts. Firstly, cooperatives believe the FCC rate formulas require electric utilities to subsidize the large cable and telecom companies by setting pole attachment fees artificially low. Instead of implementing the FCC formula, TEC suggests applying a single Texas formula in the event that parties are unable to reach an agreement. This formula would more accurately capture the true cost of pole use and is currently used by some cooperatives. TEC reports that the recently reduced FCC formula is currently under appeal by some of the investor-owned utilities to which it applies. Next, to address issues of unauthorized or unsafe attachments, TEC recommends requiring a contract and permit before attachment, a written plan of correction for unpermitted or problem attachments, and the imposition of costs and sanctions for non-compliance. Third, to address abandoned attachments, cable companies should agree to post a bond to pay for the removal of abandoned attachments and agree to authorize cooperatives to dispose of those attachments after providing notice to the attaching company. Fourth, cooperatives agree to the cable companies' suggestion that cooperatives follow the FCC make-ready timeline as long as requirements are adjusted for smaller operating systems. Fifth, while the Cable Association has suggested pole attachment audits be conducted by an independent third party and that charges for unauthorized attachments be limited to a set period of time, the cooperatives counter that the charges should be limited to the audit period. Furthermore, cooperatives suggest there should be a pole count benchmark set at the end of each

²³³ Todd Baxter, Vice President of Government Relations and General Counsel, Texas Cable Association, before the Senate Committee on Business and Commerce, August 14, 2012.

audit. Sixth, the Cable Association suggests that a third party dispute resolution process is needed to enforce applicable law when parties cannot reach an agreement, but the cooperatives suggest that all technical disputes that might delay the attachment process should go to non-binding arbitration, allowing other disputes to go directly to state district courts. Lastly, TEC believes it would like an indemnity provision to protect cooperatives against liability for an attaching company's failure to secure its own easement from the property's landowner.²³⁴

CONCLUSION

The Texas telecommunications market has made great strides to enhance competition. The market is not perfect, as referenced by testimony regarding issues with customer service and data security. Specifically, Clifford Gay testified about a problem with customer service for his mobile broadband service. Thankfully, the issue was resolved.²³⁵ Data Foundry, a facilities-based data center operator, testified to concerns of cyber security. Specifically, their clients are concerned that Internet transmission providers or Internet access providers are inspecting and appropriating the confidential content and information. Data Foundry worries that more and more of their clients will abandon cloud computing and take their information offline and return to traditional means of business. Therefore, Data Foundry believes that user privacy should be a default rule on the Internet, and users should not be compelled to waive their privacy as a mandatory condition of service. Any waiver of privacy should be opt-in and totally voluntary.²³⁶

The Committee supports efforts for more competition but stresses the importance of consumer protection. TUSF revenues have been reduced for the large companies and are projected to be reduced for the small companies as well, but this should not be interpreted as a sign that a need no longer exists to use the funds in order to make voice telecommunication services affordable and accessible. The Committee supports a needs test for ILECs applying for TUSF revenue, but stresses that the PUC should consider ongoing state and federal cuts to universal service funding when considering criteria for eligibility. In addition, the Committee supports extending the availability of broadband. To promote broadband extension, perhaps funds that are no longer eligible to ILECs for USF due to the aforementioned suggested reform of eligibility standards could be used to support broadband efforts. Though one of the original purposes of universal service was to keep rural rates affordable in comparison to urban rates, Texas has seen rural rates lower than urban rates, despite higher costs in rural areas. Consequently, the Committee also supports bringing urban and rural basic local telephone rates into parity and the Commission's actions to rebalance rates for small and rural ILECs should serve this purpose.

Provider of Last Resort obligations served the purpose of ensuring that all who wanted voice service had access to it; but if competition exists, the need for POLR obligations decrease since the customer has alternative choices. However, since deregulation classifications do not account for the exchange in its entirety, the Committee recommends that the PUC consider these gaps in competition when considering deregulation requests for certain exchanges. In order to ensure affordability, the TUSF not only helps high cost areas subsidize rates, but also helps low income customers, and the PUC should continue the Lifeline program with the TUSF.

²³⁴ Eric Craven, Senior Vice President, Government Relations and Legal Affairs, Texas Electric Cooperatives, before the Senate Committee on Business and Commerce, August 14, 2012.

²³⁵ Clifford Gay, before the Senate Committee on Business and Commerce, August 14, 2012.

²³⁶ Andrew Macfarlane, Data Foundry, Inc., before the Senate Committee on Business and Commerce, August 14, 2012.

Regarding telecommunication service discounts for public institutions like schools and hospitals, the Committee understands the need to provide broadband services to learning and healthcare institutions at low prices for the benefit of the public. However, if these discounts are to continue, a more equitable method is recommended so that certain telecommunications providers are not solely required to provide the discounts.

The Committee agrees that certain telecommunications providers are not treated equally in regards to right-of-way fees; specifically, those providers assessed under the Category 2 access line category. However, the Committee believes there is administrative recourse to remedy this fee structure and urges the PUC to assert its authority to redefine access line categories "as necessary to ensure competitive neutrality and nondiscriminatory application to maintain consistent levels of compensation, as annually increased by growth in access lines and the consumer price index, as applicable, to the municipalities." The Committee also affirms the PUC's authority to redefine or add formerly excluded providers or services so that Category 2 lines can be redefined to apply more equitable access line fees. However, the issue of telecommunication and cable providers attaching wires and equipment to electric cooperatives' poles should remain within contractual negotiation parameters; state regulation is not needed.

RECOMMENDATIONS

1. The Legislature should require the PUC to provide more specific criteria for application of Substantive Rule 26.408 for Additional Financial Assistance.
2. The Legislature should encourage the PUC to adopt a plan to require applicants of the two high-cost assistance TUSF plans (Texas High Cost Universal Service Plan and Small and Rural Incumbent Local Exchange Carrier Universal Service Plan) to demonstrate that TUSF subsidies are needed to ensure affordable telephone service. To ensure the PUC has the flexibility to institute these reforms, the Legislature should:
 - a. modify or eliminate PURA 56.026 to give the PUC the flexibility to consider the full-range of analyses that might demonstrate TUSF support;
 - i. Specifically, PURA 56.026(a): "*A revenue requirement showing is not required for a disbursement from the universal service fund under this subchapter.*"
 - b. allow the provisions of House Bill 2603 to expire in 2013; and
 - c. eliminate or modify the TUSF program that implements Section 56.025 of the Public Utility Regulatory Act. This program allows eligible companies to apply to the PUC to supplement any changes made by PUC or FCC policy which reduce USF support.
3. The Legislature or PUC as appropriate, in conjunction with a needs test for TUSF high cost assistance, should ensure that funds no longer disbursed for basic local telephone service are used instead for broadband expansion.
 - a. Specifically, if funds remain after the PUC has implemented a needs test for the TUSF high-cost assistance programs, those diverted funds should be used for broadband service and deployment.

- b. Since federal telecommunication support programs are moving away from supporting a network that is only voice capable, the state should consider revising its support mechanisms for high cost service to include broadband as a basic service to qualify for support.
 - c. The Legislature should require the PUC to establish a task force comprised of rural areas, urban areas, low income consumers, public libraries, schools, and non-profit organization advocates to deliberate and provide the Legislature with proposals on USF support of Internet access for low income consumers.
4. In order to increase telephone service penetration rates and maintain service in lower income households, the PUC should consider more actively promoting the Lifeline program in Texas. Furthermore, relevant state agencies should educate employees and clients regarding Lifeline services as well as provide application assistance for the Lifeline discount program. Specifically, the PUC should:
 - a. maintain an email list of nonprofit organizations that work with the elderly and low income populations of this state;
 - b. email information about Lifeline and the application form to members of the email list on a quarterly basis;
 - c. monitor the marketing activities of telecommunication utilities to ensure that basic service is provided on a stand-alone basis,
 - d. enter into memoranda of understanding with state agencies that provide services to the low income and elderly and with public housing authorities to improve the enrollment rates in the Lifeline service program; and
 - e. form a working group with these agencies and the public housing authorities to regularly review progress in Lifeline enrollment and to make changes, if any, to the activities the agencies and the public housing authorities perform to improve Lifeline enrollment.
5. The Legislature should direct state agencies to educate both their employees and clients about the Lifeline discount and present application opportunities to those clients likely to qualify for the program. Specifically:
 - a. State agencies should provide clients with educational materials about Lifeline at the time they apply for relevant benefits, similar to what is required in the state of Florida. Florida also requires that if a state agency determines a person is eligible for Lifeline, the agency must immediately forward the information to the PUC to ensure the client is automatically enrolled in the program.
6. The Legislature should reaffirm its support for more equitable access line fees and affirms §283.003 (b) of the Local Government Code that the PUC has the authority to redefine "access line" and the categories "as necessary to ensure competitive neutrality and nondiscriminatory application to maintain consistent levels of compensation, as annually increased by growth in access lines and the consumer price index, as applicable, to the municipalities." The Legislature should also affirm the PUC's authority to redefine or add formerly excluded providers or services so that Category 2 lines can be redefined to apply more equitable access lines fees. Lastly, the Legislature should affirm §283.055(d) of the Local Government code, and PUC Substantive Rule 26.467 which provides that city allocations for access line fees may be challenged by a provider and not

implemented if the PUC determines the allocation is not just and reasonable, competitively neutral, or is discriminatory.

- 6. Study the costs and benefits of implementing a redeemable deposit program for beverage containers. Analyze the impact on Texas manufacturing of additional supplies of raw materials generated and any reduction of litter and landfill waste.**

BACKGROUND

The Committee did not take up this interim study charge.

RECOMMENDATIONS

The Committee did not issue any recommendations for this charge.

7. Review current and pending ERCOT protocols as they apply to all generation technology, and identify those protocols that may provide operational, administrative, or competitive advantages to any specific generation by fuel type. Consider the impact any revisions to the protocols may have on grid reliability and electricity rates. Make recommendations for revisions or statutory changes to limit distortions in the Texas electrical market.

BACKGROUND

The Electric Reliability Council of Texas (ERCOT), the independent system operator responsible for maintaining grid reliability and market functions, supervises the market by a set of standards or protocols. These protocols outline the business rules and practices used by ERCOT and market participants for the orderly functioning of the ERCOT system, market, and operations.²³⁷ In order to create a protocol or revise an existing protocol, proposals are submitted to ERCOT. Next, ERCOT analyzes the proposals and conducts an internal executive review as well as an impact and legal review. Then the stakeholders are given a comment period after which the Protocol Revision Subcommittee considers proposed language and further analyzes the impact. The Technical Advisory Committee and the Board of Directors both vote on the proposal; upon approval by both, the proposal is sent to the Public Utility Commission of Texas (PUC) for further consideration. Any appeals of the decision the Board of Directors has made can be appealed through the PUC; otherwise, the protocol is deemed approved absent PUC objection. Lastly, the new or revised protocols are then implemented in the ERCOT market.²³⁸

ERCOT protocols govern how different electric generating resources interconnect and interact with the transmission grid and establish rules that enable grid operators to manage issues efficiently while recognizing the unique characteristics of certain resources. The ERCOT system features diverse generators using different technologies and fuels, with major contributions from units powered by natural gas, coal, nuclear, and wind resources. Different technological characteristics raise different issues for the grid operator. For instance, the start-up time for types of units, the ability of the unit's output to be planned, dependence on weather conditions, the ability or control of the unit's output in regards to what operators may require, and the availability of different units on particular days all affect electric system stability and transmission congestion. Consequently, protocols are not uniform among different fuel sources. The following report analyzes whether this situation presents advantages to certain generators by fuel type and what impacts those advantages have on grid reliability and rates.²³⁹

²³⁷ Electric Reliability Council of Texas website, "Protocols - Nodal," <http://ercot.com/mktrules/nprotocols/> accessed: Sept. 4, 2012.

²³⁸ Testimony of H.B. "Trip" Doggett, President, Electric Reliability Council of Texas, before the Senate Committee on Business and Commerce, July 10, 2012.

²³⁹ Ibid.

TESTIMONY

Protocols and Generation Sources

Intermittent resources like some renewable energy, nuclear energy, and hydroelectricity all have some exceptions to the protocols that account for their unique characteristics, such as variable output or risks to adjusting output. For example, when ERCOT purchases capacity to meet reliability needs, the costs of those purchases are allocated to Qualified Scheduling Entities with capacity shortfall. Capacity shortfall is calculated based on forecast values for intermittent resources. For other resources, it is calculated based on the lower of the scheduled capacity value at time of purchase or at real-time. Another example: generators are subject to penalties when generating power outside established ERCOT standards. Although intermittent resources must comply with such standards, compliance is reviewed in light of the difference in their ability to control changes in wind speed, for example. Also, hydro generators are allowed to provide fast acting responsive reserve service up to 100 percent of their maximum output. All other generators are limited to 24 percent of maximum.²⁴⁰

ERCOT protocols recognize the inherent difference in various generation technologies. If ERCOT needs to take generators offline for reliability reasons, nuclear and hydro will only be taken offline after all other plants. Specifically, nuclear power plants are the last resource required to power down under ERCOT protocols since this type of generating plant is not designed to cycle rapidly. Applying uniform standards in this instance would risk the security and stability of the plant. Accordingly, ERCOT protocols consider the variable generating or operating characteristic of certain resources when establishing protocols and provide tolerances for other intermittent resources like wind and solar, since they both depend on variable weather patterns for generation. However, when standards can be applied in a more uniform matter to these intermittent resources, they should be.²⁴¹ For instance, during curtailment requirements when resources are required by ERCOT to reduce production to manage congestion on the transmission system, both wind and solar are held to the same curtailment standards as other types of generation.²⁴²

ERCOT protocols generally provide operational and competitive advantages to generation resources over most demand side resources as well as distributed generation. In fact; demand side management has limited opportunities to participate in the ERCOT market. Currently, industrial customers actively participate in demand side management and the market while smaller classes, like residential and commercial, have not received the same encouragement.²⁴³ In addition, distributed generation does not have the same opportunity to participate and sell energy into the ERCOT market as traditional generators do.²⁴⁴ Standardized rules or protocols to

²⁴⁰ Testimony of H.B. "Trip" Doggett, President, Electric Reliability Council of Texas, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁴¹ Testimony of Jeffrey Clark, Executive Director, The Wind Coalition, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁴² Testimony of Dan Jones, Director of Independent Market Monitor, ERCOT Wholesale Market, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁴³ Testimony of Colin Meehan, Clean Energy Analyst, Environmental Defense Fund, the Senate Committee on Business and Commerce, July 10, 2012.

²⁴⁴ Testimony of Shane Menking, President and CFO, Data Foundry, Inc., before the Senate Committee on Business and Commerce, July 10, 2012.

establish a method or price at which distributed generation can participate and sell into the ERCOT market do not currently exist.²⁴⁵

Intermittent Renewable Resources

Some renewable resources, like wind and solar, have varying levels of outputs. Consequently, ERCOT must account for and manage the grid for fluctuations in the load, or end use customers, as well as the supply of generation. This can result in relaxed requirements related to the adherence to schedules for intermittent renewable resources (IRRs) such as wind and solar facilities as compared to other generation technologies. As previously stated, under the ERCOT protocols, IRRs are largely exempt from schedule control requirements that are applicable to other generation technologies. Under such provisions, ERCOT requires plant generators to provide plans each day about intended operations. Generators are then required to follow those plans or be subject to penalties, unless they provide timely notification to ERCOT of any adjustments. In contrast, IRRs are treated in the ERCOT protocols in the same manner as load, since neither is subject to schedule control requirements.²⁴⁶

Potomac Economics has been retained to serve as the Independent Market Monitor (IMM) for ERCOT. In this role, Potomac Economics identifies conduct by market participants or market rules that compromise the efficiency or distort the outcomes of the markets. Additionally, Potomac Economics issues periodic reports providing an independent assessment of the competitive performance and operational efficiency of the market. According to the IMM, differing protocol treatment for IRRs is logical if the intended result is market efficiency. For example, higher than expected output from one IRR may be offset by lower than expected output from another. Overall, it is more cost-effective for ERCOT to centrally manage these deviations of IRRs in the aggregate than to impose requirements on individual IRR facilities. However, although the current provisions are a more cost-effective approach, they are not cost-free; in fact, these costs can be quantified and are known as "ancillary costs."²⁴⁷

Ancillary Services

Ancillary services are costs to the electric grid system and are services provided at the system level by ERCOT to account for minute-by-minute fluctuations in load across the ERCOT grid. Below is a grid of ancillary service types.²⁴⁸ ERCOT manages these variations in demand by paying generators to be available to ramp up or down in order to balance supply and demand. ERCOT has increasingly used these services to manage deviations in the output of IRRs as their share of the overall generation fleet has expanded.²⁴⁹

²⁴⁵ Testimony of Richard Howe, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁴⁶ Ibid.

²⁴⁷ Testimony of Dan Jones, Director of Independent Market Monitor, ERCOT Wholesale Market, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁴⁸ Testimony of Jeffrey Clark, Executive Director, The Wind Coalition, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁴⁹ Testimony of Dan Jones, Director of Independent Market Monitor, ERCOT Wholesale Market, before the Senate Committee on Business and Commerce, July 10, 2012.

Type of Service	Description
Responsive Reserve	Responsive or “spinning” reserves are daily operating reserves that will respond quickly to restore interconnection frequency in case of a disruption.
Non-Spinning Reserve	This service provides additional electrical generation capacity within 30 minutes.
Replacement Reserve	This service is utilized when additional capacity is called on to provide additional Balancing Energy Bids, to cover system capacity or congestion.
Out of Merit Capacity	Similar to Replacement Reserve, but not acquired through the Replacement Reserve market process due to immediate operational needs.
Black Start	This service, acquired by ERCOT for the benefit of all customers, is power that can be generated without the support of the ERCOT transmission grid in case of a partial or total blackout.
Reliability Must-Run Capacity	This is capacity from a generator that would otherwise be mothballed or retired except that it is necessary to provide “voltage support, stability or management of localized transmission constraints.” ²

Source: ERCOT

Because ancillary costs are transmission costs incurred to ensure the effective delivery of power to load, these costs have been allocated to retail electric providers or other Load Serving Entities (LSEs) like municipally-owned utilities or electric cooperatives. Under the current ERCOT protocols, these costs are allocated solely to LSEs based on their overall share of load within the ERCOT market.²⁵⁰ If the centralized power of ERCOT to aggregate IRR schedule deviations is maintained, grid operators should consider allotting ancillary costs among those that impose similar burdens and receive similar benefits regarding ancillary services, such as load and IRRs. For example, it may be appropriate to require that IRRs bear a portion of the ancillary costs that currently only LSEs and, consequently, retail customers pay for.²⁵¹

One approach could be the inclusion of the actual production from IRRs in ERCOT’s allocation of ancillary service costs. The following data provides a breakdown of the results of this approach had it been in place in 2009, 2010, and 2011. The chart shows that ancillary service costs for loads represent approximately three to four percent of the ERCOT-wide costs of wholesale energy, which was \$34.03, \$39.40, and \$53.23 per MWh in 2009, 2010, and 2011, respectively.²⁵²

Load Only Allocation

Load and IRRs Allocation

Load (\$/MWh)	Load (\$/MWh)	IRRs (\$/MWh)
2009	1.17	1.10
2010	1.26	1.11
2011	2.41	1.40

Source, Dan Jones, Independent Market Monitor of ERCOT Wholesale Market

Alternatively, many argue the flexibility of the current protocol process allows ERCOT the ability to respond to variable resources or new and innovative technologies in the market like energy storage. Existing ERCOT protocols are not designed to provide advantage or disadvantage to any one type of generation over the other; but instead are designed to manage the

²⁵⁰ Testimony of Jeffrey Clark, Executive Director, The Wind Coalition, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁵¹ Testimony of Dan Jones, Director of Independent Market Monitor, ERCOT Wholesale Market, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁵² Ibid.

market to dispatch the most efficient and lowest-cost resource. Diversity in generation can maximize the impact of all available generation technologies and help meet the state's resource adequacy needs. Consideration of the different behaviors of various fuel source characteristics during the protocol process promotes more energy choices for ERCOT and consumers; consequently, the Texas ERCOT market is one of the most competitive markets in the nation.²⁵³

Furthermore, assigning ancillary service costs to intermittent resources may not level the field, but instead, result in a competitive disadvantage for these resources since only certain types of generation, intermittent renewable generation, would be responsible for a portion of the costs. More specifically, the Wind Coalition estimates such cost assignment would result in minimal reductions in ancillary costs to LSEs, but would impose additional costs of up to \$1.40/MWh which could be an increase of three to four percent in cost per MWh for wind that would not be applied to generation across the board. Considering that ancillary service costs fluctuate according to market clearing prices, which are set by the volatile price of natural gas, this proposal could result in dramatically increased costs for intermittent renewable resources.²⁵⁴

CONCLUSION

While ERCOT Protocols are not intentionally designed to grant one particular fuel source a competitive advantage over the other, the protocol process, which successfully dispatches the most efficient and lowest-cost resources, recognizes different technology or characteristics of each generation source. Because of this recognition, and consequent lack of uniformity in market operations per generation source, some resources may receive a market advantage. But resource adequacy and diversity must also be taken into consideration regarding market operations. So, while intermittent resources may cost the market additional ancillary services, the benefit of additional capacity and diversity can be comparable to those costs.

RECOMMENDATIONS

1. ERCOT should consider reviewing relaxed schedule control requirements for IRRs to determine if more predictable schedule requirements for IRRs would make the competitive energy market more reliable and economically efficient.
2. ERCOT should evaluate whether IRRs should bear a portion of the ancillary costs associated with managing the intermittent nature of their generation as well as those costs and effects impacting the electric grid.

²⁵³ Testimony of Jeffrey Clark, Executive Director, The Wind Coalition, before the Senate Committee on Business and Commerce, July 10, 2012.

²⁵⁴ Ibid.

8. Monitor the implementation of legislation and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, review the implementation of HB 2592 and 2594 relating to payday lending, and make recommendations relating to consistency and coordination with local ordinances and federal law.

BACKGROUND

On October 9, 2012, the Senate Committee on Business & Commerce held a hearing on this interim charge and received invited testimony from these stakeholders:

- Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner (OCCC);
- Ann Baddour, Texas Fair Lending Alliance;
- Stephen Reeves, Texas Faith for Fair Lending;
- Jerry Allen, Dallas City Council;
- Bill Spelman, Austin City Council;
- James Kopp, Assistant City Attorney, City of San Antonio; and
- Rob Norcross, Consumer Service Alliance of Texas (CSAT).

Payday and auto title loans are short-term, small dollar alternative loan products that have been gaining popularity in the United States over the past decade. These loans tend to be accessed by individuals with an income stream and a checking account. While auto title loans require a borrower's vehicle title as collateral, payday loans do not generally require a borrower to provide collateral.

Payday and auto title loan transactions involve three parties: a lender; a store front business that facilitates the transaction; and a borrower. Lenders in these transactions rarely interface with borrowers. Instead, storefront businesses, commonly known as "payday lenders," facilitate a loan transaction for a borrower and charge that borrower fees for the service. In Texas, the term payday lender is a misnomer, as a separate lender originates and retains ownership of the loans made to borrowers. However, since "payday lender" is the term commonly used to refer to these businesses, it is used throughout this report.

Prior to the implementation of HB 2594, which was passed by the 82nd Texas Legislature in 2011, these payday lenders operated under Section 393.101 of the Finance Code and filed a registration with the Secretary of State. Under this registration scheme, storefronts were known as "Credit Services Organizations" (CSOs) and were not subject to direct regulation of their operations by any agency at the state level.

Following considerable growth in the payday and auto title lending industries, the 82nd Regular Session of the Texas Legislature saw a number of bills filed to increase regulation over payday lenders. Three of these bills gained traction and moved through the legislative process, and two of the three became law.

HB 2592 dealt exclusively with payday and auto title loan notice and disclosure requirements and required a number of disclosures, including: the posting of fee schedules, the posting of contact information for the OCCC, and the provision to customers of information related to the costs and risks associated with these loans.

HB 2594 established a unique licensing requirement in a new section of Chapter 393 of the Finance Code for payday lenders in addition to their registration as CSOs, terming them "Credit Access Businesses" (CABs). Pursuant to this legislation, each CAB storefront is required to obtain a license from the OCCC, pay an application fee, maintain minimum net assets, and be bonded in order to conduct business in the state. The bill provides the OCCC with investigative and enforcement authority and the ability to suspend or revoke a license if necessary. Also, HB 2594 requires quarterly data reporting by lenders, establishes an annual assessment to fund a financial education endowment, and codifies a requirement that lenders comply with federal law restricting lending to certain military personnel.

HB 2593 did not pass but would have addressed concerns related to the cycle of debt. The term "cycle of debt" refers to a scenario in which a borrower takes out a loan and makes partial repayment of only interest and fees, and possibly some amount of principal, but is unable to repay the full debt. As a result, the customer must continue to renew the loan rather than pay it off. HB 2593 focused on addressing the cycle of debt effect through a combination of limitations on the structure of loans that may be offered, although the specific limitations within the bill varied throughout the legislative process. During the legislative session, extensive discussions and debate over how best to achieve a cycle of debt solution were conducted. These discussions may serve as a starting point for further consideration of the issue going forward.

IMPLEMENTATION

The OCCC began implementation of HB 2592 and HB 2594 following the bills' effective date of January 1, 2012, and both industry and consumer stakeholders have actively participated in the implementation process.²⁵⁵

As part of the implementation process, the Finance Commission of Texas and the OCCC organized and conducted rulemaking initiatives to support the new laws' provisions governing payday lenders. The rulemaking process has resulted in better rules, disclosures, and data reporting models.²⁵⁶ The following rules have been adopted:

- CAB licensing (HB 2594). These rules require CABs to be licensed with the OCCC by January 1, 2012 and were effective Thursday, November 10, 2011.

²⁵⁵ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁵⁶ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

- CAB provisional licensing (HB 2594). These rules establish a provisional license for CABs and were effective on Thursday, January 5, 2012.
- CAB branch license application amendments (HB 2594). These rule amendments provide a procedure for current CAB licensees to add one or more locations after approval of their most recent new or transfer license application. These rule amendments were effective on Thursday, September 6, 2012.
- Scheduled proposal for CAB data reporting amendments (HB 2594). These rule amendments provide provisions relating to annual reports and the confidentiality of all data reports submitted by CABs and were presented to the Finance Commission of Texas on Friday, October 19, 2012.
- CAB consumer disclosures (HB 2592). These rules require that disclosures be provided before a credit application or a financial evaluation occurs and were effective January 5, 2012.
- CAB fee schedule posting, (HB 2592). These rules provide clarification on fee schedule posting requirements and were effective on Sunday, January 1, 2012.
- CAB disclosure amendments (HB 2592). These rule amendments clarify application of adopted rules to existing business practice for CAB loans transacted via the Internet and provide guidance to CAB licensees on when and how to provide disclosures under this business model. These amendments were effective on Thursday, May 10, 2012.

LICENSE INFORMATION COLLECTED

As of the October 9, 2012 hearing of the Senate Business and Commerce Committee, the OCCC had issued 3,329 provisional and final CAB location licenses. As of the end of August 2012, the OCCC had performed 253 examinations with a 90.9 percent rate of acceptable compliance.²⁵⁷

DATA COLLECTED

The first quarter for which data was collected under the terms of HB 2594 was the period of January through March (first quarter) of 2012, with a deadline for submission of data set by the OCCC on April 30, 2012. Data for the second quarter of 2012 was due on July 31, 2012, and the third quarter data due date was October 31, 2012.

The quarterly data has provided a number of points of interest for policymakers, including the following facts:

- In first six months of 2012 there were 1.7 million extensions of credit through CABs, with 84 percent being made by payday lenders and 16 percent being made by auto title lenders.²⁵⁸
- The average fee for payday loans was \$22.75 per \$100 of loan advanced.²⁵⁹

²⁵⁷ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁵⁸ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

- During the second quarter of 2012, about 70 percent of customers refinanced their first payday loan, and those that did refinance did so an average of 2.4 times.²⁶⁰
- The number of auto title loan vehicle collateral repossessions was highest in Waco at 5.44 per hundred, and lowest in El Paso at 1.74 per hundred.²⁶¹

CITY ORDINANCES/UNIFORMITY OF LAW

The cities of Austin, Dallas, and San Antonio have each instituted ordinances governing both the location and the operations of CABs in their respective municipal jurisdictions. The ordinances are similar and include:

- a requirement for registration of CABs to conduct business in the municipality;
- detailed record-keeping requirements;
- limitations on the amount that can be advanced to a borrower based on the borrower's monthly income;
- a maximum allowable number of four installments for a given extension of credit;
- a maximum allowable number of three renewals for a given extension of credit (Austin and San Antonio's ordinances provide that an extension of consumer credit with installment payments may not be renewed at all); and
- a fine per violation of not more than \$500.

While well-intended, the adoption of these ordinances has resulted in a patchwork of regulation across the state. A statewide solution to address concerns over the cycle of debt issue is a preferred means of addressing these concerns, and this Committee intends to pursue such a solution during the upcoming legislative session.

Following the financial crisis of 2008, Congress passed the Dodd-Frank Act, which delegated authority to the Federal Consumer Financial Protection Bureau (CFPB) to regulate the activities performed by payday lenders. The CFPB has not, as of the date of this report, issued rules governing payday lending activity. However, the CFPB also has hosted dozens of payday lending roundtables and meetings at its offices in Washington, DC,²⁶² has issued an examination manual to be used in payday lender examinations,²⁶³ has commenced payday lender examinations,²⁶⁴ and has hosted a field hearing in Birmingham, Alabama on the subject.²⁶⁵

OCCC IMPLEMENTATION CONCERNS

In her comments during the October 9th hearing of the Senate Committee on Business & Commerce, the Commissioner of the OCCC raised the following issues which have arisen during the implementation process:

²⁵⁹ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁶⁰ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁶¹ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁶² Semi-Annual Report of the Consumer Financial Protection Bureau, July 2012. pg. 9.

²⁶³ Semi-Annual Report of the Consumer Financial Protection Bureau, July 2012. pg. 43.

²⁶⁴ Semi-Annual Report of the Consumer Financial Protection Bureau, July 2012. pg. 43.

²⁶⁵ Semi-Annual Report of the Consumer Financial Protection Bureau, July 2012. pg. 38.

- Chapter 393 of the Finance Code does not always clearly define CAB activity under a CAB license. This creates an uneven playing field and raises concern over a slippery slope of usury law enforcement.²⁶⁶
- It is unclear whether the 180-day limitation on a CAB loan in Section 393.201 of the Finance Code applies to the loan as a whole or to the portion of the loan service provided by the CAB itself. Evidence of loans with terms exceeding 180 days has arisen, particularly in the auto title area, and the OCCC is investigating this ambiguity. Some clarification in statute might be beneficial.²⁶⁷

CONCLUSION

While the legislation passed during the 82nd Regular Legislative Session was a step in the right direction, there is still work left to be done. The new OCCC licensing requirements have provided consumers with a place to go with complaints about CABs, and the level of complaints received underscores the need for further action by the legislature. Between December 1st and August 31st, 306 complaints related to CABs were filed with the OCCC, the second-highest number of complaints filed behind only motor vehicle sales finance.²⁶⁸

As the upcoming 83rd Regular Legislative Session approaches, the Committee will continue to work with interested stakeholders to address the remaining issues related to CABs and their operations in Texas.

RECOMMENDATIONS

1. The Legislature should continue to pursue a balanced, statewide cycle of debt solution.
2. The Legislature should more clearly define allowable CAB activity in Chapter 393 of the Finance Code.
3. The Legislature should clarify the 180-day loan term limit in Section 393.201 of the Finance Code.

²⁶⁶ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁶⁷ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

²⁶⁸ Testimony of Leslie Pettijohn, Commissioner, Office of Consumer Credit Commissioner, before the Senate Committee on Business & Commerce, October 9, 2012.

9. Assess the impact of current and anticipated drought conditions on electric generation capacity. Identify those regions of Texas that will be most affected by a lack of capacity. Analyze response plans and make recommendations to improve and expedite those plans.

BACKGROUND

One of the most crucial issues facing Texas is the availability of water. Within this concern is its use for mining energy resources and producing power, since many fuel sources used to produce electricity require water for steam production as well as cooling for thermal units. In fact, in summer 2011, Texas experienced record heat and drought; these extraordinary weather conditions, coupled with economic growth, tested our electric infrastructure. The state required almost 70,000 megawatts (MW) of energy on August 3, 2011 - a demand never seen before in the state of Texas. Several days in August 2011 came dangerously close to rotating outages. Combined with existing capacity shortage concerns like inadequate future generation sources, the drought served to exacerbate concerns as we entered another summer of record demand for electricity in 2012. While power generating facilities like coal, natural gas and nuclear power plants only account for three percent of the state's water use, as much as 38 percent of the state's capacity for this form of electric generation could be threatened by water shortages under these serious drought conditions.²⁶⁹ Grid operators were able to avoid blackouts, but the close calls only highlighted the state's vulnerability. ERCOT projects the state will not be able to meet its electricity needs by 2014, and even earlier if the yet-to-be completed, planned generation does not come online.

TESTIMONY

Water

The worst one-year drought on record that Texas has ever experienced occurred in 2011. By October 2011, 97 percent of the state, including all or part of every county, was experiencing extreme or exceptional drought. Although rains resulted in some improvement, as of December 27, 2011, the U.S. Drought Monitor showed 67 percent of Texas in extreme or exceptional drought conditions.²⁷⁰ The extreme drought of 2011 reduced lake water, stream flow, and water tables to alarmingly low levels. But the phenomenally hot growing season also played a major role in worsening the drought as the year ensued. In fact, the summer of 2011 in Texas was the hottest season in recorded weather history for any state in the nation. All three summer months — June; July and August — were the hottest in our state's weather history, which extends well over 100 years. When the hottest July weather in history is combined with rainfall statewide of merely 11 percent, drought becomes all the more aggressive. The unparalleled heat and absence of ample rainfall are manifestations of a fairly intense episode of La Niña, which is an abnormal cooling of the surface waters in the equatorial Pacific Ocean. Most La Niña episodes last

²⁶⁹ Testimony of Carolyn Brittin, Deputy Executive Administrator, Water Resources Planning and Information, Texas Water Development Board, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁷⁰ Testimony of Bryan Shaw, Chairman, Texas Commission on Environmental Quality, before the Senate Committee on Business and Commerce, January 10, 2012.

between one and two years, and many of them have two or three phases.²⁷¹ However, the severity of the drought in Texas improved greatly in 2012 with 23 percent of the state experiencing extreme or exceptional drought.²⁷²

The Texas Commission on Environmental Quality (TCEQ) is the state agency charged with managing surface water rights in Texas. TCEQ primarily accomplishes this task through issuing and enforcing water right permits. Under Chapter 11 of the Water Code, TCEQ issues water use permits for a variety of uses including power generation, which is classified as an “industrial” use, and oil and gas production, which is classified as a “mining” use. Specifically, TCEQ issues perpetual, term, and temporary water use permits. Perpetual permits do not expire while term permits are issued for a term of up to 10 years. Temporary permits expire after a term of no longer than three years. There are 114 industrial water rights and 40 water supply contracts being used for power generation statewide. Of the water rights with mining use for oil and gas production, 43 are perpetual water rights and 81 are temporary.²⁷³

By statute, surface water users are required to report their usage by calendar year in a water use report. TCEQ relies on the water right holders to report their use accurately. In 2010, surface water right holders and water supply contract holders reported diverting approximately 20,400,000 acre feet of surface water for power generation. Of the surface water diverted, approximately 380,000 acre-feet was reported to have been consumptively used.²⁷⁴

TCEQ’s actions are guided by the priority doctrine, Texas Water Code Chapter 11. Senior water rights are those permit holders who obtained their authorization first in time and are entitled to receive their water before those water right holders who obtained their authorization later (junior water rights). Domestic and livestock users have superior rights to any permitted surface water right holders. If a water right holder is not getting water they are entitled to, they can call upon the TCEQ to take action to enforce the priority doctrine, also known as a senior call. TCEQ has received 15 senior calls from municipal, industrial, irrigation, recreation, and domestic and livestock users. Combined, these senior calls have resulted in the suspension or curtailment of over 1,200 water right permits. Additionally, TCEQ has stopped issuing temporary water right permits in basins affected by these calls. Suspended water rights do not include junior municipal or power generation uses because of concerns about public health and safety.

Electric Generation and Water

In a 2009 water use survey, agricultural use was found to have the largest water demand with roughly 60 percent. The second highest was water used for municipal needs, next manufacturing. Steam electric generation ranked as the fourth highest consumer of water with three percent of the state's demand.²⁷⁵ Consequently, the impact of the drought not only affects residential and agricultural uses, but also impacts electric generating capacity. Electric generation companies use water in the cooling process for generation. This water is most often obtained from man-

²⁷¹ Testimony of George Bomar, State Meteorologist, Texas Department of Licensing and Regulation, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁷² US Drought Monitor - Texas website, http://droughtmonitor.unl.edu/DM_state.htm?TX,S, accessed: Sept. 20, 2012.

²⁷³ Testimony of Bryan Shaw, Chairman, Texas Commission on Environmental Quality, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁷⁴ Ibid.

²⁷⁵ Testimony of Mark Zion, Executive Director, Texas Public Power Association, before the Senate Committee on Business and Commerce, January 10, 2012.

made cooling reservoirs that were constructed for the purpose of providing cooling water for generation. It is non-consumptive use because most of the water is used for cooling, then returned to the cooling reservoirs from which it was obtained.²⁷⁶ Specifically, power plants are responsible for nearly 40 percent of all water withdrawals, but only consume three percent of the state's water demand. Conventional steam electric power plants like nuclear, coal, and natural gas boilers with open loop cooling withdraw 10 to 40 gallons of water per kilowatt hour (kWh). Accordingly, water intensity or amount of water withdrawal for power generation depends on the fuel type, generation, and cooling technology - with nuclear facilities having the highest water intensity, conventional coal and natural gas boilers, combined cycle coal, combined cycle gas and solar/wind energy - in descending rank. The three main cooling technologies include open loop, closed loop, and dry cooling.²⁷⁷ Open loop systems take water from nearby sources like rivers, lakes, aquifers, or the ocean and circulate it through pipes to absorb heat from the steam in systems called condensers. Then it discharges the now warmer water back to the local water source, which can be harmful to the local aquatic life. Closed-loop systems reuse cooling water in a second cycle rather than immediately discharging it back to the original water source. These systems use cooling towers to expose water to ambient air. Some of the water evaporates; but the rest is then sent back to the condenser in the power plant. Because closed loop systems only withdraw water to replace any water that is lost through evaporation in the cooling tower, these systems have lower water intensity than open loop systems, but still have relatively high water withdrawal amounts. Dry cooling systems use air instead of water to cool the steam exiting a turbine; they do not use water and can thus decrease total power plant water consumption by more than 90 percent.²⁷⁸ However, dry cooling is not efficient for plant energy production and can result in the plant producing one to five percent less energy. It also requires more up front capital to build than the other cooling technologies.²⁷⁹

Electric generators have built and developed reservoirs and water infrastructure across Texas and are among the largest private holders of water rights and water contracts in Texas. In addition to water consumption, generating facilities with water reservoirs also maintain their water infrastructure by conducting biological monitoring tests, practicing water conservation, restoring and maintaining aquatic habitats, ecosystems and wetlands near their facilities.²⁸⁰ Also, generators regularly account for all water withdrawal to regulatory authorities. Many generators utilize salt water when practical and maintain equipment to avoid water leakage/wastage. In fact, a couple of generators have installed pipelines to access accumulated water from rain and seepage at mine sites and some generator resources are re-engineering their water intake structures to allow for deeper intake level conditions.²⁸¹ Furthermore, not only is water used in

²⁷⁶ Testimony of John Fainter, President and CEO, Association of Electric Companies of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁷⁷ Testimony of Michael Webber, Associate Director, Center for International Energy and Environmental Policy, University of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁷⁸ "Types of Cooling," Union of Concerned Scientist website, http://www.ucsusa.org/clean_energy/our-energy-choices/energy-and-water-use/water-energy-electricity-cooling-power-plant.html accessed: Sept. 26, 2012.

²⁷⁹ Testimony of Michael Webber, Associate Director, Center for International Energy and Environmental Policy, University of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸⁰ Testimony of John Fainter, President and CEO, Association of Electric Companies of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸¹ Testimony of H.B. "Trip" Doggett, President and CEO, Electric Reliability Council of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

electric generation and cooling processes, but electricity is also used to transport water to cities and farms, water and sewage treatment, as well as other public health and safe necessities.²⁸²

Some experts claim the state has incorrectly calculated water use information. Purportedly, both state and national level data collection efforts have failed to prioritize accurate water use information. Information on water use at Texas coal-fired electric generating units collected by the Texas Water Development Board, the Texas Commission on Environmental Quality, the U. S. Geological Survey, the U. S. Energy Information Administration, and the U. S. National Energy Technology Laboratory exhibit one or more of these problems. Specifically, electrical power generating units do not appear in the database; generating units are present, but data on water use and/or consumption are missing. Also, data on water use and/or consumption are present, but the numbers are unreasonable or are inconsistent with each other or other data. Data on water use and/or consumption are present, but do not distinguish between amounts withdrawn, used, and/or consumed. And lastly, some experts claim reasonable interpretation of their significance cannot be made. According to Lauren Ross of Glenrose Engineering, if accurate data collection of water withdrawals, return flows, and consumption at all Texas steam-electric facilities included individual generating units, electrical production, and fuel type, among other data, this supplemental information would allow a check on water reporting accuracy and allow the state to develop more accurate predictions of future water demands for similar electrical generation scenarios. But this does not consider how such information would affect the market, specifically how speculation regarding water availability for certain generating units would affect the wholesale price of electricity, and consequently, the retail price consumer pay.²⁸³

Despite purported discrepancy claims in the data used to determine water withdrawals and returns from power plants, during 2011 it was determined that 24 MW of electric generation were placed offline due to the drought. At that time, ERCOT estimated that if East Texas received only half of its normal rainfall, unviability of electric generation could have gone up to 434 MW by May 2012, and as high as 3,044 MW if there was no rain at all. Fortunately this did not happen. The water intensive nature of conventional generation makes electricity generation susceptible to not only water extremes like drought, but also freezes, as exemplified in the rolling outages of February 2011, when instrumentation pipes froze and caused some plants to shut down. During heat waves, thermal pollution limits can cause power plants to dial back their production when water temperatures become too high and floods can cause power plants to shut down due to safety concerns.²⁸⁴

Water availability, with respect to the location of generating facilities, may affect the price of electricity. According to the Texas Coalition for Affordable Power, since Texas operates a deregulated market, many of the levers that otherwise would allow policymakers to directly address reliability issues are no longer available. And the nodal system might affect the price of electricity since water and future generation co-location is problematic. The original policy considerations that supported the creation of the nodal system included the claim that the ability

²⁸² Testimony of John Fainter, President and CEO, Association of Electric Companies of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸³ Testimony of Lauren Ross, Sierra Club, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸⁴ Testimony of Michael Webber, Associate Director, Center for International Energy and Environmental Policy, University of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

to allocate costs to specific nodes would lead to the addition of generation where prices were high. But TCAP asserts that non-attainment zones, which protect air quality, and the location or quantity of limited water resources and fuel sources will frustrate if not preclude that alleged benefit. Instead, the nodal system may consistently lead to high wholesale prices in certain areas of the state where the drought has made new generation construction impractical.²⁸⁵ Drought and the related potential unavailability of generation resources is just one of many factors that are contributing to the broader resource adequacy issue. Weather driven variables, like the drought or summer heat driven demand peaks, can be significant drivers in the resource adequacy issue and, consequently, affect the price of electricity. The drought adds an unprecedented weather driven dimension of risk to the wholesale market and could exacerbate the market based pricing volatility.²⁸⁶

Transmission and Distribution Utilities (TDUs) also experienced issues related to the drought. The frequent wildfires resulting from the drought burned many wooden TDU structures across the state, causing numerous localized outages. Once the wildfires were brought under control, these structures were repaired or replaced and power was restored. In addition, in the spring and summer of 2011, there were outages related to high levels of air-borne contaminants (sea salt and dust) on transmission and distribution facilities. Coastal winds deposited sea salt and dust onto insulators, bushings, and peripheral line equipment. The lack of any appreciable rain resulted in increased electrical faults due to higher than normal accumulations. Affected utilities removed the contaminants by manual or machine-operated sprays or washes. Some proactive washing included the use of helicopter-mounted rigs and these were deployed until the natural rain washing cycle resumed.²⁸⁷

Agency Coordination

During 2011, TCEQ worked with the Texas Division of Emergency Management (TDEM), the Electric Reliability Council of Texas (ERCOT), and the Public Utility Commission (PUC) on a number of items concerning the drought and electric power generation. In February and August of 2011, ERCOT and TCEQ coordinated issues regarding the power emergency brought on by extreme weather conditions. In both cases, the agencies worked to establish a framework to provide guidance and enforcement discretion in cooperation with ERCOT's efforts to support the grid. Furthermore, TCEQ posted procedures for ERCOT or other electric reliability entities to request TCEQ enforcement discretion for a power emergency on the agency's website. In October 2011, TDEM coordinated a meeting with TCEQ, ERCOT, and the PUC regarding the potential impact of continuing drought on electric generation in Texas. Consequently, TCEQ and ERCOT worked to encourage power generators to create contingency plans. TCEQ also provided ERCOT with water right information for certain power generators and survey questions to help identify the water supply needs of power generators during the drought.²⁸⁸

Through these meetings between TCEQ and ERCOT, ERCOT was able to identify those surface water sources used by generating facilities most impacted by the drought in October 2011.

²⁸⁵ Testimony of R.A. "Jake" Dyer, Policy Analyst for Texas Coalition for Affordable Power, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸⁶ Testimony of TXU Energy Retail Company LLC, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸⁷ Testimony of John Fainter, President and CEO, Association of Electric Companies of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁸⁸ Testimony of Bryan Shaw, Chairman, Texas Commission on Environmental Quality, before the Senate Committee on Business and Commerce, January 10, 2012.

Specifically, ERCOT estimated the risk to electric generation by comparing minimum intake levels with projected minimum levels of water sources. Lakes that faced 10 year surface water supply lows serving nearby generation facilities included: Lake Granbury serving a power plant with 983 MW of capacity, Lake Limestone (1,689 MW,) Martin Lake (2,425 MW,) Twin Oaks Reservoir (1,616 MW,) and Lake Houston (1,016 MW.)²⁸⁹

Mining

Not only is water used to cool and power steam engine generation, but it is also used in association with many oil and gas activities, mostly for drilling wells, stimulating or hydraulic fracturing of wells, and enhanced recovery processes.²⁹⁰ As previously stated, mining water use in Texas represents a relatively small fraction of total water use in the state, and unlike water demand for electric generation, mining water demand is expected to decline one percent from 296,230 acre feet to 292,294 acre-feet between 2010 and 2060. Specifically, mining water demands consist of water used in the exploration, development, and extraction processes of oil, gas, coal, aggregates, and other materials. While hydraulic fracturing and total mining water use represent less than one percent of statewide water use, percentages can be significantly larger in some localized areas. In particular, the use of water for hydraulic fracturing operations is expected to increase significantly through 2020. In fact, the results of a study by the University of Texas Bureau of Economic Geology will form the basis for mining water demand projections for the 2016 regional water plans.²⁹¹

Fresh water is used in oil and gas well stimulation, including acidizing and/or fracturing. In order to be able to produce gas at economical volumes and rates, reservoirs with low permeability must be treated. One method of treatment to increase permeability is hydraulic fracturing, which involves pumping fluid into the target formation to create fractures that are held open by the propping agents in the hydraulic fracturing fluid. Water use for hydraulic fracturing of shale gas wells was dominated by the Barnett Shale in 2008 at approximately 25,500 acre feet. The following updated table for 2010 indicates estimated water volumes used to perform hydraulic fracturing on wells in various Texas plays.²⁹²

Estimated Water Use for Hydraulic Fracturing in Texas in 2010	
From http://www.twdb.state.tx.us/RWPG/rpgm_rpts/0904830939_MiningWaterUse.pdf	
PLAY	WATER VOLUMES (in Acre-Feet)
Barnett Shale	23,000 AF
Haynesville	2,500 AF
Eagle Ford Shale	6,000 AF

In response to 82R House Bill 3328, the Railroad Commission of Texas enacted new Rule 29, Hydraulic Fracturing Chemical Disclosure Requirements. In addition to requiring operators to disclose chemicals used in hydraulic fracturing treatments, Rule 29 now requires operators to

²⁸⁹ Testimony of H.B. "Trip" Doggett, President, Electric Reliability Council of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁹⁰ Railroad Commission of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁹¹ Water for Texas 2012 State Water Plan, Texas Water Development Board.

²⁹² Railroad Commission of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

indicate the amount of water used in each treatment. Consequently, future estimates of water use in hydraulic fracturing will be more definitive.²⁹³

In addition to stimulation, the oil and gas industry makes use of fresh water during water flooding operations and the drilling of wells. The table below outlines water required to drill wells in the shale formations and the Permian Basin. Historical reports suggest that the amount of fresh water used in the oil and gas industry for enhanced recovery has been decreasing during the past few decades. In terms of flooding, most takes place in the Permian Basin of West Texas, where most of the oil is produced in the state. Railroad Commission rules require that operators justify the use of fresh water in enhanced recovery. Additionally, water is also used to make up drilling fluid, which is a carrier fluid that removes the cuttings, dissipates heat created at the drill bit, and controls formation pressure. Over the past decade, there has been a steady increase in the number of wells drilled per year in Texas, but this has been interrupted recently by the economic downturn and the decrease in the price of natural gas.²⁹⁴

Water Required to Drill a Well	
http://www.twdb.state.tx.us/RWPG/rpdm_rpts/0904830939_MiningWaterUse.pdf	
PLAY	WATER USED PER WELL
Barnett Shale	150,000 – 400,000 gallons
Haynesville Shale	600,000 gallons
Eagle Ford Shale	125,000 gallons
Permian Basin	75,000 – 250,000 (6,000-ft deep)

The mining industry is currently testing new technologies that could further decrease the need for fresh water in hydraulic fracturing. These include use of fluids other than water like propane, nitrogen, carbon dioxide, sonic fracturing with no added fluid, and other waterless techniques with special drilling tools. As the cost of water increases, these more expensive technologies could become more attractive. The TWDB indicated that some companies already may be using carbon dioxide fracturing treatments in the Barnett and Eagle Ford shales. Another way that operators are stretching fresh water supplies is to recycle the hydraulic fracturing flowback fluid. Over the past few years several companies have applied for, and the Railroad Commission has approved, recycling projects in the Barnett Shale to reduce the amount of fresh water used in development activities. Water recycling projects are being explored in South Texas and East Texas, as a result of development in the Eagle Ford Shale and the Haynesville Shale, respectively. The amount of water ultimately flowing back from a hydraulically fractured gas well is a function of the formation. Generally, only the water flowing back in the first days is reusable, when water infrastructure is still in place. In addition, the quality of the flowback water is variable. Some of the initial flowback water can be reused with little treatment like filtration or/and mixing. Other flowback would require more advanced and expensive treatment. Water re-use is contingent on the price of oil and gas. In addition, other technologies limit the amount to be disposed of, but do not necessarily reduce the demand on local water resources, like using waste heat from compressors to evaporate, but not recover, water.²⁹⁵

²⁹³ Railroad Commission of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁹⁴ Ibid.

²⁹⁵ Railroad Commission of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

Most impacted regions of Texas

While agricultural irrigation use currently has the most consumptive water demand, municipal use is projected to have the largest increase in demand over the next 50 years. However, the 2012 State Water Plan estimates that water demand for steam-electric power generation is expected to increase as well. For purposes of this Water Plan, water used for steam-electric power generation is water used for the purposes of producing power. Specifically, where a generation facility diverts surface water, uses it for cooling purposes and then returns a large portion of the water to the water body, the water use for the facility is only the volume consumed in the cooling process and thus, not returned. It is difficult to study steam-electric power generation water use and projected water demands because of the very mobile nature of electricity across the state grid. While the demand may occur where Texans build houses, the power and water use for its production can be in nearly any part of the state. Beyond the specific future generation facilities on file with the PUC, the increased demand for power generation and the accompanying use of water was assumed to be located in the counties that currently have power generation capabilities for purposes of the 2012 Water Plan. Consequently, steam-electric water use is expected to increase by 121 percent over the planning horizon, from 0.7 million acre-feet in 2010 to 1.6 million acre-feet in 2060.²⁹⁶

There are 16 water planning regions and water is projected to be used for power plant cooling purposes in 14 of those regions. Annual demand is projected to increase from 733,179 acre-feet in the current decade to 1.6 million acre-feet in 2060. The greatest demands are found in the Brazos G Region - approximately the Brazos River basin, Region H -Houston and surrounding counties, and the Lower Colorado Region. In 13 of these 14 regions, projected existing supplies will be insufficient to meet demands under drought of record conditions. Water needs would be expected to increase from 63,000 acre-feet per year in the current decade up to 615,000 acre-feet per year in 2060. As much as 38 percent of the state's capacity for this form of electric generation could be threatened by water shortages under serious drought conditions. The TWDB suggests these needs could be met through the implementation of recommended water management strategies and are estimated to have a total capital cost of \$2.3 billion between now and 2060. For detailed figures, see Appendix A "2012 State Water Plan Demands and Needs for Steam-Electric Power Generation."²⁹⁷

Australia

Texas is not the first to face capacity issues due to weather. In fact in Australia, drought reduced the generating ability of both hydro and coal-fired plants that relied on fresh water; consequently, the weakened generation affected the electricity market in terms of system security and price. While the drought did not lead to an energy shortage, it did create a capacity shortage. Though Australia had a sufficient number of power stations and turbines, some of them could not operate, or were severely restricted due to water shortage. Hydro power stations were most affected, followed by fresh-water-cooled, coal-fired power stations. Gas and air or seawater-cooled coal power stations were not affected at all. The primary impact of reduced water availability was on the price of electricity. Lower-cost power generators like freshwater dependent thermal and hydro generators were supplanted by higher-cost, gas-fired generation. The National Electricity Market (NEM) or the Australian grid, responded in a number of ways. First, the NEM made a slight switch towards higher-cost generation, predominately gas-fired

²⁹⁶ Water for Texas 2012 State Water Plan, Texas Water Development Board.

²⁹⁷ Testimony of Carolyn Brittin, Deputy Executive Administrator, Water Resources Planning and Information, Texas Water Development Board, before the Senate Committee on Business and Commerce, January 10, 2012.

generation. In addition, some generators in the NEM began retrofitting existing plants to improve water use efficiency and/or sourced alternative water supplies, such as sea water, lower quality water, or treated water.²⁹⁸

A key factor in the market's ability to respond to the drought was the availability of timely and relevant information. Information on water allocations and planned government actions to supply alternative water supplies was made available to all market participants and potential investors in a timely manner. The Australian Government's view on the electricity market's reform was that the market should remain the primary mechanism for responding to changes in the supply/demand balance and energy constraint issue, including those arising from the drought. In the 2007, the Australian Energy Market Commission (AEMC) required generators to provide supply information for three scenarios across a two-year study period: low rainfall, short-term average rainfall, and long-term average rainfall. As a result of Senate Bill 1133, 82nd Regular Session (2011), Texas implemented similar reporting requirements from power generators to be analyzed by the PUC. Specifically, electric utilities were required to submit weatherization preparedness plans to the PUC for review of emergency operating plans, analysis of the grid's ability to withstand extreme weather events, and consideration of anticipated weather patterns. The PUC was directed to make recommendations for improving the emergency plans and issued them in the *Report on Extreme Weather Preparedness Best Practices* on October 2, 2012. The state should consider extending these reporting requirements and specifying that drought conditions are to be included in future weatherization report as well. Relatedly, TCEQ's Sunset Review bill, 82R House Bill 2694, amended the Texas Water Code to allow TCEQ to request information during a drought or other emergency shortage of water. Drought preparedness should be an ongoing requirement for power generators.²⁹⁹

CONCLUSION

Energy that is not as dependent on water, such as solar, wind, natural gas combined cycle, natural gas combustion turbines, or the decision to retrofit dry cooling technology on existing power plants would make electric generation less susceptible to drought concerns. Excluding retrofits, the energy sources listed also have the added benefit of low emissions. Furthermore, these types of renewable energy sources can be completed in the near term because they do not need air or water quality permits and are not impacted by concerns about fuel prices, carbon limits, or changing EPA rules. In fact, solar generation can be built in increments with the first panels providing power to the grid while the remainder of the project is built.³⁰⁰ Like wind and solar energy, combined heat and power (CHP) requires very little water. It uses heat to displace fuel instead of evaporating cooling water. Texas Combined Heat and Power Initiative estimates that the existing CHP capacity reduces water consumption by 28 billion gallons or 85,000 acre-feet per year. A study commissioned by the 80th Legislature determined that there is potential for another 13 gigawatts (GW) of CHP capacity, which would save an additional 37 billion gallons of water.³⁰¹

²⁹⁸ Kim Beazley, Embassy of Australia, before the Senate Committee on Business and Commerce, January 10, 2012.

²⁹⁹ Ibid.

³⁰⁰ Testimony of Robert A. Webb, Chair of Texas Renewable Energy Industries Association Legal Committee, before the Senate Committee on Business and Commerce, January 10, 2012.

³⁰¹ Testimony of Tommy John, Texas Combined Heat and Power Initiative, before the Senate Committee on Business and Commerce, January 10, 2012.

To achieve an energy market with low emissions and low water intensity, mechanisms can be implemented to place a price on NOx emissions instead of retrofitting systems with scrubbers. This would be costly to the existing ERCOT market as would dry cooling technology since it requires more capital than other cooling technologies. Conversely, some argue the economic value of drought resiliency from dry cooling roughly cancels out the costs of parasitic efficiency losses at power plants.³⁰² This, however, does not include the up-front costs of retrofitting existing plants with dry cooling equipment; consequently, this cooling mechanism would be more costly than efficient. In lieu of displacing water intensive energy, including resources like nuclear and coal, which are used as base load resources in the ERCOT market, in favor of water independent resources like wind or solar, conventional generators can make efforts to be more water efficient and implement more conservation methods.³⁰³

Demand response is another option to decrease dependence on conventional generation - one that does not require new generation or retrofits to existing water intensive generation. With limited ability to invest new capital given the current market conditions, and over 11,000 MW of power that is dependent on water sources at historically low levels, demand response allows the state the ability to tap into resources that require less capital, much less water, and boasts rapid deployment. Demand Response is "end-use customers reducing their use of electricity in response to power grid needs or economic signals from a competitive wholesale market."³⁰⁴ Texas is currently among the lowest in the nation in terms of utilizing demand response tools, despite having the highest potential - 19 GW according to the Federal Energy Regulatory Commission (FERC.) Currently, demand response in ERCOT amounts to only two percent of peak demand due to market barriers such as capacity caps and program eligibility limitations. Specifically, ERCOT's legacy Demand Response program is capped at 1150 MW and is effectively limited to large industrials within the Ancillary Services markets. Despite these limitations, the program helped avoid rolling blackouts during the summer of 2011 and with greater encouragement, could help alleviate drought concerns as they relate to electric generation.³⁰⁵

RECOMMENDATIONS

1. The Legislature should extend the requirement that the PUC analyze and provide recommendations on emergency weatherization preparedness plans submitted by power generation plants as initially required by 82R Senate Bill 1133.
2. The Legislature should additionally require a separate drought response plan within weatherization preparedness plans to be reviewed by the PUC. These plans should also be reviewed by the TCEQ. TCEQ should include water availability as a consideration during the permitting process.

³⁰² Testimony of Michael Webber, Associate Director, Center for International Energy and Environmental Policy, University of Texas, before the Senate Committee on Business and Commerce, January 10, 2012.

³⁰³ Testimony of Bryan Shaw, Chairman, Texas Commission on Environmental Quality, before the Senate Committee on Business and Commerce, January 10, 2012.

³⁰⁴ Testimony of Colin Meehan, Clean Energy Analyst, Environmental Defense Fund, before the Senate Committee on Business and Commerce, January 10, 2012.

³⁰⁵ Testimony of Colin Meehan, Clean Energy Analyst, Environmental Defense Fund, before the Senate Committee on Business and Commerce, January 10, 2012.

3. ERCOT should implement more aggressive demand response programs and consider methods like aggregation or lowering capacity limitations to engage smaller customer classes, such as residential and commercial to help alleviate resource adequacy needs that are exacerbated by severer weather conditions like drought.

Appendix to Charge 9

2012 State Water Plan Demands and Needs for Steam-Electric Power Generation							
		2010	2020	2030	2040	2050	2060
REGION A							
	Water Demand (acre-feet)	25,139	26,996	29,116	30,907	33,163	37,415
	Water Needs (excess of supply)	75	99	117	128	136	154
REGION B							
	Water Demand (acre-feet)	13,360	17,360	21,360	21,360	21,360	21,360
	Water Needs (excess of supply)	-	3,800	8,529	9,258	9,987	10,715
REGION C							
	Water Demand (acre-feet)	40,813	64,625	98,088	107,394	116,058	126,428
	Water Needs (excess of supply)	-	13,217	29,696	34,835	40,997	51,323
REGION D							
	Water Demand (acre-feet)	89,038	96,492	112,809	132,703	156,951	186,509
	Water Needs (excess of supply)	8,639	12,366	15,437	27,396	50,829	77,469
REGION E							
	Water Demand (acre-feet)	3,131	6,937	8,111	9,541	11,284	13,410
	Water Needs (excess of supply)	-	3,806	4,980	6,410	8,153	10,279
REGION F							
	Water Demand (acre-feet)	18,138	19,995	22,380	25,324	28,954	33,418
	Water Needs (excess of supply)	7,095	9,840	11,380	13,294	16,347	20,573
	Water Needs Not met by Strategies	1,219	3,969	5,512	7,441	10,608	14,935
REGION G							
	Water Demand (acre-feet)	168,193	221,696	254,803	271,271	300,859	319,884
	Water Needs (excess of supply)	38,542	71,483	82,891	93,599	117,616	132,872
	Water Needs Not met by Strategies	36,086	-	-	-	-	-
REGION H							
	Water Demand (acre-feet)	91,231	112,334	131,332	154,491	182,720	217,132
	Water Needs (excess of supply)	3,203	12,609	18,058	24,726	34,976	55,972
REGION I							
	Water Demand (acre-feet)	44,985	80,989	94,515	111,006	131,108	155,611
	Water Needs (excess of supply)	3,588	25,922	33,615	43,053	62,778	85,212
	Water Needs Not met by Strategies	2,588	-	-	-	-	-
REGION K							
	Water Demand (acre-feet)	146,167	201,353	210,713	258,126	263,715	270,732
	Water Needs (excess of supply)	193	53,005	53,175	76,430	81,930	89,042
REGION L							
	Water Demand (acre-feet)	46,560	104,781	110,537	116,068	121,601	128,340
	Water Needs (excess of supply)	2,054	50,962	50,991	51,021	51,657	52,018
REGION M							
	Water Demand (acre-feet)	13,463	16,864	19,716	23,192	27,430	32,598
	Water Needs (excess of supply)	-	1,980	4,374	7,291	11,214	16,382

REGION N							
Water Demand (acre-feet)	7,316	14,312	16,733	19,683	23,280	27,664	
Water Needs (excess of supply)	-	1,982	4,755	7,459	10,187	13,183	
REGION O							
Water Demand (acre-feet)	25,645	25,821	30,188	35,511	42,000	49,910	
Water Needs (excess of supply)							
TOTAL							
Water Demand (acre-feet)	733,179	1,010,555	1,160,401	1,316,577	1,460,483	1,620,411	
Water Needs (excess of supply)	63,389	261,071	317,998	394,900	496,807	615,194	
Water Needs Not met by Strategies	39,893	3,969	5,512	7,441	10,608	14,935	

- 10. Study whether advanced meters, or smart meters, that have been, and will be, installed in Texas have harmful effects on health. Report findings on whether an independent testing company that can perform an analysis on the safety of advanced meters should be commissioned and the appropriate organization to conduct such a study.**

BACKGROUND

Smart grid technology represents an array of modern, primarily digital upgrades to the electric system including such devices as advanced meters, also known as smart meters. The goals of smart grid technology are to save energy through peak shaving or shifting, reduce costs, and improve reliability.³⁰⁶ Smart meters send electricity usage information from customers to electric utilities using radio frequency waves.³⁰⁷ Initial opponents of smart meters argued the meters' consumption readings were inaccurate and too high. Most recent concerns revolve around security of data shared by the smart meter to the utility, property rights to control the materials placed on private property, privacy and surveillance concerns as well as possibly harmful effects on health by the radio frequency waves transmitted from the meters. While smart meters do provide for consumer education through their time-of-use pricing (smart meters allow the consumer to view their hours of consumption and customers are able to adjust their consumption behavior since peak hour consumption is more expensive than off-peak), most rollouts of smart meters were not done on a voluntary basis. Customers were charged approximately two to three dollars monthly for the devices despite their unwillingness to participate in the program. In total, approximately 5.8 million smart meters have been deployed, and by the end of 2013, over six million smart meters will be deployed within the Electric Reliability Council of Texas (ERCOT) grid.³⁰⁸

Specifically, smart meters provide customer education opportunities, facilitate reliability, and demand response tools within the electric grid. Smart grid devices like smart meters can help to increase reliability of the grid by allowing utilities to know exactly where and when outages occur. They also promote consumer education since tools like smart meters and other programmable devices are meant to encourage a behavioral response type of demand side management. Customers can use the information compiled through smart meters to help reduce their energy use and take part in new pricing or demand response programs. Demand Side Management, also known as demand response is the planning, implementation, and monitoring

³⁰⁶ Testimony of H.B. "Trip" Doggett, President, Electric Reliability Council of Texas, before the Senate Committee on Business and Commerce, August 24, 2010.

³⁰⁷ Dr. Edward Gelmann, Professor of Oncology, Chief of Hematology/Oncology, Columbia University Medical Center, before the Senate Committee on Business and Commerce, October 9, 2012.

³⁰⁸ Testimony of Barry Smitherman, Chairman, Public Utility Council of Texas, before the Senate Committee on Business and Commerce, August 24, 2010.

of utility activities designed to encourage consumers to modify patterns of electricity usage, including the timing and level of electricity demand.³⁰⁹

History of Smart Meter Deployment

During the 2005 legislative session, House Bill 2129 asserted that technology like smart meters had "the potential to increase the reliability of the regional electrical network, encourage dynamic pricing and demand response, make better use of generation and transmission assets, and provide more choices for consumers."³¹⁰ While the Legislature encouraged the adoption of smart meters by electric utilities with the goal of improving reliability and advancing technology, legislation did not pass which mandated smart meter deployment; consequently, Texas statute does not require the deployment of smart meters. After the passage of House Bill 3693 and House Bill 2129, which both encouraged smart meter adoption, the Public Utility Commission of Texas (PUC) began approving rules under which utilities could deploy meters if they so desired. PUC Substantive Rule 25.130 established the guidelines under which ERCOT Transmission and Distribution Utilities (TDUs) could deploy smart meters and receive cost recovery through a surcharge, as well as procedures that included customer notification before and after installment.³¹¹

Consequently, each of the four TDUs within the ERCOT region submitted orders to the PUC for approval of their plan to deploy smart meters to their service territory. After each order was approved, the TDUs began deployment. Despite the lack of statutory mandate to deploy smart meters, the four TDUs in competitive regions of ERCOT - Oncor, CenterPoint, Texas New Mexico Power (TNMP), and American Electric Power (AEP) do not allow customers to refuse advanced (smart) meter installation without loss of service; consequently, a customer can refuse the new smart meter but will be left without electric service, so it is not a viable option. However, the Committee is unaware of instances of disconnection. Most utilities are suspending installation for these customers by leaving the analog meters in service and awaiting guidance from the PUC on the ability of customers to opt out of smart meters. Oncor and CenterPoint were the first to have a deployment plan approved by the PUC in 2008 and began deployment shortly after. AEP followed in 2009 and TNMP started in 2011. All of the utilities have temporarily suspended installation for customers that initially refuse smart meters and have placed those customers at the end of the deployment "list." They provide customer education in the meantime to see if the customer can be convinced to accept the meter. Specifically, Oncor has deployed 94 percent of their smart meters and expect completion in November 2012. Of the 3.2 million meters planned for deployment, roughly 125-150 have refused installation. CenterPoint has completed deployment. Out of the 2.3 million smart meters installed, 39 refused installation. AEP has deployed 65 percent of one million meters. The utility expects completion in Dec 2013. Currently, 449 have refused installation. TNMP was the last to begin deployment and has installed 22 percent of a planned 240,000 meters. Approximately 115 have refused installation and the utility expects completion in fall 2016.³¹²

³⁰⁹ Glossary of Energy Efficiency Terms, definitions taken from American Council for an Energy Efficient Economy, <http://aceee.org/glossary/9#letterd>.

³¹⁰ Section 8, House Bill 2129 of the 79th Regular Legislative Session.

³¹¹ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

³¹² Association of Electric Companies of Texas, Submitted to the Senate Committee on Business and Commerce.

TESTIMONY

As previously mentioned, smart meters provide many operational efficiencies for the electric grid and increase consumer choices. Utilities are now aware of outages in advance of consumers notifying them. Subsequently, there is greater public awareness of outages and restoration times. By implementing smart meters within the smart grid, utilities have been able to reduce transmission expenses; and these expenses are credited against the smart meter surcharge - please see the chart below for expected savings and costs per TDU. Regarding improved consumer choices, smart meters have increased the number of retail products, many of which are only possible through the use of smart meter technology. For example; time of use pricing, bill credits for reducing consumption during grid emergencies, and pre-paid offerings are all made possible or enhanced through smart meter technology.³¹³

	CenterPoint	Oncor	AEP TCC*	AEP TNC**	TNMP
Installation to Date	2 Million	3,022,347	479,080	139,079	57,807
Total # Meters at Full Deployment	2 Million Complete	3 Million End of 2012	809,000 End of 2013	193,000 End of 2013	200,000 End of 2016
Total Estimated Savings***	\$120.6 Million	\$176.0 Million	\$89.2 Million	\$32.6 Million	\$19.3 Million
Estimated Customer Education Expense	\$5.6 Million	\$15.1 Million	\$4.0 Million	\$1.0 Million	\$1.95 Million
Monthly Residential Surcharge Amount <i>Reflects savings above</i>	\$3.05	\$2.19	\$2.26	\$2.35	\$3.40
Total # of Installations on Hold	39	200	460 (combined)		300

SOURCE: PUC

*AEP TCC residential surcharge is \$3.15 during the first two years, \$2.89 during the next two years, and \$2.26 for the remainder of the surcharge period.

**AEP TNC residential surcharge is \$3.15 during the first two years, \$2.27 during the next two years, and \$2.35 for the remainder of the surcharge period.

*** Savings is rolled into the surcharge calculation.

The PUC opened a rulemaking in response to concerns about the deployment of advanced meters and requests for an opt-out option under Project Number 40190. Cost, accuracy, outage management, and the impact on market rules are some of the data utilities gathered and some of the questions discussed. A meeting was held on August 21, 2012, in which the PUC heard testimony from the public. In response to the health concerns voiced at the meeting Commission staff is conducting a review of all existing reports and studies on radio frequency and electromagnetic frequency.³¹⁴

Deployment and Installation

AEP Texas plans to install over one million meters throughout the 373 cities and rural communities in its service territory and will complete deployment in late 2013. To date, nearly 650,000 advanced meters have been installed across West and South Texas; and the advanced

³¹³ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

³¹⁴ Ibid.

metering system deployed by AEP Texas was developed by Landis+Gyr. This system is commonly referred to as Gridstream and utilizes a radio frequency mesh network consisting of a 900 megahertz communication module in the advanced meter that communicates with neighboring advanced meters, routers, and collectors to create a whole mesh network. Prior to selecting a vendor, AEP Texas enlisted the help of an outside consultant, Plexus Research, along with subject matter experts from within the parent company, American Electric Power. Individuals with experience in meters, networks and security were engaged to evaluate the vendors and ensure the technology chosen met the requirements set out by the PUC, as well as industry standards as defined by such entities as the Federal Communications Commission (FCC) and the American National Standards Institute. Before they deploy in a particular area, AEP Texas undertakes a customer education effort. They have a mobile demonstration vehicle which is an 18 wheeler that goes to larger cities and towns prior to deployment to help educate customers. They have held community meetings in some cities and claim to make every effort to answer customer questions. Lastly, AEP Texas reports outreach efforts to the local media in advance of and during deployment.³¹⁵

Oncor plans to install approximately 3.2 million meters throughout its North Texas service territory and will complete deployment in late 2012. To date, nearly 3.1 million smart meters have been installed to replace analog meters which utilized 1950's technology. Like AEP Texas, Oncor has conducted a customer education campaign which included newspaper ads, billboards, brochures, letters to customers, doorhangers, social media, and a mobile express center which traveled around the state for the purpose of customer outreach. Regarding customers who expressed concerns about smart meters, Oncor claims to have worked with each customer one-on-one to understand and, hopefully, resolve their concerns if possible. In most instances, Oncor reports they have been able to address those concerns to the customer's satisfaction and, consequently, the customer has allowed installation. Also similar to AEP Texas, the smart meter Oncor uses is manufactured by Landis+Gyr and the technical evaluation process Oncor used to select Landis+Gyr accounted for the guidelines set by the PUC, FCC, and American National Standards Institute. In fact, Oncor claims one of the many reasons they selected Landis+Gyr was their smart meters used a radio frequency technology that had been deployed and proven in the field for many years.³¹⁶

Oncor claims that despite ongoing deployment, the utility is already experiencing benefits. For example, the new smart meters eliminated the need for a meter reader to enter the customer's property to read the meter. This means Oncor does not have to send meter readers to the various 3.1 million locations within its service territory that already have smart meters. In addition, customers can now monitor their energy usage more closely, switch Retail Electric Providers (REPs) more easily, and select new electric service pricing plans offered by REPs that offer lower-priced or free electricity during certain hours of the day or night, thereby helping customers to save money on their electric bills. Furthermore, by integrating the advanced metering system with other Information Technology systems, Oncor can now detect and response to outages almost immediately without customers having to call them, which is especially important to the 3,666 critical care and 718 chronic condition residential customers. Lastly, since March 2009, Oncor has completed over five million service orders remotely,

³¹⁵ Jeff Stracener, Manager of Advanced Meter Infrastructure, AEP Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

³¹⁶ Mark Moore, Senior Director of Measurement Services, Oncor Electric Delivery Company, LLC., before the Senate Committee on Business and Commerce, October 9, 2012.

instead of having to dispatch personnel and trucks to perform the tasks. Oncor reports the cost savings achieved are passed onto the customers.³¹⁷ CenterPoint claims similar benefits to customers and the grid.

Landis+Gyr has been manufacturing electricity meters around the world for more than 100 years including those deployed by AEP Texas and Oncor and is a global leader in the field of metrology. They have manufactured over 20 million radio-enabled meters in North America and operate in the unlicensed 900 megahertz frequency band, which is the same frequency band used by a wide variety of modern devices such as cordless phones, baby monitors, and certain wireless networks. Though this frequency band is not licensed, it is regulated by the FCC for safety and minimum interference among other devices operating within the band. Specifically, the FCC evaluates and manages exposure impacts and establishes the standards that must be followed for design, test, and certification of wireless products. These output limits are set on the basis of recommendations from standards officials and organizations, and have been adopted by the American National Standards Institute. Landis+Gyr report they adhere to these guidelines and standards in testing and obtaining certification and verification of their products. The design process includes in-house testing to ensure the transmitter complies with FCC regulation. Landis+Gyr also requires performance verification testing for international radio transmission and power line-conducted transmission products. After the design and internal testing, Landis+Gyr obtains FCC certification for the transmitter used in their product not by testing the product themselves, but by using accredited independent testing laboratories. These independent certifying laboratories are subject to FCC accreditation requirements. Landis+Gyr asserts that each smart meter sold has been certified and has output levels in accordance with the FCC limits and its generated exposure to radio frequency density has been found to be significantly below FCC limits.³¹⁸

Possible Harmful Effects on Health

The PUC reports that the possibility of harmful effects to personal health were not raised as a result of smart meter deployment and claim that the radio frequencies emitted by advanced meters are generally well below limits set by the Federal Communications Commission (FCC). More specifically since 1996, the FCC has required all communications devices to meet minimum guidelines for safe human exposure to radio frequency.³¹⁹ In fact, there are several guidelines or standards that recommend safe limits for human exposure to radio frequency fields. These include exposure limits developed by the Institute of Electrical and Electronics Engineers, guidelines published by the International Commission Non-Ionizing Radiation Protection, and rules on maximum permissible exposures promulgated by the FCC. These exposure limits are all based on the fact that radio frequency exposures, at sufficiently high levels, may increase the temperature of the body or portions of the body to a level that may be considered hazardous.³²⁰ Vendors selling products that do not meet FCC specifications are subject to fines and penalties. The Environmental Protection Agency, Federal Drug Administration, National Institute for

³¹⁷ Mark Moore, Senior Director of Measurement Services, Oncor Electric Delivery Company, LLC., before the Senate Committee on Business and Commerce, October 9, 2012.

³¹⁸ Bruce Young, Senior Director of Hardware Development, Landis+Gyr - North America, before the Senate Committee on Business and Commerce, October 9, 2012.

³¹⁹ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

³²⁰ "A Perspective on Radio-Frequency Exposure Associated with Residential Automatic Meter Reading Technology: EMF health Assessment and RF Safety," February 2010, Electric Power Research Institute, before the Senate Committee on Business and Commerce, October 9, 2012.

Occupational Safety and Health, and the Occupational Safety and Health Administration monitor and regulate various aspects of radio frequency. The acceptable FCC radio frequency limits for power density are 6.1 watts per square meter (w/m^2) and $10 w/m^2$ depending on frequency for continuous whole body exposure. Cellular phones have a power density level of $7.8 w/m^2$, baby monitors have a power density level of $0.029 w/m^2$, microwave ovens have a power density level of $0.043 w/m^2$, Wi-Fi base stations or wireless modems have a power density level of $0.021 w/m^2$, and smart meters have the lowest power density level of the devices compared at $0.0018 w/m^2$.³²¹

Dr. Edward Gelmann of Columbia University, as a medical expert representing four TDUs, claims the smart meter transmissions are periodic and very quick so that during an entire day, the smart meter is only communicating (transmitting) for about 90 seconds. In addition, Dr. Gelmann testifies that smart meters can easily be compared to common household devices such as cordless phones and baby monitors. In fact, while baby monitors and smart meters transmit signals at similar radio frequencies, baby monitors cause considerably more radio frequency exposure than smart meters due to power density levels, transmission periods, and location - baby monitors are inside the house and near beds while smart meters are outside the house. The same comparison is true for cellular phones and smart meters, specifically due to the location of the cell phone, but also because smart meters transmit for such short periods (90 seconds). Furthermore, Dr. Gelmann states that comprehensive exposure studies have been done to determine if there are adverse health effects associated with cell phone use, and those studies have determined that cell phones do not cause human diseases or adverse health effects. Subsequently, Dr. Gelmann argues that based on comparisons with cell phones alone, it would be difficult to conclude that smart meters could be harmful in any way. Dr. Gelmann further asserts that smart meters, like the other household items mentioned, transmit at levels well below the limits set by the FCC. Dr. Gelmann reviewed scientific, peer-reviewed literature and evaluated the operations of the smart meters used by Oncor and concluded that there is no convincing evidence that smart meters or similar devices can cause any adverse health effects. He categorically asserts that "there is no chance that any of these devices can cause cancer or affect the cancer process."³²²

The Environmental Defense Fund (EDF) has researched health concerns related to smart meters in response to concerns from their members, public officials, and concerned citizens. Their research includes a survey of the best available research in the field of electromagnetic and radio frequency radiation, including studies from the World Health Organization, the Electric Power Research Institute, and a report by the California Council on Science and Technology. In addition to their survey of existing research on potential health impacts resulting from smart meter electromagnetic and radio frequency radiation, EDF has consulted with outside experts who are focused on the dangers of electromagnetic and radio frequency radiation. These experts helped inform EDF's position that limited radio frequency exposure levels associated with smart meters should not result in reduced support for the smart grid. Whether or not future studies find the overall radio frequency problem to be significant, smart meters are a very small part of that problem. At the same time, EDF believes the smart grid brings environmental benefits such as reduced greenhouse gases, reduced burning of fossil fuels and enhanced integration of solar and

³²¹ Brian Lloyd, Executive Director, Public Utility Commission of Texas, before the Senate Committee on Business and Commerce, October 9, 2012.

³²² Dr. Edward Gelmann, Professor of Oncology, Chief of Hematology/Oncology, Columbia University Medical Center, before the Senate Committee on Business and Commerce, October 9, 2012.

wind power. In addition, EDF asserts that people who are more focused on human health than on environmental sustainability also have compelling reasons to support smart grid technology since it can cut air pollution from the electric utility sector by as much as 30 percent by 2030. That would reduce the current estimation of more than 34,000 deaths a year from power plant pollution which is comparatively more than lives lost on U.S. highways. Dirty air also exacerbates asthma and lung disease, especially among children and the elderly, with more than 18 million acute respiratory symptoms annually. Additionally, since smart grid technology can adjust demand or energy consumption to match intermittent wind and solar supplies, it will enable the U.S. to rely far more heavily on clean, renewable, and domestic energy which can reduce foreign oil imports. This could mitigate the environmental damage done by domestic oil drilling and coal mining which EDF believes reduces harmful air pollution.³²³

However, some consumers and medical physicians claim that electromagnetic and radio frequencies have adverse health effects. Dr. William Rea of the Environmental Health Center of Dallas reports that personal health effects of electrical impulses include rapid aging, heart defects, and brain damage. In fact, since Dr. Rea wrote the first paper proving that electromagnetic frequency waves could be harmful for some in 1991, he reports to have seen approximately 1,500 people with sensitivity to electromagnetic frequency. Furthermore, he states that with the institution of smart meters he has seen a large increase in illness due to their electromagnetic frequency output. The range of symptoms includes heart arrhythmia and brain, muscle, and joint dysfunction. In addition, Dr. Rea asserts that people with metal implants have an antenna effect which accentuates the problem, making them vulnerable to smart meters. He believes the public has little protection against electromagnetic frequency waves because they go through many buildings. He asserts that smart meters contribute to electromagnetic frequency smog and have been shown to cause the rapid aging syndrome with physiological stress. Specifically, smart meter electromagnetic frequency exposure can decrease antioxidants, neurotransmitters, and hormones. It can also punch holes in the blood brain barrier and increase calcium into the cells which causes fatigue. Smart meters can put out "dirty electricity" which causes physical disruption to the body. Furthermore, those suffering from other medical conditions can be predisposed to sensitivity from smart meter electromagnetic frequencies. These include physical traumas like head injury, chemical overload, exposure to pesticide, natural gas, or formaldehyde, and metal implants like artificial hips, joints, and pacemakers. Biological sensitivities like sensitivity to pollens and dusts, impaired immune systems, MRI machines, and exposure to fire retardants or mold can cause additional problems as well. Dr. Rea reports that several countries such as Norway, Sweden, and Austria have legislation about smart meters and he believes the forced use of smart meters is dangerous at this time and should not be forced upon the public without their individual permission.³²⁴

Texans United Against Smart Meters, an "organized citizenry across the State of Texas demanding an immediate moratorium on the deployment of smart meters until studies regarding health hazards and constitutional violations of privacy intrusions are addressed," claims House Bill 2129 was misinterpreted and implemented as a mandate to deploy smart meters instead of just an encouragement for adoption.³²⁵ The group references numerous articles and studies

³²³ Colin Meehan, Energy Analyst, Environmental Defense Fund, before the Senate Committee on Business and Commerce, October 9, 2012.

³²⁴ Dr. William Rea, President, Environmental Health Center of Dallas, before the Senate Committee on Business and Commerce, October 9, 2012.

³²⁵ Texans United Against Smart Meters website, <http://texansagainstsmtmeters.com> accessed: Nov. 6, 2012.

including those of the American Academy of Environmental Medicine and the American Pediatric Association which conclude that smart meters represent a "clear and present danger to human beings, especially elderly and young people." Specifically, the American Academy of Environmental Medicine report states that long range electromagnetic and radio frequency can act over large distances, affect biological systems, and consequently imprint into the living system with long lasting effects.³²⁶ They also cite a January 2009 issue of the Journal of Bioelectromagnetic Medicine which outlines many attempts to reduce or eliminate the threat of electromagnetic radiation. Moreover, the group notes exposure leads to adverse neurological, cardiac, respiratory, dermatological, and ophthalmologic effects. They also state there is a direct causative effect of smart meters to autism and cancer citing the Multiple Chemical Sensitivity American Report of August 2011. Specifically, the report asserts that in the last 30 years, autism has increased 60 fold in parallel with the rise of electromagnetic pollution. In conclusion, the group claims the public has not been given complete access to study results; specifically, scientists with contrary findings to that of the California Commission on Science and Technology report on the safety of smart meters were stricken from inclusion within the report. The group claims these scientists had extreme differences in results and findings from those published concluding that smart meters were safe. Lastly, opponents claim the report did not contain a non-biased review, but rather a copy of the manufacturer's manual, verbatim.³²⁷

Texans United Against Smart Meters questions the legitimacy of smart meter report supportive studies. The group claims that only a few studies, approximately two dozen case control studies on mobile phone use, have reached the conclusion of no reported elevations of cancer. Importantly, they note that most of these studies were funded by the industry and contained many significant experimental design flaws, including the fact that population sizes were too small and studied for shorter time periods. Conversely, studies commissioned and reviewed by non-industry organizations show a clear increase in cancer cases among individuals who have suffered from prolonged exposure to low-level microwaves transmitted from radio antennas. Furthermore, they assert that some public health officials have voiced concerns regarding wireless smart meters; the Santa Cruz County Public Health Department in California is worried about the growing number of citizens who report they have developed hypersensitivity to electromagnetic frequency waves including those reporting symptoms after the installation of smart meters. Consequently, the group believes the mass deployment of smart grid technology could expose large segments of the public to significant risks without their consent, and until the health effects are known for certain, the Texans United Against Smart Meters organization calls for a moratorium on smart meter deployment as well as the removal of existing meters unless the consumer expressly grants permission for installation.³²⁸

Smart meter opponents argue the cumulative effect of wireless transmissions are disregarded in previous discussions which assert smart meters do not pose adverse health effects. FCC standards, testing, and epidemiology regard smart meters as the only end-use device and do not incorporate the rest of the wireless network communicating with the meter. Despite smart meters being outside of the house or a distance away from consumers, this length may not be

³²⁶ "Electromagnetic and Radiofrequency Fields Effect on Human Health," American Academy of Environmental Medicine, before the Senate Committee on Business and Commerce, October 9, 2012.

³²⁷ Texans United Against Smart Meters website, <http://texansagainstsmartmeters.com> accessed: Nov. 6, 2012.

³²⁸ "Smart Meters: Correcting the Gross Misinformation," Dr. David O. Carpenter, Founder, University of Albany School of Public Health, New York, Submitted to the Senate Committee on Business and Commerce October 9, 2012.

sufficient when the routers and collectors are covering large geographical areas for the purposes of transmission and communication with other meters. The installation process could be harmful as well. Opponents claim installing electrical meters on bases that have never been maintained since the original construction can be dangerous and further claim that utilities may not use qualified electrical professionals who are licensed or bonded to install the meter. They report meter bases owned by home owners are being blamed for fires and electrical problems inside the building when unsafe or improper installation may be the reason.³²⁹

Other States and Opt-Out Plans for Smart Meter

Other states have offered opt-out opportunities to consumers who oppose smart meter installations including Maine, Oregon, and California. Of these three states, all have passed at least some of the cost to remove or deny installation of smart meters to the consumer.

Maine. In May 2011, Central Maine Power (CMP) became the first U.S. utility to implement a smart meter opt-out requirement. The Maine Public Utilities Commission allows customers to turn off the wireless transmitter on their digital smart meter for an initial charge of \$20, plus a monthly charge of \$10.50. Also, keeping an existing mechanical meter costs \$40 upfront, plus a \$12 monthly fee. Customers also have the option of moving a wireless smart meter to another location on their property. As of February 2012, about 8,000 CMP customers chose to opt-out of installing a smart meter, representing about 1.3 percent of CMP's 612,000 customers.³³⁰

Oregon. Only two customers sought to opt-out of Portland General Electric's (PGE) smart meter program. PGE customers must pay \$254 to opt-out, plus a \$51 monthly fee. PGE's 825,000 smart meter deployment was completed in December 2010.³³¹

California. On February 1, 2012, the California Public Utilities Commission approved monthly opt-out charges for Pacific Gas & Electric (PG&E) customers who wanted to keep their analog meters. This included a \$75 up front and a monthly fee of \$10.³³² They also included a smart meter opt-out section to their website.³³³ Reportedly, PG&E expects the opt-out list to exceed 145,800 customers with an expectation that 145,000 to 150,000 customers will choose to keep their analog meters. The utility has installed nearly 10 million smart meters throughout its Northern California territory in a statewide rollout that began in 2006.³³⁴

Independent Study

Dr. Edward Gelmann testified that since numerous studies by various independent agencies at the international, national, state, and local levels have studied the health effect of smart meters or similar devices and determined that there is not a credible link between radio transmissions health effects, an additional study by the State of Texas is not necessary. He states that California, Vermont, and Maine have considered the same issue and each has concluded that smart meters are completely safe and that additional study of their safety is not necessary.³³⁵

³²⁹ Curtis Bennett, Chief Science Officer, Thermogرافix Consulting Corporation, before the Senate Committee on Business and Commerce, October 9, 2012.

³³⁰ Association of Electric Companies of Texas, Submitted to the Senate Committee on Business and Commerce.

³³¹ Ibid.

³³² Ibid.

³³³ <http://www.pge.com/myhome/customerservice/smartmeter/optout/>.

³³⁴ Association of Electric Companies of Texas, Submitted to the Senate Committee on Business and Commerce.

³³⁵ Dr. Edward Gelmann, Professor of Oncology, Chief of Hematology/Oncology, Columbia University Medical Center, before the Senate Committee on Business and Commerce, October 9, 2012.

As previously stated, some consumer representatives argue that the cumulative effect of so many wireless devices are negatively affecting the population and offer that studies claiming no adverse health effects are not accounting for multiple devices transmitting together. Furthermore, some consumers are worried smart meter deployment by electric utilities will set a precedent for other utilities like gas and water. These and others argue for a moratorium on meter deployment.³³⁶ Others want removal of meters at no cost to consumers and claim more extensive studies of the health effects as well as public education is needed before the meters should be deployed. Until that time, some consumers believe citizens should be given the opportunity to opt out of smart meter installation.³³⁷

CONCLUSION

While industry and their contracted medical experts present numerous studies which assert the lack of negative health effects due to smart meters, consumer representatives at the October 9th hearing condemned reported instances of installation despite homeowners telling their respective utilities they did not approve.³³⁸ Some believe smart meters have been aggressively deployed to support Agenda 21 initiatives which seek to use national resources for the goal of global sustainability. Regardless, most opponents call for the immediate end to the deployment of smart meters and argue until independent, third-party testing can show evidence that smart meters do not cause adverse health effects, smart meters should not be deployed. Consequently, the Committee recommends an independent third party, perhaps Underwriter Laboratories, should study if smart meters are linked to harmful effects on health. Further, the Committee recommends utilities offer the opportunity for citizens to opt-out of smart meter installation and retain their analog meters for continued service.

RECOMMENDATION

1. Utilities should offer customers the ability to opt out of the smart meter program and allow those customers to continue electric service using an adequate meter.

³³⁶ Beth Beisel, before the Senate Committee on Business and Commerce, October 9, 2012.

³³⁷ Pam Colquitt, Licensed Physical Therapist, before the Senate Committee on Business and Commerce, October 9, 2012.

³³⁸ Ibid.

APPENDIX A: Report of the Subcommittee on Water Utilities in Rural and Unincorporated Areas

BACKGROUND

In Texas, small water systems have become big business.

Throughout the past decade, an increasing number of small, privately-owned public water and wastewater utility systems, commonly referred to as "mom and pop" systems, have been acquired by national corporations and investment funds. While the ownership of water utilities has evolved, the state's role in regulating the rates customers pay to private water providers or "Investor Owned Utilities" (IOUs) has not, and the Texas Commission on Environmental Quality's (TCEQ) process for rate setting no longer serves the best interests of customers or utilities.

Most IOUs are located in rural, unincorporated areas of the state and it has become increasingly common for the largest IOUs to seek annual rate increases, and for the rates charged by those IOUs to be double or triple the rates charged by a nearby member-owned or municipally-owned utility system. This pattern of recurring and dramatically escalating rate increases has led to many dissatisfied customers, negatively impacted property values, raised questions about the potential negative impact on economic development, and sparked increasing questions by lawmakers who represent areas of the state served by certain IOUs.

During the 82nd Regular Session, Texas Legislature, the Sunset Advisory Commission recommended "*the state could benefit from transferring regulatory functions related to water and wastewater utilities to the Public Utility Commission of Texas*" (PUC). However, the PUC sunset bill did not pass and the utility rate setting function did not transfer. The 82nd Legislature directed the PUC to undergo sunset review again, prior to the 83rd Legislature, and the Sunset Commission Staff Report presented in November 2012 has reaffirmed the recommendation that water and wastewater utility ratemaking functions should transfer to the PUC.

Public Hearings and Testimony

Subcommittees of the Senate Committee on Business and Commerce and the Senate Natural Resources Committee ("the Subcommittees") were formed to study this issue and to make recommendations. The Subcommittees heard from invited and public testimony at hearings in July 2011 and November 2012, where customers and utility representatives and legislators discussed and agreed that the current system for rate setting is broken and in need of significant reform. Additionally, the Chairs of the Subcommittees, along with their staff, have spent time with a working group of industry representatives to explore potential reform.

Utility ratemaking should move from TCEQ to the PUC.

As a general rule, testimony before the Subcommittees endorsed the Sunset Commission recommendation to transfer ratemaking from TCEQ to the PUC, with some witnesses adding that support for the transfer would hinge on working out details of the PUC's process and assuring appropriate funding for the PUC. Witnesses acknowledged that the PUC's structure and expertise is focused on fair and efficient rate-related regulation, and that the transfer offers potential benefits by aligning most utility regulation within one agency. Furthermore, the PUC's

mission is to protect customers, foster competition, and promote high-quality infrastructure, while TCEQ's mission is to protect our state's public health and natural resources. Being that the PUC currently regulates the state's electric and telecommunication utilities, implements respective legislation, and offers customer assistance in resolving complaints, it would be seamless to transfer water and wastewater utility rate regulation. Transferring these functions to PUC would take advantage of PUC's regulatory focus and processes and allow TCEQ to better focus on its core mission of ensuring environmental quality.

Witnesses also noted that the transfer provides the much needed opportunity to modernize the rate setting process and to move away from the current "one-size-fits-all" approach employed by TCEQ. Current law and TCEQ's rules were designed for small stand-alone mom-and-pop systems, and were put in place prior to the emergence of the trend toward acquisition by out-of-state utility operators and investors. While the ownership of some of the state's largest IOUs has changed and the financial structures and accounting has grown increasingly complex, the laws and TCEQ's staff and resources have not kept pace. TCEQ is simply not adequately equipped with mission, resources, or rules necessary to protect the public against the potential for monopoly abuse of an IOU.

The rate setting process should not be the same for all utilities.

In addition to transferring the function to the PUC, the Subcommittee hearings established support for ending the one-size-fits-all treatment and establishing utility classifications for the purpose of rate setting, either based on connection count or annual operating revenues. Most witnesses supported a proposal to designate a utility with 10,000 connections or greater as Class A; 500 to 10,000 connections as Class B; and 500 or fewer connections as Class C. Utilities owned by and under common-control of a Class A utility, even though they may have less than 10,000 connections, would also be classified as Class A.

The hearings also supported prohibiting a utility from charging a proposed rate increase until the increase had been finally approved, as long as there was a time limit for when the approval had to be final. Under the current rules, the IOU is permitted to begin charging customers the requested new rate within 60 days of providing a notice of the increase to customers. This can lead to a perverse incentive for a utility to request a larger-than-necessary increase in order to drive a settlement with protesters for a reduced amount. This drive to settle can disadvantage customers who lack the resources needed to disprove the utility's request, and who are facing bills based on the higher proposed rate throughout the course of their contest or negotiation.

Utilities classified as Class A would follow a rate making process similar to process that the Public Utility Regulatory Act outlines for electric IOUs and that is currently used for electric rate increases. A Class A utility would file detailed costs, rate schedules, and prefiled testimony supporting the requested rate increase at the time the IOU applied for the rate increase, and a final rate determination would be required to be made within 185 days. Additionally, a Class A utility would be required to file annual financial and earnings monitoring reports with the PUC, similar to what is currently required for electric companies.

Class B utilities would file a rate application much like what is currently required by TCEQ. Class B IOUs would file an abbreviated rate-filing package providing essential cost-of-service and rate base information, but pre-filed testimony would come later if the application became contested.

Class C utilities would be allowed an option to request an annual rate adjustment based on a predetermined index not to exceed more than a 5 percent increase. This would allow for streamlined ratemaking to encourage appropriate and timely investment in infrastructure for the state's smallest IOUs. Adjustments could go into effect 30 days after proper notice to customers, if the adjustment is equal to or lower than the PUC's established water utility index for that year. If the adjustment is greater than the established index, the rate application would follow the Class B process. A Class C utility would be allowed only one adjustment every 12 months, and no more than four total adjustments prior to the Class C utility filing a Class B rate application.

While CCNs provide assurance for a utility system operator, they impair and prohibit competition choice that customers of many IOUs seek, and effectively prohibit a city from providing utility service to its citizens.

The Subcommittees heard that competition is non-existent among private water utilities in Texas and that state law requires private water utilities to operate as monopolies. IOUs are required to obtain a Certificate of Convenience and Necessity (CCN) certifying their service area. The CCN grants the IOU the exclusive right to provide water or wastewater within their certificated area, and the obligation to provide service that is "safe, adequate, efficient and reasonable".³³⁹

The CCN requirement recognizes that a utility with a stable customer base that is not subject to competition is best situated to attract the large amount of capital needed. This protection provides assurance to a potential lender that the utility will generate revenues for repayment of loans, and also provides assurance to avoid unnecessary duplication of infrastructure that would create inefficiencies and more environmental disruption. However, as CCN territories become increasingly urban, and as water rates have increased, the issue of single-certification has become a source of some controversy.

While many IOUs are located in rural and unincorporated areas, some IOUs are located in high-growth areas and cities that have formed or expanded. Particularly in these instances, IOU rates and CCN boundaries have become an issue of much attention for potential land developers and city officials. A landowner of over 25 acres in certain urban counties that is not receiving utility service or a landowner of over 50 acres in any county may apply for expedited decertification from a CCN. However, the only option for a landowner of less than 25 acres or a customer of a utility that is receiving service from a CCN holder is for another similar utility to apply for a CCN to serve the landowner's property. In these instances, parties may negotiate to reach agreement over a service area. But in most cases, negotiations are contentious, lengthy, and often unsuccessful. Cities that have IOUs operating within their city limits have sought TCEQ's approval for dual certification, have pursued legislative solutions, and have pursued eminent domain actions against private utility providers.³⁴⁰

³³⁹ Texas Water Code Sec 13.001 (b)(1) states "retail public utilities are by definition monopolies in the areas they serve". See also Texas Water Code Sec 13.242 requiring a retail public utility to hold a CCN. See also, Texas Water Code 13.139(a) providing standards of service.

³⁴⁰ Texas Water Code Section 13.255 does provide a way for any city to become singly certified to a CCN area of a Texas Water Code Chapter 67 non-profit water supply or sewer service corporations, Texas Water Code, Chapter 53 fresh water supply districts or Texas Water Code, Chapter 65 special utility districts, if negotiations fail. However, this provision does not apply to an IOU holding a CCN unless the IOU is located within the corporate limits of the City of Houston.

A municipal governing body has original jurisdiction over water and wastewater rates an IOU may charge customers within its corporate limits. The city council may approve the increase, attempt to negotiate a different rate, or deny the IOU's rate increase. If a rate is denied, the IOU then may appeal the denial to the TCEQ. The TCEQ refers the appeal to the State Office of Administrative Hearings (SOAH). The City will typically seek to be a party to the proceeding on behalf of its citizens, and the city is entitled to recover the cost necessary to defend their local action before SOAH from the IOU. However, the IOU may then recover that same cost through the rates it charges the customers.

The Subcommittees expressed that the reforms should not interfere with municipal jurisdiction, and that municipalities should continue to exercise original jurisdiction over IOU rates within their municipal boundaries.

State regulators and customers should be given more information about a proposal for Sale, Transfer, or Merger of utility systems, and proposals for a system-wide or consolidated tariff.

The Subcommittees heard testimony regarding the Sale, Transfer, Merger (STM) process that an IOU must follow when it seeks to acquire all or a portion of another utility. Various circumstances give rise to a utility acquisition. An acquired system may be financially troubled or in need of investment, but challenged by limited access to capital or debt. Similarly, a utility system that is small, with a customer base that is not growing or even in decline, may not generate the revenue needed to support the cost of service, including upgrades necessary to remain in compliance with federal or state quality requirements for public drinking water systems. A new owner with access to debt and capital who is willing and able to finance improvements necessary for compliance is one method of ensuring public health and safety.

In other instances, an acquired system may be located in a promising growth area, well situated for an investor seeking to capitalize on service to an expanding customer base. Some IOUs have recovered a 12 percent return on invested capital, so acquisition of a utility system that is in need of capital improvement has become an attractive opportunity for those looking to invest and earn a favorable rate of return.

Current law only requires notice of an STM to be provided to customers of a utility that is to be purchased, acquired, or transferred, and notice is not required to be provided to customers of a utility that is seeking to purchase, receive, or acquire a utility system. Additionally, notices currently provided to customers of a utility to be transferred are misleading as they state that the STM will not impact a customer's rates. While technically correct, because an application for an STM is not an application to increase rates, an STM is often followed by the new owner making a significant investment in the system. This investment, while many times necessary for the protection of health and safety, does impact rates -- rates for customers of the system to be transferred, but also potentially for existing utility customers, who are not given notice of an opportunity to protest the application.

TCEQ witnesses said that current law does not allow the Executive Director to deny an STM application. The Executive Director has the authority to refer STM applications to SOAH when there are concerns that the proposed acquisition and transfer do not serve the public interest. TCEQ Commissioners are the final decision makers concerning approval or denial of an STM application that has been referred to SOAH.

Purchase or acquisition is often followed by a request by the utility to consolidate multiple, often disparately located systems for the purpose of spreading out the cost of improvements and to mitigate the cost of infrastructure upgrades to a small system. A benefit of consolidation is that by drawing from a larger customer base, the cost to an individual customer would theoretically be reduced. A downside of consolidation is that all customers of a utility with consolidated systems are typically asked to bear the cost equally, and some customers within a consolidated system will be asked to pay for upgrades and investments that result in no direct benefit to the quality of their service. Additionally, consolidating may distort the cost of providing water or wastewater utility service. For a customer of a utility with a business model that is built on acquisition and consolidation, the rate increases seemingly never end. As this has occurred in Texas, the trend of acquisition and consolidation has resulted in increasing frustration by thousands of disgruntled utility customers who are confronted with annual and sizable water and sewer rate increases, and who remain captive customers of their utility provider.

Historically, rate consolidation was allowed across a CCN. The 77th Legislature in 2001 added a requirement that a utility must demonstrate that the consolidated systems are "substantially similar" prior to requesting a consolidated tariff.³⁴¹ In recent years, one utility has claimed to be entitled to a special exemption from this requirement.³⁴²

Currently, customers lack resources to participate in a rate case. They also lack public advocacy, and they potentially incur all of the costs of a rate case, including the utility's costs.

Once an IOU files an application to raise rates it is required to notify customers, and within 60 days it begins to charge the proposed rate. Customers have the right to petition TCEQ to protest the increase and, more often than not, customers of the largest IOUs organize to protest. However, the customers lack the resources to effectively evaluate or challenge the utility's request. A fully litigated rate case can take several years to resolve, and customers then must pay for their own costs and the costs the utility incurred during the process. Ninety percent or more of these cases result in a settlement in large part because customers simply lack the resources to participate in the process.

In processing an application for a rate increase, TCEQ is statutorily obligated to represent the public interest, which is understood to be an obligation to preserve the financial stability of the utility as well as protection for customers. The agency must balance the interests of both sides during what is typically a contested, litigious, and highly adversarial ratemaking proceeding. Because there is no state agency representing the exclusive interest of the customers, the customers only protection is to challenge a utility's proposed rate increase through organizing the community to petition for protest, raising funds, and pooling resources to hire private attorneys, accountants, rate experts, and engineers, and undertaking a long and expensive contested rate case. The IOU defends their proposed rate increase with a team of private attorneys and experts, knowing it will be entitled to pass the cost of that defense to their customers in a surcharge.

The Subcommittees heard that not every customer of an IOU in Texas faces the same challenges that the customers served by the largest IOUs have experienced. A vast majority of IOUs are small stand-alone utility systems with operators who work diligently to provide quality service at a low-cost and to maintain satisfied customers. While the cost of running any water system is likely increasing, it does not appear to be typical for these "mom and pop" systems to propose

³⁴¹ See Texas Water Code Section 13.145(a).

³⁴² See Texas Water Code Section 13.145(b).

dramatic or significant rate hikes or to become embroiled in long, expensive, and contentious rate proceedings. Rather, they attempt to structure rate increases incrementally and work to quickly achieve settlement when proposed rates are challenged, thereby avoiding the significant cost associated with a contested rate case.

CONCLUSION

Texas faces significant challenges due to the state's projected population growth and aging infrastructure and the need for increasingly costly replacement, repair, and upgrading of water systems.

While the cost of providing safe, clean drinking water is only going to increase, much needs to be done to ensure that the state is holding up its end of the bargain by providing adequate oversight of IOUs. The State must protect the public from the potential for monopoly abuse and foster public trust. Today's regulatory practices have not kept up with the changes in the industry and business model for water systems. They no longer serve the best interest of utilities or customers. The need for reform is past due when one considers changing industry practices, the rising costs of water infrastructure and the challenges of extended droughts.

This is likely not an issue that can be fixed in one bill or one legislative session. The true fix is likely to involve a multi-session approach, and a continuing commitment to a partnership between the State of Texas, IOUs, and customers to work together to understand the challenges of water supply and the principles of equity that underpin utility regulation. However, the magnitude of the challenge is no excuse to postpone action. The problems persist and compound if we delay. The solutions and ideas that have emerged through interim hearings, stakeholder work sessions, and staff meetings devoted to this issue deserve legislative attention and swift action.

RECOMMENDATIONS

At a minimum, the Legislature should consider and pass legislation in the 83rd Session as follows:

1. The Legislature should transfer water and wastewater utility ratemaking functions from the TCEQ to the PUC.
2. The Legislature should establish a new rate setting process that, at a minimum, does the following:
 - a. Prohibits the utility from charging a proposed higher rate until it has been finally approved;
 - b. Ends the one-size-fits-all rate making approach, creates classifications for utilities based on size so that the large utilities are required to include substantial supporting details and pre-filed testimony when applying for a rate new rate, and gives the smallest systems an opportunity to adjust for inflation through an administrative mechanism;
 - c. Requires that the large, national IOUs follow a rate setting process modeled after the Public Utility Regulatory Act provisions for establishing the rates of regulated

- electric utilities and submit an application containing a detailed accounting of the basis for seeking a rate increase and pre-filed testimony;
- d. Reduces the time required and the cost ultimately paid by customers as a result of a contested rate proceeding;
 - e. Ensures that the amount of profit or return that an investor owned utility might earn is sufficient to ensure adequate and reliable utility service but does not result in a windfall for the utility.
3. The Legislature should authorize the Office of Public Utility Council to represent and serve as an advocate for residential and commercial customers in rate proceedings, Sale Transfer or Merger proceedings, and to conduct water and wastewater customer education and outreach.
 4. The Legislature should direct the PUC to establish a phone number and email address for receiving, and then investigating and resolving, customer complaints. The Legislature should require that the PUC make this information available to customers.
 5. The Legislature should require more transparency and better communication between IOUs and customers, including a requirement that an IOU provide information on a public website about its water source, its certified service areas, the cost to provide water service, and rates.
 6. The Legislature should require the PUC to carefully review an application to Sell, Transfer or Merge a stand-alone water system into a regional or statewide system. That review must consider the similarity of the systems and the potential impacts of the acquisition to customers, and should ensure that the transition does not result in financial hardship for customers.
 7. The Legislature should provide that notice of a Sale, Transfer or Merger should be provided to customers of the acquiring and to-be-acquired utility and should contain information about the likely impact of a Sale, Transfer or Merger on customer's future rates.
 8. The Legislature should repeal Texas Water Code Section 13.145(b) that has been said to exempt one water utility from the requirement that two or more utility systems must be substantially similar to one another in order for rates to be consolidated across multiple utility systems.
 9. The PUC and OPUC should provide a biennial report to the legislative leadership and committees of jurisdiction updating the legislature on the status of the transition and agency performance, lessons learned, and recommendations of items for legislative consideration.

HEARING SUMMARY

The Senate Committee on Business and Commerce Subcommittee on Water Utilities in Rural and Unincorporated Territories and the Senate Committee on Natural Resources Subcommittee on Water Utilities in Rural and Unincorporated Territories (subcommittees) met in a joint hearing on Thursday, July 28, 2011, to hear invited and public testimony relating to the bundling of small water and sewer systems by a single investor-owned utility (IOU), and to consider the causes of and any regulatory issues associated with rapidly escalating water and sewer utility rates for Texans who live in unincorporated and rural areas of the state.

Senators Watson and Senator Nichols called the meeting to order. Senator Watson said that the purpose of the hearing was to gain a better understanding of IOUs and how the state might regulate IOUs in order to properly protect Texans. He said that the hearing would address whether there is a need to reform the process for applying for rate increases, the process for contested cases, the processes for the sale, transfer, and merger (STM) of utilities, processes for requesting or receiving consolidated tariffs, and interim rate processes.

Senator Nichols said that he has received many complaints relating to IOUs, stating that problems have occurred in different counties and with different companies. He said that such examples indicate that there is a problem with IOU processes.

Senator Watson called L'Oreal Stepney, deputy director, Office of Water, Texas Commission on Environmental Quality (TCEQ); Doug Holcomb, legislative and consumer liaison, Water Supply Division, TCEQ; and Todd Gallaga, senior attorney, Water Rights and Water Utilities, Environmental Law Division, TCEQ, to testify.

Stepney discussed the role of TCEQ in water and sewer regulation, stating that authority over water utilities was transferred to TCEQ's predecessor agency in 1986. She said that the three types of entities that are authorized to provide retail water or sewer utility service include political subdivisions (cities, water districts, and counties), nonprofit water supply corporations (WSCs), and IOUs. She said that Chapter 13 (Water Rates and Services), Water Code, gives TCEQ original rate jurisdiction over IOUs that provide service outside a city limit. Stepney said that water service within a city's limit is under the original jurisdiction of that city. She stated that TCEQ has appellate jurisdiction over a city's ratemaking decision when the rates affect IOUs operating within the city limits and over retail utility rates for customers outside of the city. Stepney said that TCEQ also has appellate jurisdiction over all customers in a water district and over wholesale water and sewer rates. She said that many contested cases that are presented to TCEQ are settled through a mediation process.

Holcomb discussed the process of reviewing STM applications that are submitted to TCEQ, stating that provisions relating to STM are found in Section 13.301(Report of Sale, Merger, Etc.; Investigation; Disallowance of Transaction), Water Code. He said that IOUs and WSCs are required to file an STM application when they sell or acquire a portion of a water or sewer system. Holcomb stated that after an STM application is submitted to TCEQ and after a period of for public comment, the executive director of TCEQ (executive director) determines whether the STM application meets required criteria. He said that an STM application is sent to the State Office of Administrative Hearings (SOAH) if requirements are not met and it is determined to be in the public interest to do so.

Senator Watson asked whether costs to consumers and the potential effect on customer utility rates are considered in the decision regarding whether the STM is in the public interest. Holcomb replied that TCEQ considers how the STM will affect customer rates, stating that an acquiring entity is required to notify and explain to customers the effect the STM will have on their utility rates.

Senator Watson asked whether certain requirements that are imposed on electric utility entities attempting to purchase another electric utility are imposed on STM transactions for water utilities. Holcomb said that TCEQ refers an STM case to SOAH if TCEQ is concerned about an acquiring entity's ability to provide service to customers. Senator Watson asked whether TCEQ considers the disparity in rate structures between the acquiring and the acquired entities. Holcomb replied in the affirmative, stating that an IOU that acquires a water system cannot change the acquired system rates through the STM process.

Senator Whitmire asked whether there have been instances in which TCEQ raised objection to or blocked an STM application. Holcomb said that there have been instances in which TCEQ has referred STM applications to SOAH. At Senator Whitmire's request, Holcomb discussed his role as a legislative and consumer liaison, stating that TCEQ receives calls from consumers and works with consumer groups to address concerns but that his role is not as a consumer advocate.

Senator Nichols, referencing a written report provided to the subcommittees by TCEQ that stated that a certificate of convenience and necessity (CCN) grants a virtual monopoly for a geographic area and that CCNs eliminate expensive and impractical competition, asked what the original intention of granting CCNs was. Senator Nichols said that the TCEQ report stated that utility regulation serves as a substitute to competition. Stepney said that CCNs give an entity exclusive authority to provide service. Holcomb said that the language Senator Nichols referenced stating that utility regulation operates as a substitute for competition is taken directly from Section 13.001 (Legislative Policy and Purpose), Water Code. He said that giving utilities exclusive rights to a service territory enables that entity to have a stable customer base which will assure lending institutions of that entity's capital. Senator Nichols stated that the original purpose of CCNs has been accomplished and now CCNs are being used to prohibit competing entities from offering lower water utility rates. He said that the public is not benefitting from CCNs.

Senator Nichols, again referencing the materials provided by TCEQ, asked Holcomb to explain why TCEQ encourages regionalization and consolidation. Holcomb replied that TCEQ is mandated by the Health and Safety Code and the Water Code to encourage regionalization.

Senator Nichols and Holcomb discussed dual certification for utilities in the same area. Holcomb stated that TCEQ has the authority to grant dual certification if both entities agree to the dual certification. He said that if the entities that are involved disagree, the contested case is referred to SOAH. Holcomb said that in contested cases, TCEQ tries to mediate and help utilities understand whether it is in their best interest to agree to an STM. Senator Nichols stated that it is expensive for entities to participate in contested cases. Senator Nichols asked why TCEQ refers cases to SOAH instead of regulating the contested cases at TCEQ. Holcomb replied that statutory language needs to be clarified to state that TCEQ has the authority to transfer or decertify service areas.

Representative Callegari asked Holcomb to describe the requests for dual certification. Holcomb replied that TCEQ often receives requests for CCNs and applications to decertify areas. Stepney said that in some dual certification applications, one IOU will ask to serve a high density area with another IOU serving low density areas. Holcomb said that most IOUs are certificated to the subdivision that they serve.

Senator Eltife said that the City of Tyler has received no assistance from TCEQ in the 10 years during which the city has attempted to purchase water systems from the IOU in the area. He said that TCEQ has the authority to allow dual certification in a service area. He said that an IOU would not agree to allow competition to be certified in the same area and that customers are held hostage by the lack of competition. Senator Eltife said that changes need to be made.

Senator Watson said that the original intention of CCNs and the consolidation process of STM were to allow for necessary investment in a given area. He said that large utility companies are purchasing many CCNs in various locations and asking to consolidate those various CCNs. Senator Watson asked how the merger of many CCNs meets the original purpose of CCNs. Holcomb replied that the consolidation of CCNs brings utility services under one management scheme. He said that IOUs are required to make improvements to individual water systems and that the water systems are still stand-alone systems. Senator Watson disagreed, stating that consolidation means that the systems are not treated as stand-alone systems and that consolidation conflicts with the original purposes of CCNs.

Senator Watson asked whether it is required that water systems be substantially similar in order to be consolidated and whether a current application for a merger of CCNs by Monarch Utilities/Southwest Water Company (Monarch) is exempt from that requirement. Holcomb said that it is not a requirement of Monarch's STM application that the water systems to be consolidated be substantially similar because Section 13.145 (Multiple Systems Consolidated under Tariff) exempts a public utility that provided utility service in only 24 counties on January 1, 2003, from requirements under that section, including the requirement that systems under the tariff be substantially similar. He said that Monarch bought the public utility to which that exemption applies. Senator Watson asked whether other IOUs in the state are able to claim that exemption. Holcomb replied in the negative.

Senator Watson asked whether TCEQ considers the affordability of rates as a priority over regionalization in the STM application process or whether the rates in a stand-alone system would be more affordable than a consolidated system. Holcomb replied that TCEQ considers the affordability of rates, particularly by ensuring that the acquiring entity has financial capacity. He said that an IOU acquiring other systems typically files an application to change the rates in the system that the acquired.

Senator Watson asked whether TCEQ performs household cost analysis for STM applications. Holcomb responded that he was unsure whether TCEQ performs household cost analysis and that TCEQ is more focused on determining whether the acquiring entity has the financial, managerial, and technical capabilities to adequately operate the acquired system.

Senator Watson asked whether the requirement that water systems be substantially similar should be analyzed in determining whether consolidation is in the public interest. Holcomb agreed. Senator Watson, Holcomb, and Gallaga discussed an application for a rate increase by Aqua

Texas (Aqua). Gallaga said that it was determined that Aqua was not required to show that systems were substantially similar during the STM process but was required to show that the systems were substantially similar during the rate increase proceedings. Holcomb said that the determination of "substantially similar" is considered during rate cases, rather than during the STM application process.

Representative Callegari asked how TCEQ handles the ratemaking of an entity that purchases a water system that is inefficient and must make improvements to bring the system within compliance. Holcomb replied that if a utility purchases a system that is not in compliance, it is a business decision by the utility whether to increase rates to cover the costs of bringing the system into compliance. He said that the burden is on the utility to show TCEQ that the rates are just and reasonable.

Senator Nichols and Holcomb discussed acquisition adjustments. Senator Nichols asked whether the number of consumers needed to trigger a contested case increases after a consolidation of CCNs. Holcomb said that statute sets forth the number of customers needed to protest a rate change to equal the lesser of 1,000 individuals or 10 percent of the population. Senator Nichols said that it may be difficult for customers in various areas under a consolidated system to communicate. He asked whether customer information was made available to customers looking to garner support to contest a rate change. Holcomb replied that an IOU should make such information available to customers but that TCEQ does not have such information.

Senator Watson called Cathleen Parsley, chief administrative law judge (ALJ), SOAH; Kerry Sullivan, general counsel, SOAH; Sheri Givens, Office of Public Utility Counsel (OPUC); and Blas Coy, director, Office of Public Interest Counsel, TCEQ, to testify.

Parsley discussed the role of SOAH in water utilities cases. She said that after a hearing before an ALJ, SOAH issues a proposal for a final decision by TCEQ. She said that water rate cases have a high settlement rate. Parsley said that a utility is authorized to recover expenses associated with the rate case. Following an inquiry from Senator Watson, Parsley said that such expenses include court costs such that a contested rate case can end up costing customers.

Senator Nichols asked how often SOAH ALJs set interim rates. Sullivan replied that he knew of only two instances in a seven-year time period in which an ALJ set an interim rate. He said that it is rare for TCEQ to set interim rates but that TCEQ has the authority to suspend the effective date of a rate change.

Senator Watson, Parsley, Sullivan, Coy, and Givens discussed the differences in water utility rate cases and electric utility rate cases brought before SOAH. Parsley said that the role of SOAH is the same in both water and electric utility rate cases. Senator Watson said that the legislature created a process for OPUC to represent the public in contested cases but that there is no equivalent advocate for water utility customers. Coy said that the public interest counsel at TCEQ does not have the same statutory authority as OPUC to represent individuals in rate cases.

Senator Nichols asked whether there is a rule to determine whether a utility rate is just and reasonable after recovering legal and court costs. Sullivan replied that there is no rule other than the rates be just and reasonable. Senator Nichols said that there is no penalty for an IOU to ask for a higher rate increase, knowing that the consumers will pay for the recovery court fees if that

rate is challenged. Senator Watson said that the high number of rate case settlements is a result of customers fearing that their rates will be higher if they continue with a contested hearing.

Senator Watson and Sullivan discussed pre-filed testimony in rate cases before SOAH. Senator Watson said that pre-filed testimony is required in electric utility rate cases but is not required in water utility rate cases.

Senator Watson called David Frederick, attorney, Texans Against Monopolies Excessive Rates (TAMER), and Orville Bevel, TAMER, to testify. Frederick discussed the history of rate increases for Monarch customers in unincorporated areas in comparison to customers in the City of Blue Mound (Blue Mound). He said that customers in unincorporated areas are not protected from rate increases in the same manner as customers under the jurisdiction of a city. He said that the burden is on the IOU to prove that rates are reasonable for customers inside city limits but that the burden is on customers outside a city jurisdiction to reverse a rate increase by an IOU. Frederick said that over a 10-year period, people in unincorporated areas paid over \$800 more than other customers for the same amount of water and from the same company. He said that IOUs have no incentive to resolve contested rate cases.

Senator Deuell asked how a fair rate is determined. Frederick replied that TCEQ has a process to determine fair rates and that Blue Mound makes decisions on fair rates for the city by hiring a rate consultant.

Senator Deuell asked whether it is possible that water rates in unincorporated areas are higher because delivering water to the areas is more costly. Frederick replied that although that is a possible reason for higher rates, customers in unincorporated areas do not have the resources or information to determine reasons for their water utility rates. He said that there needs to be some way for customers to recover the costs of litigation and obtaining such information.

Senator Watson asked whether there have been instances in which an IOU expressly excludes incorporated areas from its application to increase rates because a city is able to represent customers in the contested rate case. Frederick replied that the current Monarch application for a rate increase excludes cities from the proposed rate increase. He said that customers in unincorporated areas need some means to recover the costs of hiring consultants.

Bevel said that TAMER represents 1,500 ratepayers under the Monarch water utility system. He said that although 90 percent of rate cases are settled, such cases are settled in no less than 18 months. He said that it is difficult for ratepayers to raise money to hire attorneys to represent them in contested cases. Senator Deuell asked how an organization of 1,500 ratepayers could not garner enough assets to be represented in court. Senator Deuell said that customers within city limits pay property taxes in order to be represented by the city. Bevel responded that TAMER does not have the authority to assess fees from members. He said that ratepayers in unincorporated areas have little or no means to recover costs while IOUs can recover their costs through customer assessments.

Senator Nichols said that instead of regulating water utility rates, TCEQ has shifted its responsibility to the legal system and given citizens the responsibility of representing themselves in rate cases. Bevel said that TAMER sent in 2,000 resident signatures to protest Monarch's rate increase and has still not received acknowledgement from TCEQ.

Senator Nichols called Clark Thompson, Hornsby Bend Customers; Lisa Elmore, Forrest Bluff Neighborhood; and Thomas Fritzinger, president, Austin Colony Homeowners Association (HOA), to testify.

Thompson said that the current STM application by Monarch includes dissimilar water and sewer systems; violating Chapter 13, Water Code, which prohibits the consolidation of dissimilar systems. He discussed the Monarch rate change application and the percentage of rate increases ratepayers are expected to pay.

Elmer said that Monarch represents a state-sanctioned monopoly and that the state has an obligation to protect consumers. She said that state agencies should be able to advocate for the public interest. Elmer said that Monarch has imposed a rate increase only on those consumers who have no advocate and who are left to decipher the cumbersome provisions of the Water Code.

Fritzinger said that economic impact of Monarch rate increases includes more than increased monthly utility bills. He said that values of homes decrease when residents are unable to upkeep their lawns and foundations due to high water utility rates. He said that individuals consider water rates in a certain area in their decision to purchase a home. Fritzinger said that water utilities need to be better regulated in order to protect citizens.

Following an inquiry from Senator Nichols, Thompson said that although consolidation of CCNs may be warranted in some circumstances, he is opposed to the STM proposed by Monarch.

Fritzinger said that the Austin Colony HOA spent thousands of dollars to hire a consultant for their rate case and that it is incumbent on the residents and HOAs to obtain the information needed to organize and raise money. Elmer said that money spent on legal fees could be better spent in the community. Thompson said it is inefficient to rely on citizens to undertake the regulation of a large IOU.

Senator Watson called Julie Couch, city manager, City of Rockwall (Rockwall), and Allan Hooks, mayor, Blue Mound, to testify.

Couch said that Rockwall has annexed areas that surround an area served by water and sewer system owned by Aqua. She said that residents in the Aqua service territory pay five times more for water than residents of Rockwall. Couch said that under current law, Rockwall cannot offer a comparable rate to customers in the Aqua service territory.

Senator Nichols said that TCEQ has the authority to grant a dual certification that will allow Rockwall to serve the area. Couch replied that it makes sense for Rockwall to tie the water systems of Aqua into the city's existing systems and not to install additional lines as would be required under dual certification. She said that the costs for dual certification would have to be passed on to customers. Couch said that Rockwall has attempted to acquire the Aqua system but that Aqua is an unwilling seller. She said that there is nothing in statute to trigger a discussion on an STM if one party is unwilling to participate.

Hook discussed water rates in Blue Mound since 2001, noting that water utility costs have increase from \$45 to \$130 for the same amount of water. He said that Blue Mound is preparing to have an open hearing on rate increases and to set its own water rates.

Senator Nichols called Charles Profilet, executive vice president, Texas utilities managing director, Monarch; Bob Laughlin, Aqua; Shelley Young, vice chairman of Texas Alliance of Water Providers (TAWP), Rosehill Utilities; and Simon Sequeira, chairman TAWP, Quadvest, LP, to testify.

Profilet said that Monarch has acquired 113 separate water and sewer systems in Texas since 2004 that mostly serve small, rural, and unincorporated areas. He discussed improvements in customer service at Monarch, including the establishment of a blue ribbon panel, reduced call waiting times, reduced service interruptions, installation of advance meter technology, and development of an integrated voice response system for customers to check and make payments on their bills over the telephone and online. Profilet said that Monarch invested \$70 million in systems that were in need of repair in order to comply with TCEQ requirements. He said that the costs for making those repairs cannot be sustained by current rates. He said that increasing rates is never popular and the process for rate changes in Texas is contentious and lengthy. Profilet said that he supports a review of ways to improve the ratemaking process in Texas.

Senator Nichols said that there is a balance that needs to be met when dealing with IOU rates. He said that IOUs invest money in order to adequately provide services and are authorized to receive a return on their investment. Senator Nichols said that customers need to be protected in a reasonable manner. Profilet said that IOUs are obligated to provide adequate service. He suggested that the subcommittees consider the National Association of Regulatory Utility Commissioners for best practices for IOUs. He said that he would like to assure Monarch shareholders that return on investments would cover any risk.

Senator Watson said that Monarch's STM application is an attempt to consolidate systems in order to reduce risk and that Monarch would not make investments unless it is sure that it will receive a return on its investment. Profilet said that consolidation is like an insurance policy for customers. He said that when one system breaks down, the consolidated system ensures that the utility will have the resources to fix the system with limited interruption to other areas. Senator Nichols discussed an example in which one county in a consolidated water system must pay increased rates for improvements made to substandard systems in other counties.

Senator Deuell asked Profilet to discuss specific expenses associated with the Monarch water system in Blue Mound. Profilet said that he does not have information specific to the Blue Mound system because it is part of a consolidated system. Senator Deuell asked how Monarch justifies the differences in rates between customers inside and outside of city limits. Profilet said that he is in favor of reforming the ratemaking process and that from a utility perspective, he would like to see all customers paying the same rate at the same time.

Senator Watson asked whether Monarch expressly excluded cities from its rate increase because customers within city limits have greater protection. Profilet replied that Monarch will file a rate increase for cities in August.

Senator Watson asked why Monarch purchased a large number of water and sewer systems that required improvements that would necessitate a rate increase. He asked whether Monarch purchased those systems because it anticipated making additional profits through hookups to the improved systems. Profilet replied that it was a business decision by Monarch to purchase systems in areas of the state that were anticipated to experience growth. Senator Watson said that Monarch is asking for a rate increase to pay for speculative investment in areas where anticipated growth did not occur and the expected revenue was not gained. Senator Watson expressed his belief that Monarch engages in the activity of inflating rates before settling with customers in mediation.

Laughlin discussed the Aqua service territory surrounded by Rockwall. He said that Aqua rates have been set based on regionalization. He stated that Rockwall brokers for water and sewer services because the city does not have a water or sewer plant. Laughlin said that Aqua initiated the discussion of selling its water systems to Rockwall but that an agreement has not been reached. He said that Aqua has previously sold its systems to entities that could provide lower rates to customers.

Senator Deuell asked Laughlin whether Aqua investments justify rates in the Aqua service territory that are three times higher than rates in Rockwall. Laughlin replied in the affirmative, stating that rates were vetted on a regional basis. He said that rates can be lowered if Aqua is allowed to access the same regional water facility that Rockwall accesses for its services. Following an inquiry from Senator Deuell, Laughlin said that there is a need to reform the system of ratemaking through TCEQ. He said that it is not good public policy to dictate that systems must be sold.

Senator Nichols and Laughlin discussed the purchase of water systems by Aqua. Senator Nichols asked, in a situation in which a city has grown around a service area and would supply water service easier and less costly to consumers, why an entity such as Aqua would be resistant to allow such a city access to the water system. Laughlin replied that Aqua has been open to working with cities but that problems arise when evaluating the market value of the water systems. He said that IOUs are long-term investors and consider revenue over a span of 25 years. Laughlin stated that each IOU model is different.

Young stated that TAWP was created by small IOUs and that TAWP includes 11 IOU members that serve small numbers of residents. She said that although most of the hearing was targeted toward large IOUs, provisions that require pre-filed testimony in rate cases or cost recovery for customers would negatively impact small IOUs.

Sequeira said that Quadvest addresses the concerns of its customers and offers fair prices. He said that Quadvest has not participated in rate hikes. Sequeira stated that the majority of IOUs operate with a small rate of return on their investment. He said that small IOUs are considered to be a part of the community they serve.

Senator Watson opened the hearing to public testimony.

C.A. Cockrell, TAMER and Greater Lake Palestine Council, discussed Lifeline rates, stating that a tiered system should be considered in rate cases to afford different rates for the elderly and

economically disadvantaged. He said that rate changes should not be implemented until the rates are approved by TCEQ.

Mark Zeppa, executive director, Independent Water and Sewer Companies of Texas, stated that the requirement that utility systems be substantially similar only exists for rate cases and do not exist in STM or the initial CCN. He said that the concept of CCNs was created to deter overlapping electric and telephone utilities from locating expensive facilities in the same location. He said that IOUs are entitled to recover costs and to receive a return on their investment. Zeppa said that whether rates are reasonable and just is subject to dispute and litigation. He said that when regulation artificially keeps rates low, it eliminates the return on investment and confiscates IOU capital.

Senator Nichols said that the subcommittees are attempting to determine reasonable solutions to utility rates that are not just and reasonable.

Senator Deuell said that there must be regulation when a company is given a monopoly. Zeppa agreed and said that regulation of IOUs currently exists. Senator Deuell asked Zeppa to discuss disparities in utility rates. Zeppa replied that IOUs pay taxes that no other entities are required to pay and said that cities do not invest as much as IOUs.

Senator Deuell expressed frustration that IOU representatives have been unable to provide the subcommittees with specific details associated with individual systems.

Arthur Smith, Country Bend HOA, discussed rate increases in his area by Monarch, stating that the proposed rate represents a 125 percent rate increase. He said that there have been instances of water service interruption and termination notices being sent to customers erroneously. Smith said that Monarch rates are unjust.

George McIntyre, representing himself, testified that current water rates do not promote water conservation. He said that residents are charged a fixed base for water service which discourages them from minimizing their water usage. He said that fixed portions of monthly water utility rates should be evaluated.

Melia O'Dell, representing herself, testified that water utility rates have tripled since 1999. She said that applications for rate increases can be denied but that TCEQ rubber stamps rate increase applications. O'Dell said that TCEQ needs specific criteria to determine whether rates are just and reasonable. She said that homeowners in her neighborhood have stopped watering their lawns, which affects property values. She said that it is very difficult to organize residents in disjointed communities who are customers of the same IOU.

Eric Elskelund, Mayor, City of Woodcreek, stated that the quality and cost of basic utility services affect the health and safety and financial stability of a community. He discussed a survey in which 76 percent of Aqua customers in the area expressed dissatisfaction with Aqua water utility rates.

Errol Le Cesne, Summerlake Ranch HOA, discussed the HOA in his Houston community that includes a number of residents living on acre-plus lots. He discussed rates charged by Aqua in a five-month period that averaged a 48.2 percent increase.

Alfred Adams, Summer Lake Ranch Subdivision, stated that based on the testimony presented before the subcommittees, the system of regulating IOUs is broken. He asked that the subcommittees fix the problems associated with IOUs.

Kirk Holland, general manager, Barton Springs/Edwards Aquifer Conservation District, stated that incentives should be provided for customers who conserve water. He said that tier pricing is an effective tool to promote water conservation that also allows IOUs to be financially viable.

Rick Byrne, representing himself, testified that water is the only utility for which there is no competition in the unincorporated area of Harris County that is served by Aqua. He said that Aqua is abusing its position as a monopoly.

DuAnne Nebeker, representing herself, stated that she was not informed that she was purchasing a home in an area that was served by an antiquated water and sewer system that would need improvements and additional investment. She said that customers should be made aware of older water systems when purchasing homes.

Helen Lewis, Pine Trails Community Improvement Association (Pine Trails association), testified that the 1,800 homes in that association are served by Aqua. She said that residents are required to pay a base rate of \$89 for water service and that the Pine Trails association settled a recent rate case because residents felt intimidated. She said that Aqua is authorized to file a rate increase in a short amount of time after a contest rate case is settled. Lewis said that the cycle of rate increases needs to stop.

Amy Benedict, Pine Trails association, testified that Aqua has filed for eight rate increase in 11 years. She said that residents waste water because they are paying a fixed base fee. Benedict said that people should instead only be charged for the amount of water that they use.

Anne Hawken, Deer Creek Ranch, testified that Deer Creek Ranch ratepayers protested a 93 percent rate increase. She said that a lot of money was spent in the contested case and that ratepayers won \$320,000 in refunds that have been put in escrow. Hawken said that another rate increase has since been filed. She said that the Water Supply Division at TCEQ needs to be restructured and improved.

Alisa Talley, City of Houston (Houston), expressed concern that any potential legislative action would interfere with or impede a city's regulatory authority over water rates and that those in a city's extraterritorial jurisdiction would assume that the city would bail out an IOU.

Melba Pourteau, senior assistant city attorney, Houston, testified that Houston has covered the costs to acquire substandard IOU structures to ensure adequate delivery of water services on two occasions. She said that Houston bailed out a failed IOU and stated that the city cannot be expected to plan for the acquisition of a substandard system. Pourteau said that the Water Code should reflect current practices of cities. She said that there is a lack of cooperation by IOUs and that Chapter 13 allows IOUs to sit out of local rate proceedings.

Sally Caldwell, Woodcreek Property Owners, provided the subcommittees with 700 petitions against the rate increase proposed by Aqua. She said that she understands that IOUs should receive a return on their investment but stated that it is unclear what is just and reasonable.

Diane Hervol, resident of the City of Kyle, stated that there is a lack of adequate services provided by Monarch. She said that cities need a clear and definitive way to ensure that citizens have access to water that is affordable and adequate. Hervol said that inadequate services provided by IOUs have a negative effect on local economies.

Linda Patillo, Poolcrest Property Owners Association, discussed a 120 percent rate increase by Monarch for water utility services. She said that homeowners did not receive the required notice that their rates would be increased. She said that many residents in her area have fixed incomes and cannot afford such rate increases.

Dolores Zitko, representing herself, provided written testimony to the subcommittees relating to redevelopment in California.

Zelda Williams, Jersey-Hilltop Acres HOA, read letters submitted from homeowners in the Jersey-Hilltop Acres HOA who are against Aqua water utility rates, including letters from homeowners with fixed incomes.

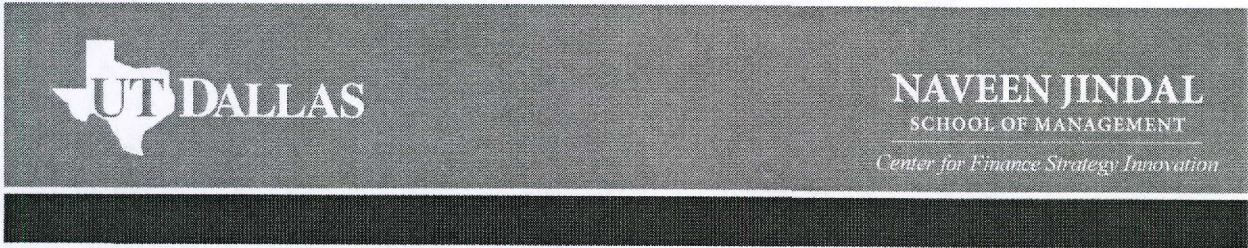
Connie Romero, representing herself, stated that the fixed base water utility charge represents more than half of her monthly water utility bill. She questioned whether TCEQ ensures that improvements are being made to the water systems every time Aqua increases its rates to cover such improvements. Romero discussed incidents in which drinking water did not meet quality requirements. She said that problems concerning IOUs are present nationwide and that IOUs should be prevented from charging excessive rates.

Georgia Stapleton, representing herself, testified that there has been an abuse of the power of eminent domain by Tarrant Regional Water District for development in the area.

Senator Watson said that the subcommittees intend to work very seriously on issues relating to IOUs that were presented in the hearing.

The subcommittees recessed subject to the call of the chairs.

**APPENDIX B: Final Report to the Senate Committee on
Business & Commerce: Occupational License and
Regulation in Texas**



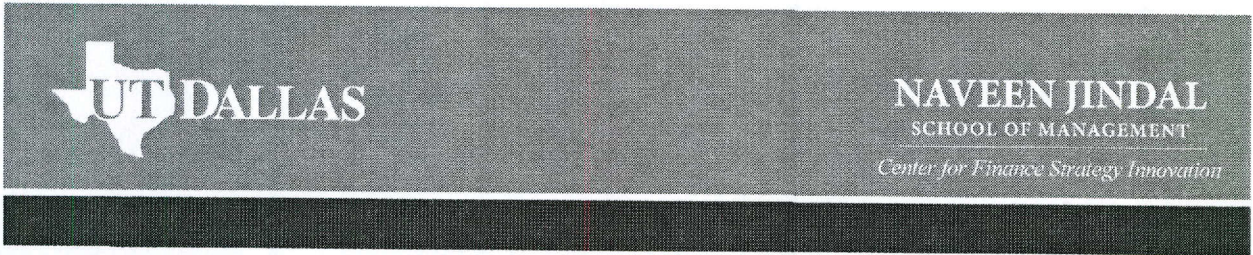
**FINAL REPORT to the SENATE COMMITTEE ON BUSINESS AND COMMERCE
Occupational License and Regulation in Texas**

Center for Finance Strategy Innovation

The University of Texas at Dallas

David M. Epperson, Resident Fellow

December 2012



January 15, 2013

Senator John Carona, Chairman
 Senate Committee on Business and Commerce
 The State of Texas
 PO Box 12068
 Sam Houston Building, Room 370
 Austin, Texas 78711

Dear Chairman Carona:

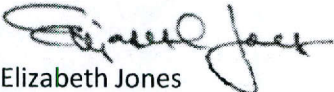
On behalf of the Center for Finance Strategy Innovation ("CFSI") at the University of Texas at Dallas, it is with great pleasure that we hereby formally submit the attached report entitled, "Final Report to the Senate Committee on Business and Commerce - Occupational License and Regulation".


The report provides a review of the state's current approach to licensing and regulation of occupations which is designed to ensure protection of the public welfare, trust, health and safety and eliminate unnecessary, overly restrictive, or anti-competitive regulation. Per our Interim charge, we compiled a list of occupations regulated in Texas, reviewed existing guidelines, best practices, and other state's approaches for determining when regulation is necessary, and have set forth recommendations for improving Texas' regulatory system.

This project was financially underwritten in its entirety by CFSI for the benefit of the Senate Committee on a pro-bono basis as a public service to the state of Texas. CFSI wishes to publicly acknowledge and thank the report's author, CFSI Resident Fellow, David M. Epperson, for his outstanding professional contribution and scholarship.

We appreciate this opportunity to be of service to you and the Senate Committee, and look forward to working with you in the future.

With kind regards


 Elizabeth Jones
 Co-Founder and Associate Director
 Center for Finance Strategy Innovation
 The University of Texas at Dallas


 David Springate
 Co-Founder and Director
 Center for Finance Strategy Innovation
 The University of Texas at Dallas

Final Report to the Senate Committee on Business & Commerce: Occupational License and Regulation in Texas

Texas takes great pride in its reputation as a free-enterprise, entrepreneurial, right-to-work state.¹ At the same time, up to 30 percent of Texas workers require a license to practice their chosen occupation – figure that has risen from five percent in the 1950s and ten percent in the 1970s.²

Originally intended to protect the public from quacks, frauds and charlatans, occupational licensing has expanded to such a degree that critics have called it the “new unionism,”³ doing more to protect strong lobbies of industry incumbents from competition than to guard public health and safety. In recent years, commentators on both the left and right sides of the political spectrum have called for licensing’s rollback.⁴

This report will examine the issues surrounding occupational licensing and attempt to set forth a reasonable balance between the protection of the public on one hand versus the right of Texans to earn a living, unfettered by state limitations, on the other.

Categories of Occupational Regulation

Occupational regulation falls into three broad categories in increasing order of restrictiveness: registration, certification, and licensing.

The first, **registration**, is the least onerous. Registration requires those persons participating in an occupation to register that fact with a governmental entity,⁵ but does not otherwise control who may work in that field. Examples include mobile food units or roadside food vendors.

¹ “If you pass into law a right- to-work law, you may join my home state and take over the title of the state that’s creating more jobs in American than any place in this country,” Perry said to a standing ovation by Republicans at the New Hampshire State House. *ABC News*, November 30, 2011. <http://abcnews.go.com/blogs/politics/2011/11/on-second-day-in-n-h-rick-perry-pushes-right-to-work-bill>

² Kleiner, Morris M., Krueger, Alan B., “The Prevalence and Effects of Occupational Licensing,” *Working Paper 14308*, National Bureau of Economic Research, September 2008. <http://www.nber.org/papers/w14308>.

³ Ibid.

⁴ Litan, Robert E., “Why Professional Licenses are a Barrier to Growth,” *The Atlantic*, March 12, 2012. <http://www.theatlantic.com/business/archive/2012/03/why-professional-licenses-are-a-barrier-to-growth/254041/>; Hemphill, Thomas, “Deregulating Occupations: Is Michigan Leading the Way?” *The American*, May 30, 2012, <http://www.american.com/archive/2012/may/deregulating-occupations-is-michigan-leading-the-way>.

⁵ Many municipalities also require registration, but this report’s focus will be on occupational regulation at the state level.

Rather than regulate the flow of entrants into an occupation, registration often is intended to facilitate other policy objectives, such as tax collection or health and safety inspections.⁶

The second, **certification**, also does not preclude non-certified personnel from working in a particular field. Instead, the certifying organization attests that certified persons have met particular (and hopefully higher) standards of competence and professionalism.

Many of these certifying bodies are private organizations, such as the CFA Institute (Chartered Financial Analyst) and the National Institute for Automotive Service Excellence (ASE Blue Seal of Excellence).

At the state level, certification is typically enacted through “title protection acts,” (also known as “title acts”), where uncertified practitioners may perform the same type of work as certificate holders, and only become subject to agency enforcement action if they use a particular title.⁷ Dietitians and Code Enforcement Officers are examples of this type of certification in Texas.

Certification is also common for sub-specialties within licensed occupations. Many of the ubiquitous accident/injury television commercials state that the attorney in question is Board Certified in Personal Injury Trial Law.⁸ Similarly, any physician may refer to him or herself as a “cosmetic surgeon,” but only physicians certified as such by the American Board of Plastic Surgery can call themselves “Board Certified” plastic surgeons.⁹

The third and most restrictive category of occupational regulation is **licensing**. In licensed occupations, only license holders may perform the particular type of work in question, which is why licensing laws are also known as “practice protection” acts.

Unlicensed personnel, regardless of the words they use to describe themselves, are not

⁶ Texas Administrative Code, §229.372(a)(3)(A) requires mobile food units to be inspected and to pay a \$250 fee for a two year permit.

⁷ *Sunset Occupational Licensing Regulation Model*, March 29, 2012, p. 1. <http://www.sunset.state.tx.us/licensemodel12.pdf> (hereinafter cited as “*Sunset L/R Model*”).

⁸ According to the State Bar’s Attorney Statistical Profile (2011-12), 7,068 of the state’s 89,987 licensed attorneys are board certified in one or more of 20 specialties. [http://www.texasbar.com/AM/Template.cfm?Section=Demographic and Economic Trends&Template=/CM/ContentDisplay.cfm&ContentID=18560](http://www.texasbar.com/AM/Template.cfm?Section=Demographic%20and%20Economic%20Trends&Template=/CM/ContentDisplay.cfm&ContentID=18560).

⁹ The question of what types of physicians are qualified to perform which procedures has become more controversial in recent years as doctors in non-surgical fields have sought to augment their incomes with “cash and carry” elective cosmetic procedures. For example, a 2010 study in Southern California found that nearly 40 percent of doctors offering liposuction had no specific surgical training. “Study blasts lack of training in cosmetic surgery marketplace,” *Los Angeles Times*, April 2, 2010. http://latimesblogs.latimes.com/booster_shots/2010/04/cosmetic-surgery-liposuction.html. The study noted that while doctors needed certification (in the form of hospital privileges) to conduct surgery in hospitals, no law prevented them from offering these procedures in their own offices.

only barred from working, but are subject to fines and even imprisonment¹⁰ if they attempt to do so. Licensing is the primary subject of this report.

The Scope of Occupational Licensing in Texas and Elsewhere

Local jurisdictions in the United States have licensed the practice of law since the Colonial era,¹¹ and the Republic of Texas began regulating the practice of medicine in 1837.

By the Second World War, the state had added a number of other health-related fields to the list of professions requiring a license,¹² along with teachers (1905), barbers (1929), insurance sales personnel (1933), architects and professional engineers (1937), and real estate brokers (1939).

The pace of occupational licensing accelerated following the Second World War. The charts below show the number of newly licensed occupations for each year, as well as the cumulative total.¹³

Note, however, that these charts include both business *and* individual licenses (i.e., accounting firms *and* accountants) as well as multiple licenses for what is essentially the same occupation (i.e., master electricians *and* journeyman electricians) – a subject that we will address in greater detail later in this report.¹⁴

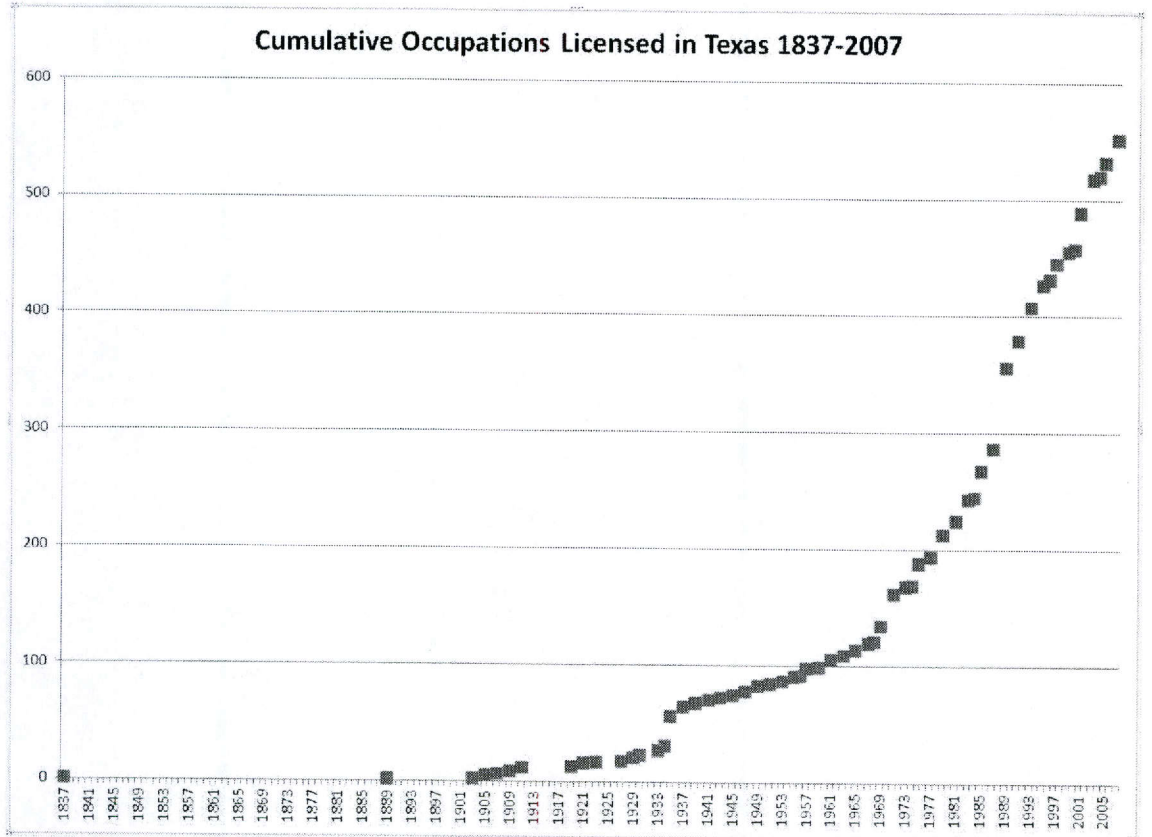
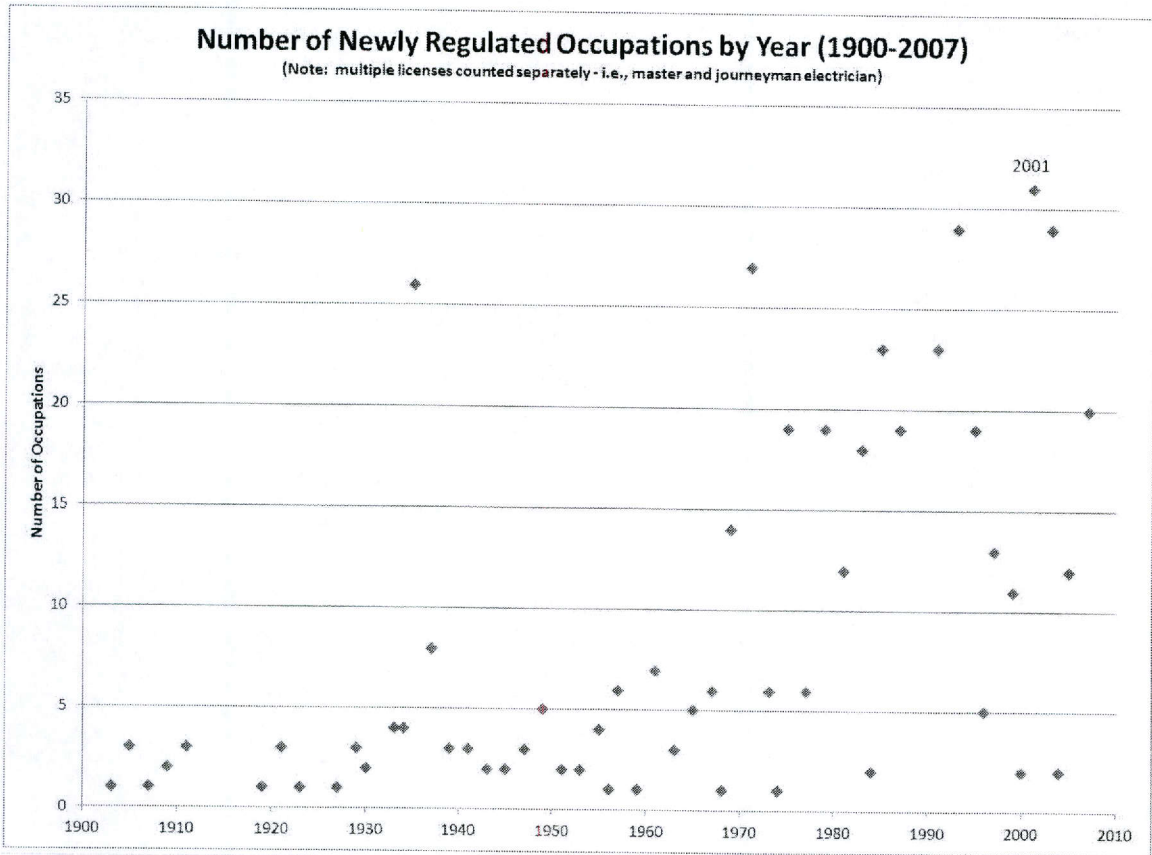
¹⁰ According to the Texas Occupations Code, §165.152, the unauthorized practice of medicine is a third-degree felony, and each day a violation continues constitutes a separate offense – even if no harm accrues to the “patient.” §165.163 provides additional criminal penalties for causing physical, psychological or financial harm (with the latter being a state jail felony).

¹¹ “Licensing” in the Colonial era meant admission to practice or to the bar of a particular court. In the 1700s, aspiring attorneys would “read law” in the office of an experienced attorney. Typically, after a few years, the apprentice would then appear before a judge and be admitted to the local bar. Statewide bar associations began to form in the latter part of the nineteenth century and gradually became compulsory. The Texas Bar Association was founded in 1882, and state bar membership for all Texas attorneys became compulsory with the passage of the State Bar Act in 1939.

¹² These included Dentists (1889), Pharmacists (1907), Registered Nurses (1909), Veterinarians (1911), Optometrists (1921), and Podiatrists (1923).

¹³ Both charts are derived from data compiled by the Texas Legislative Council and presented in Occupational Regulation in Texas – Occupational Licenses and Statutory Penalties for Violations Relating to Occupational Licenses, Texas Legislative Council, October 2008. <http://www.tlc.state.tx.us/pubspol/OccReg.pdf>. (hereinafter cited as “Occupational Regulation in Texas”).

¹⁴ On the first chart, the spike in 1935 was mainly due to new licenses relating to alcoholic beverages following the repeal of Prohibition. For the sake of scale, this chart also omits the 69 newly licensed occupations in 1989, as the majority of these pertained to occupations surrounding the legalization of horse and greyhound racing.



Obtaining comprehensive data pertaining to occupational licensing is not an easy task. In 2008, the Texas Legislative Council (“TLC”) labored to compile a list of all work-related licenses in the state, and after heroic effort, the TLC concluded that Texas regulated 514 different occupations.¹⁵

Over the past few years, several independent research organizations have attempted to sort through the thicket of data and catalog all licensed occupations in each of the 50 states.¹⁶ These studies have all begun with data compiled by the US Department of Labor.¹⁷ However, researchers for each of these endeavors had to adjust the raw data to account for multiple job descriptions for what is essentially the same occupation, and to avoid double-counting licensed sub specialties within already licensed professions.¹⁸

This proved to be an inexact science. Nevertheless, we believe that in totality, the state rankings are directionally correct and point out the extent to which some states impose far greater licensing burdens upon their workers than do others.

In comparison to other states, Texas ranks in the lower third in terms of the number of licensed occupations.

A 2007 survey by the Reason Foundation (the “Reason Report”) ranked Texas 35th out of the 50 states.¹⁹

Reason Foundation (# Licensed Occupations - 2007)

5 Highest		5 Lowest	
California	177	Missouri	41
Connecticut	155	Washington	53
Maine	134	Kansas	56
New Hampshire	130	South Carolina	60
Arkansas	128	Idaho	61
		Texas	78

¹⁵ See *Occupational Regulation in Texas*, cited *supra*. The cumulative total in the above chart tops out at 552 occupations, with the difference serving to further illustrate the difficulty in tabulating multiple descriptions of the same occupation and duplicate business and individual licenses.

¹⁶ We must note, in the interests of fairness and full disclosure, that the organizations who have put the greatest efforts into disentangling the extent of occupational licensing requirements between the states and professions are philosophically opposed to licensing in general and advocate rolling back these requirements.

¹⁷ http://www.acinet.org/licensedoccupations/lois_keyword.asp?nodeid=16&by=occ (“Career One Stop”)

¹⁸ For example, elementary school teachers and secondary school teachers are sometimes listed separately (as are subject matter specialties like “science teacher”). For the purposes of state-to-state comparisons, though, all “Teachers” must be licensed, so the occupation really counts only once.

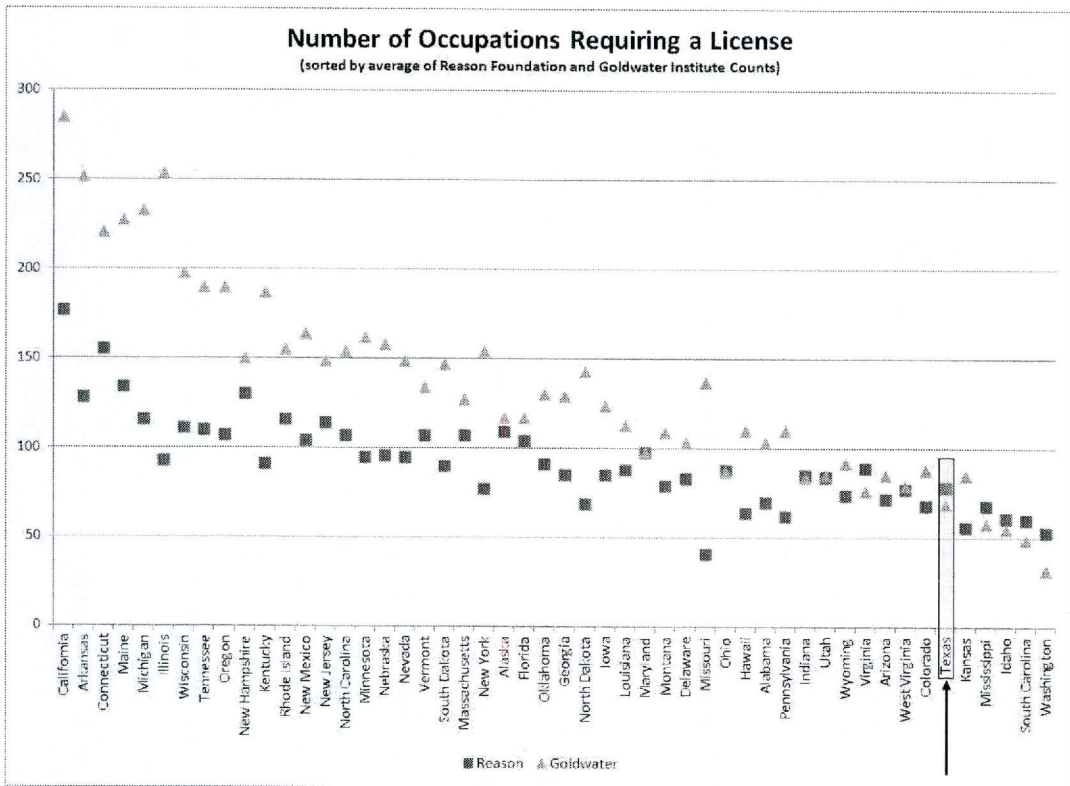
¹⁹ Summers, Adam, B., *Occupational Licensing: Ranking the States and Exploring Alternatives*, Reason Foundation, August 2007. <http://reason.org/news/show/occupational-licensing-ranking>.

In 2012, the Goldwater Institute published a similar list.²⁰ Though the numbers and state rankings varied from the 2007 Reason Report, the pattern is fairly consistent. California topped both lists, with the number of licensed occupations by the “high licensing” states exceeding those of the less regulated states by significant multiples.

Goldwater Institute (# Licensed Occupations - 2012)

5 Highest		5 Lowest	
California	285	Washington	32
Illinois	254	South Carolina	49
Arkansas	252	Idaho	55
Michigan	233	Mississippi	58
Maine	228	Texas	69

A chart showing the positions of each state in both data sets (sorted by the average of the Reason and Goldwater counts) is shown below:



²⁰ Schlomach, Byron M., *Six Reforms to Occupational Licensing Laws to Increase Jobs and Lower Costs*, Goldwater Institute Policy Report # 247, July 10, 2012. <http://goldwaterinstitute.org/sites/default/files/Policy%20Report%20247%20Licensing.pdf>

A 2012 report by the Institute for Justice (“IJ”)²¹ took a slightly different approach. In *License to Work*,²² the IJ focused on the licensing requirements for 102 occupations typically held by lower or middle income persons.

The IJ examined both the *breadth* of licensure (the number out of the 102 occupations in question requiring a license) in conjunction with the *burden* of licensure – that is, how difficult it is to obtain a license based on time and cost of education, duration of required experience, and the need to pass exams.

State rankings based on the IJ’s combined score are shown in the table below (excluding the District of Columbia):

5 Highest		5 Lowest	
Arizona	1	Wyoming	50
California	2	Colorado	49
Oregon	3	Indiana	48
Nevada	4	South Dakota	47
Arkansas	5	Missouri	46
		Texas	31

Rankings by Occupation

The question as to which occupations are most often licensed naturally follows. Our analysis, based in large part on data collected for the 2007 Reason Report, found 33 occupations that require a license in all 50 states.²³ These are set forth in the table below, along with the year that Texas first required the profession to be licensed.²⁴

²¹ On its web site, the Institute for Justice describes itself as a “libertarian public interest law firm,” with emphasis on economic liberty. <http://www.ij.org/about-ij-ij-at-a-glance>.

²² Carpenter II, Dick; Knepper, Lisa; Erickson, Angela; Ross, John, *License to Work: A National Study of Burdens from Occupational Licensing*; Institute for Justice, May 2012. <https://www.ij.org/licensetowork> (hereinafter cited as “*License to Work*”).

²³ The Reason Report included a downloadable spreadsheet (which we adjusted further to eliminate double counting of professional sub-specialties). The Reason Report tabulated 20 additional occupations that are licensed by 30-49 states, and 258 that require licensing by at least one state – although once again, we note that many of these are subspecialties within already licensed occupations.

²⁴ Year of first licensing data was sourced from the Texas Legislative Council’s *Occupational Regulation in Texas*, cited *supra*.

Year First Licensed in Texas	Occupation
1700s	Lawyers (first statewide Texas Bar 1882; compulsory state bar after 1939)
1837	Physicians and Surgeons
1889	Dentists
1905	Teachers
1907	Pharmacists
1909	Nurses, Registered
1911	Veterinarians
1921	Optometrists
1923	Podiatrists
1929	Barbers
1933	Insurance Sales Agents (Life, Accident, Health); P&C 1941
1935	Cosmetologists
1937	Architects
1937	Professional Engineer
1939	Real Estate Brokers
1945	Medical and Health Services Managers, including Nursing Home Administrators
1949	Chiropractors
1951	Dental Hygienists
1951	Nurses, Licensed Practical and Licensed Vocational
1957	Securities, Commodities, and Financial Services Sales Agents
1969	Hearing Aid Dispensers and Fitters
1969	Psychologists
1971	Physical Therapists
1975	Pest Control Workers/Pesticide Handlers
1979	Accountants and Auditors
1979	Land Surveyors
1981	Social Workers
1983	Emergency Medical Technicians and Paramedics
1983	Occupational Therapists
1989	Real Estate Appraisers
1992	Truck Drivers, Commercial
1993	Physician Assistants
1995	Educational, Vocational, and School Counselors

The reader will note that the earliest occupational licenses were skewed toward the health professions. In an era of snake-oil salesmen and traveling medicine shows, when occupational standards either did not exist or were not particularly strict,²⁵ and when information on individuals and businesses was difficult to obtain, these measures carried broad popular support.²⁶

The question that faces us today is whether this is still true.

This is not the first time that an interim committee of the Legislature has been charged with investigating the subject of occupational licensing in Texas. In 2008, the House Committee on Government Reform issued a report documenting many of the issue we address, and we agree broadly with that report's conclusions.²⁷

²⁵ The American Medical Association was founded in 1847, and medical schools began to be established around the same time. However, it wasn't until the *Flexner Report* of 1910 documented the wretched quality of many of these institutions that the impetus was found to professionalize medical education in the United States. For an interesting perspective on conventional medical wisdom of the early 1880s and its role in the death of President Garfield, see Millard, Candace; *Destiny of the Republic: A Tale of Madness, Medicine and the Murder of a President* (2011).

²⁶ Kleiner, Morris; "A License for Protection," *Regulation*, Fall 2006. <http://www.cato.org/pubs/regulation/regv29n3/v29n3-2.pdf>.

²⁷ See <http://www.house.state.tx.us/media/pdf/committees/reports/80interim/GovernmentReform80th.pdf>. Among this report's recommendations were 1) that the state take actions to ensure that licensing protected the

Arguments in Favor of Occupational Licensing

In the view of its proponents, licensing serves primarily to:

- Ensure at least a base level of education, experience and competence within a profession (as well as exclude potentially dangerous personnel, such as persons with violent criminal records or a history of embezzlement);
- Protect the public from professional misconduct via the ongoing oversight of licensed practitioners (such as suspending substance abusers from patient contact);
- Protect the public in cases of market failure – either for “involuntary” transactions, or for transactions in fields where consumers have difficulty distinguishing between good and bad practitioners (due either to lack of information or insufficient technical knowledge);
- Make it easier to prosecute or discipline bad actors whose conduct would not – as a *practical* matter – fall readily within other criminal or consumer protection statutes.

Arguments Against Occupational Licensing

On the other hand, opponents of licensing argue that:

- Many licensed occupations have only tenuous links to public health and safety. As a result, licensing serves more to protect industry incumbents from competition than to safeguard public welfare;
- The private marketplace is perfectly capable of weeding out incompetent practitioners. This is especially true now that consumers have access to far more comprehensive information than they had even a decade ago;
- Licensing regimes are riddled with inconsistencies, and their criteria are often arbitrary and bear no relation to the dangers they purport to counter;
- For occupations that are licensed in some states but not others, studies have found no significant difference in professional quality in the licensed states;
- Some occupations have so few license holders or such a minimal number of complaints or disciplinary actions that the profession is simply not worth regulating (and in many of these professions, the majority of complaints are related to unlicensed practice rather than to substantive misconduct);
- Licensing impedes labor mobility and places unreasonable obstacles in front of workers trying to improve themselves;
- Additional factors render licensing unnecessary or superfluous
 - Many of the evils that licensing purports to counter may be addressed by other criminal or consumer protection statutes;
 - Some occupations – as a practical matter – are subcontractors of other

public rather than block competition against incumbent practitioners; and 2) that the state establish both sunset and *sunrise* commissions to examine which existing regulations can be done away with as well as to ensure that new regulations are the least restrictive way to achieve the public interests they were intended to serve.

- professionals who have every incentive to control quality;
- In most cases, voluntary certification provides nearly the same benefits as licensing without restricting a person’s freedom to work (and may even be a more optimal alternative in most cases as the certifying organization must convince the market that its particular qualification has real-world value);
- Licensing stifles innovation, and can exclude ground-breaking thinkers whose ideas run counter to the orthodoxy of the day. This is especially true in a world where scientific advances are becoming more dependent on interdisciplinary teams, and where traditional boundaries between professions are becoming blurred.

The Right to Work

The US Supreme Court has ruled that “the right to work for a living in the common occupations of the community is of the very essence of ... personal freedom and opportunity,”²⁸ and that “the right to hold specific private employment and to follow a chosen profession free from unreasonable governmental interference comes within the ‘liberty’ and ‘property’ concepts of the Fifth Amendment” and the Due Process and Equal Protection clauses of the Fourteenth.²⁹

This is not to say that the state has no vested interest in occupational regulation. The Supreme Court has long recognized that “a state can require high standards of qualification” to pursue an occupation. However, “any qualification must have a rational connection with the applicant’s fitness or capacity” to engage in that profession.³⁰

In recent years, plaintiffs, aided by anti-licensing advocacy groups, have launched a number of successful challenges to overly restrictive occupational licensing regimes. In August 2012, a federal court in Utah overturned that state’s requirements that African hair braiders possess a cosmetology license.³¹

After noting that the plaintiff in such cases bears the burden of proving that the licensing scheme in question is “arbitrary, unreasonable and without any substantial relation to public health, safety, morals or general welfare,” the court concluded that:

“Utah’s cosmetology/barbering licensing scheme is *so disconnected from the practice of*

²⁸ *Truax v. Raich*, 239 U.S. 33, 41 (1915).

²⁹ *Greene v. McElroy*, 360 U.S. 474, 492 (1959); *Schwartz v. Board of Bar Examiners*, 353 U.S. 232 (1957); *Dent v. West Virginia*, 129 U.S. 114 (1889). The Texas Supreme Court has followed this principle. See, for example, *Smith v. Decker*, 158 Tex. 416, 312 S.W.2d 632 (1958).

³⁰ In *Schwartz*, the Supreme Court upheld the right of New Mexico to license attorneys, but struck down the state bar’s unreasonable refusal to let Schwartz take the bar exam due to character issues – issues that stemmed from an arrest nearly two decades earlier. In *Dent*, the Court upheld West Virginia’s licensing requirements for physicians.

³¹ See *Clayton v. Steinagel*, Case No. 2:11CV379 DS (US District Court for the District of Utah, Central Division), August 8, 2012. https://ecf.utd.uscourts.gov/cgi-bin/show_public_doc?211cv0379-41.

African hair braiding, much less from whatever *minimal threats to public health and safety* are connected to braiding, that to premise [plaintiff's] right to earn a living by braiding hair on that scheme is wholly irrational and a violation of her constitutionally protected rights (emphasis added).”

In making its determination, the court observed that at least 70 percent of the 2,000 hours of mandatory curriculum were irrelevant to hair braiding and that nothing on the cosmetology exam pertained in any way to the practice.³²

Other courts have overturned licensing requirements on similar grounds. In July 2011, a federal court in Louisiana struck down the state's requirement that persons manufacturing or selling caskets be licensed as funeral directors.³³ In the words of the court,

“There is *no rational basis* for the State of Louisiana to require persons who seek to enter into the retailing of caskets to undergo the training and expense necessary to comply with these rules. *Simply put there is nothing in the licensing procedures that bestows any benefit to the public in the context of the retail sale of caskets.* The license has no bearing on the manufacturing and sale of coffins. *It appears that the sole reason for these laws is the economic protection of the funeral industry* which reason the Court has previously found not to be a valid government interest standing alone to provide a constitutionally valid reason for these provisions (emphasis added).”

In 2008, a California court struck down licensing requirements for persons engaged in “non-pesticide animal damage prevention and bird control,” as unreasonably broad.³⁴ In similar cases in earlier years, courts have also overturned licensing schemes for professional photography,³⁵ watchmaking,³⁶ and florists,³⁷ in each case ruling that the profession in question did not reasonably threaten public safety.

³² In economic terms, the Utah requirements would have forced Clayton to spend up to \$16,000 in tuition – all for a side business that netted her “\$4,800 in a good year.” <http://www.ksl.com/?nid=960&sid=21638994>. On the other hand, a Texas appeals court affirmed a district court decision that the practice of eyebrow threading subjected its practitioners to regulation under Texas cosmetology licensing requirements. *Patel v. Texas Department of Licensing and Regulation*, Case No. 03-11-00057-CV, Texas Court of Appeals, 3rd District – Austin). <http://www.3rdcoa.courts.state.tx.us/opinions/PDFOpinion.asp?OpinionId=21248>, filed July 25, 2012. In *Patel*, the court ruled that the practice of eyebrow threading was sufficiently different from the practice of African hair braiding to render the hair braiding cases irrelevant to the plaintiff's situation.

³³ *St. Joseph Abbey, et al. vs. Paul “Wes” Castille, et al.*, US District Court, Eastern District of Louisiana, Civil Action No. 10-2717. The US Fifth Circuit Court of Appeals agreed with the district court's logic, though it reserved final judgment in the case pending resolution of a state law issue by the Louisiana Supreme Court (Case No. 11-30756, filed October 23, 2012; revised November 21, 2012). <http://www.ca5.uscourts.gov/opinions/pub/11/11-30756-CV0.wpd.pdf>. See also *Craigmiles v. Giles*, 312 F.3d 220 (6th Cir. 2002). On the other hand, the Tenth Circuit upheld Oklahoma's funeral director licensing requirements for casket sales. *Powers v. Harris*, 379 F.3d 1208 (10th Cir. 2004).

³⁴ *Merrifield v. Lockyer*, 547 F.3d 978 (9th Cir. 2008) <http://www.ca9.uscourts.gov/datastore/opinions/2008/09/15/0516613.pdf>.

³⁵ *Sullivan v. DeCerb*, 23 So.2d 571 (Fla. 1945).

³⁶ *State ex rel Whetsel v. Wood*, 248 P.2d 612 (Okla. 1952).

³⁷ *S.S. Kresge Co. v. Couzens*, 287 N.W. 427, 430 (Mich. 1939). However, in *Meadows v. Odom*, 360 F. Supp. 2d 811 (M.D. La. 2005), the court upheld Louisiana's licensing regime for florists.

Other courts have addressed situations even more blatantly anti-competitive. In 1983, a federal court in Massachusetts issued an injunction against enforcement of the state's one-year residency requirement to obtain a fortune teller's license.³⁸

More recently, Kentucky's attorney general announced that he would not attempt to defend the state's licensing law for moving companies, which entrepreneurs had challenged on the basis that, for all practical purposes, it required a new moving company to get permission from the state's existing moving companies before doing business in Kentucky.³⁹

Where to Set the Balance

According to the Texas Government Code, §325.022(b)(2), a bill intending to create a new state agency should be evaluated on "whether the form of regulation, if any, proposed by the bill is the **least restrictive form of regulation that will adequately protect the public** (emphasis added)." We agree that this should be the default standard for occupational regulation as well.

Even so, questions remain as to exactly where to strike the appropriate balance and which forms of regulation will provide most of the essential public benefits without restricting the freedom of Texans to work.

In some instances, the case for the regulation becomes manifest following a horrific disaster. For example, Texas established the Board of Architectural Examiners in the aftermath of the 1937 New London school catastrophe, where improperly designed mechanical and electrical systems resulted in a natural gas explosion that killed over 300 students and teachers.⁴⁰

In other cases, however, the best regulatory path is not so obvious.

One way to approach this issue is to construct a matrix of the two most basic criteria for licensing: cases of market failure, combined with circumstances that render this failure a *legitimate* hazard to public health and safety.

³⁸ See <http://www.lawlib.state.ma.us/docs/TalamoFortuneTelling.pdf>. Other courts have struck down ordinances against fortune telling on free speech grounds. *Argello v. City of Lincoln*, 143 F.3d 1152 (8th Cir. 1998).

³⁹ <http://blog.pacificlegal.org/2012/kentuckys-attorney-general-will-not-defend-the-states-anti-competitive-licensing-law/>.

⁴⁰ Sunset Advisory Commission Staff Report– Texas Board of Architectural Examiners; Texas Board of Professional Engineers; Self-Directed Semi-Independent Agency Project Act, October 2012, pdf p. 7 (hereinafter cited as the "TBAE Sunset Report"). The New London disaster also led to the licensure of professional engineers, as well as the addition of odorants to natural gas – a safety practice that quickly spread across the globe.

		Serious Harm to the Public?	
		Yes	No
Market Failure?	Yes	Licensing necessary to protect the public interest	Cases of market failure exist, but the potential harm to the public is not sufficient to justify the state's interference with the right of citizens to earn a living.
	No	The most difficult quadrant - consumers have free choice but the potential for harm may justify the state's intervention in the private marketplace.	The free market is perfectly capable of protecting consumers

In economic terms, “market failure” occurs when the allocation of goods and services is not efficient. In such cases, the outcome of a particular transaction does not reflect what would occur in the classic definition of a free market – when the buyer is under no compulsion to buy, the seller is under no compulsion to sell, and both parties possess the information required to make the decision in their own best interests.

In essence, the market “fails” when one or both of the following occur:

- **Compulsion** – one party cannot, as a practical matter, decline to participate in the transaction; and/or
- **Information Asymmetry** – one party has far more knowledge about or expertise in the subject matter in question so as to make the transaction inherently unequal.

The work of Emergency Medical Technicians provides an example of an involuntary transaction. No one, when a loved one has suffered a heart attack, has the time to verify that the EMT attending to the patient is actually qualified to do so.

An example outside the health care arena concerns tow truck operators and vehicle storage facilities, where disputes over involuntary transactions – vehicles removed from “No Parking” areas under the euphemism “nonconsent tows” – are common. Complaint and disciplinary numbers from the Texas Department of Licensing and Regulation (“TDLR”) over the past two years reflect the potential for consumer abuse by personnel in these industries.⁴¹

⁴¹ This table, as well as similar tables presented later in this report, was compiled from data in the TDLR’s Administrative Orders database. <http://www.license.state.tx.us/cimsfo/fosearch2.asp> . We then sorted and classified the text files into broad categories listed above. In cases that involved multiple violations (for example, an unlicensed operator conducting an unauthorized tow), we classified the incident as a “misconduct” category to the extent possible (i.e., as an “unauthorized tow” rather than a “no license” violation).

Tow Trucks	Count of #	%
Improper Fee	257	31.8%
Unauthorized Tow	96	11.9%
Safety Gear / ID	20	2.5%
Other Misconduct	17	2.1%
Failure to Return Vehicle	2	0.2%
		48.5% consumer abuse related
Admin / Inspection	190	23.5%
No License	188	23.2%
Conviction / Prison	33	4.1%
Drug Test Issues	6	0.7%
Total	809	100.0%

Most cases of market failure, however, result from information asymmetry. For instance, few consumers possess the requisite knowledge to judge the skills and capabilities of their physicians – although the same could be said for lawyers, architects, plumbers, electricians, and a variety of other skilled trades.

The decision to license, then, must be based on additional factors – namely the potential for harm and the ability of consumers to solve the information asymmetry problem in another way.

Taking the latter first, we recognize that while vigorous online ratings systems exist for consumer products – most notably for cars and electronics – *services* are subject to far more subjective criteria that do not lend themselves as readily to “one star” or “five star” rankings.

Nevertheless, the Better Business Bureau, along with sites like Angie’s List, Yelp and a host of others, provide consumers with information beyond traditional word of mouth reputation. This is true even for health care professionals. For example, *Texas Monthly* publishes an annual list of “Super Doctors” (searchable on the magazine’s web site) where physicians, in accordance with sub-specialty, are designated as such by a vote of their professional peers.⁴²

Nevertheless, in the case of physicians, lawyers and similar professions, licensing can provide a useful service by establishing minimal standards and saving prospective patients or clients from having to verify even the most basic information.⁴³ We do not believe, for instance, that the public would support a regime that placed the onus on individuals to verify that their “doctor” actually graduated from an accredited medical school.⁴⁴

⁴² *Texas Monthly* publishes similar ratings for dentists (“Super Dentists”) and attorneys (“Super Lawyers”), both of which are listed according to professional sub-specialties.

⁴³ Consumers who are members of health insurance plans often choose their physicians from a list provided by – and *presumably* vetted by – their insurance companies.

⁴⁴ Some economists, including Nobel Prize winner Milton Friedman, have argued that licensing physicians causes net economic harm by unnecessarily restricting the supply of medical care. For the reasoning underlying this

In the same vein, licensing can also serve to keep potentially dangerous personnel away from occupations requiring access to their customers' homes. In a somewhat surprising finding, our analysis of TDLR disciplinary records for electricians from August 2010 through September 2012 revealed that while only 8 percent of the actions related to fraud or shoddy work, nearly 30 percent of the actions involved an applicant's or licensee's criminal record.⁴⁵

Electricians	Count	%
Fraud	43	3.7%
Bad Work	37	3.1%
No Work Permit	13	1.1%
Unsafe Practices	1	0.1%
		8.0% Consumer related
No License	701	59.7%
Conviction / Prison	340	28.9%
Admin / Inspection	35	3.0%
False Application	5	0.4%
Grand Total	1175	

A review of these TDLR records also highlights a second major pillar of occupational licensing. These laws allow boards to discipline or remove professionals who once qualified for their license but who have later – for a variety of reasons – become a hazard to their clients and the public at large.

Medical boards routinely suspend physicians and dentists for alcohol and drug abuse, and of the “Conviction/Prison” electrician disciplinary actions noted above, the descriptions for 128 of the incidents state that the electrician’s license was “revoked upon Respondent's imprisonment in a penitentiary.”

However, the question of whether licensing boards truly protect the public from incompetent or dangerous practitioners is controversial. A number of observers have criticized such boards for being reluctant to discipline members of their own profession or to strip a person of his or her livelihood.⁴⁶

viewpoint, see Svorny, Shirley, “Medical Licensing: An Obstacle to Affordable, Quality Care, Policy Analysis, No. 621, *Cato Institute*, September 17, 2008. In a similar vein, others have argued for the deregulation of law practice. See <http://www.brookings.edu/research/opinions/2012/04/deregulate-lawyers-winston>. However, we doubt that unlicensed physicians or lawyers would be able to obtain malpractice insurance, rendering the issue somewhat moot – at least for conscientious practitioners with personal assets at risk.

⁴⁵ See <http://www.license.state.tx.us/cimsfo/fosearch2.asp>. Electricians were licensed by the state only in 2003. However, municipalities had required electrician licenses for years, and one of the main drivers behind HB 1487 was to increase labor mobility by replacing up to 60 separate municipal licenses with one statewide license.

⁴⁶ See, for example, Robert C. Derbyshire, How Effective is Medical Self-Regulation?, 7 *Law and Human Behavior* 193, 199-200 (1983).

One recent study found that 55 percent of doctors who had their hospital privileges restricted or revoked for misconduct escaped any licensing actions by their respective states.⁴⁷ Although that study did not specify the exact nature of this misconduct, the report noted that roughly half of these physicians were considered an immediate threat to health or safety, were deemed incompetent or negligent, or provided substandard care.⁴⁸

Although many boards have now added “public” members (as opposed to license holders in the regulated profession) in an effort to avoid regulatory “capture,”⁴⁹ the impact of these actions is questionable.⁵⁰

Moreover, anecdotal evidence – taken from professionals who did not want to go on the record for obvious reasons – points to one further issue: the notion that licensing boards often pursue relatively trivial cases rather than take on instances of gross malpractice that may be more difficult to prove, or that such boards go after small-time solo practitioners while leaving the transgressions of their “big firm” brethren unpunished.⁵¹

A review of disciplinary records published in the *Texas Bar Journal* provides some support for this view. Lawyers are disbarred on a regular basis in Texas, mostly for one of two causes: stealing client money (“co-mingling” in the industry jargon) or neglect – that is, taking a case and then doing nothing as the statute of limitations runs out or the client suffers some other irreparable harm.

However, the vast majority of those disbarred fall within the solo practitioner or small firm category, and John Grisham would still be a poor struggling scribbler were it not for the propensity of “sharks in three piece suits” to escape retribution for their misdeeds.⁵²

⁴⁷ Sun, Lena, “Report: State boards don’t always discipline doctors sanctioned by hospitals,” *Washington Post*, March 16, 2011. <http://www.washingtonpost.com/wp-dyn/content/article/2011/03/16/AR2011031605966.html>. A review of the National Practitioner Data Bank from 1999 to 2004 found that roughly one-third of physicians disciplined for alcohol and drug abuse are repeat offenders, which calls into question the ultimate effectiveness of such sanctions. http://www.washingtonpost.com/wp-srv/metro/daily/graphics/doctorsChart_041005.html.

⁴⁸ Ibid.

⁴⁹ The Texas Medical Board has 12 physician members and 7 public members. <http://www.tmb.state.tx.us/boards/medbd.php>. The California Medical Board is composed of 8 physician members and 7 public members. <http://www.mbc.ca.gov/board/members/Index.html>.

⁵⁰ See, for example, Law, Marc T. and Hansen, Zeynep K., “Medical Licensing Board Characteristics and Physician Discipline: An Empirical Analysis,” *Journal of Health Politics, Policy and Law*, Vol. 35, No. 1, pp. 63-93 (2010).

⁵¹ Shakespeare’s Henry V comments on his traitorous knights’ desire to punish “this poor wretch,” while their own “capital crimes, chew’d, swallow’d and digested appear before us.” *Henry V*, Act II, Scene 2.

⁵² The *Sunset LR Model*, p. 3 (link *supra*), notes that the State Bar “operate[s] with more insulation and independence than many state agencies,” and that as a result, regulation may “favor the legal profession more than the public.” As to identities of specific firms, and which misdeeds they may have committed, the news media provide sufficient information for members of the public to draw their own conclusions.

Cases Where Licensing Is Not Justified

Moving to the opposite end of the spectrum, some licensed occupations have little, if any, legitimate impact on public health or safety. Information about these practitioners is readily available, and dissatisfied customers are free to take their business elsewhere, at little harm to themselves other than perhaps some wasted money.

		Serious Harm to the Public?	
		Yes	No
Market Failure?	Yes	Physicians Dentists Architects EMTs	
	No		★

Texas, for instance, is one of the few states to regulate interior designers⁵³ and is part of a somewhat larger number to license landscape architects.⁵⁴ Though we give their lobbyists credit for trying, neither profession can plausibly maintain that incompetent practitioners represent a danger to public safety⁵⁵ – certainly not one sufficient to warrant state intervention into the private marketplace.⁵⁶

⁵³ According to the Institute for Justice, only 4 states license interior designers, while the *TBAE Sunset Report* states that 26 regulate the profession. It is unclear whether the difference reflects double-counting issues outlined earlier, or whether it results from inconsistent definitions of “licensing” versus other forms of regulation.

⁵⁴ According to the Sunset Commission, all states license landscape architects. *TBAE Sunset Report*, pdf p. 22. However, the Reason Report stated that only 43 do so, and the Institute for Justice counts only 10 – though this count refers to landscape *contractors* rather than landscape *architects*.

⁵⁵ The *TBAE Sunset Report*, pdf pp. 21-22, notes that while landscape architects “do focus on the aesthetics of a space, which may indicate an element of consumer choice that may argue against regulation,” they also design for safety and accessibility – such as in playgrounds where they will factor in “the amount of padded ground covering each piece of equipment in order to prevent serious injury.” This appears to stretch the bounds of plausibility, and we also note also that a recent Virginia commission recommended that the profession of landscape architecture be deregulated. Virginia Commission on Government Reform and Restructuring, *Report to the Governor* (full cite *infra*).

⁵⁶ The Sunset Commission recently stated that the state “does not have a clear interest in maintaining what is ultimately a voluntary registration program for interior designers, and its approach to regulating interior designers is ineffective, [since] the Board only interacts with a subset of designers who have chosen to register, and has little knowledge of the many professionals practicing across Texas who have not chosen to register.” *Sunset TBAE Report*, pdf p. 22).

Complaint data for these occupations support this conclusion. According to figures provided by the Texas Board of Architectural Examiners (“TBAE”), the TBAE has taken only four misconduct-related disciplinary actions against interior designers in the past five years (out of an average of 4,800 active licensees), and none at all against landscape architects (~1,300 active licensees).⁵⁷

Other states have even less justifiable licensing requirements. Louisiana still requires a license for florists – though in 2010 the state did abolish the “demonstration exam” that was graded by existing licensed florists and which had a failure rate approaching 50 percent;⁵⁸ and California licenses such perilous occupations as upholsterers, travel guides, makeup artists, and funeral attendants.⁵⁹

Finally, in a case directly out of the “they can’t be serious” file, Indiana licensed *hypnotists* from 1997 until this requirement was abolished in 2010.⁶⁰

The Indiana hypnotist statute led to an amusing unintended consequence. As word of the licensing regime spread, the state began receiving applications from people who did not live in Indiana. These individuals had no plans to move there, but they wanted to be able to advertise themselves in their home jurisdictions as “state licensed” and thus lend their enterprise a credibility that it did not otherwise possess.⁶¹

Cases of Potential Market Failure with Varied Practical Risk to the Public

We move now to the less straightforward cases, where it is possible that market failure may exist, but where this failure may not lead to any substantive, demonstrable harm to the public.

⁵⁷ In our data request to the TBAE, we defined “misconduct” as being anything other than unlicensed practice, failure to meet continuing education requirements or to pay annual dues, or other administrative-related actions.

⁵⁸ See Scott, Robert Travis, “Florist Licensing Requirement Challenge Remains Perennial,” *New Orleans Times-Picayune*, March 4, 2010. http://www.nola.com/politics/index.ssf/2010/03/florist_licensing_requirement.html; Keller, Tim, “IJ Prunes Louisiana’s Floral Cartel,” Institute for Justice, October 2010. <http://www.ij.org/ij-prunes-louisianas-floral-cartel-2>. A cynical mind might suggest that the floral demonstration exam’s 50 percent failure rate was due to the existing license holders’ desire to keep new competition out of their profession.

⁵⁹ <http://licensetowork.ij.org/ca>.

⁶⁰ <http://www.in.gov/pla/hypnotist.htm>; http://www.in.gov/pla/files/IHC.2009_EDITION.pdf.

⁶¹ Walker, Jesse, “Trance Licensing,” *Reason Foundation*, December 4, 2009. <http://reason.com/blog/2009/12/04/trance-licensing>.

		Serious Harm to the Public?	
		Yes	No
Market Failure?	Yes	Physicians Dentists Architects EMTs	
	No		↕

Two state agencies administer the regulations for the greatest number of occupations in Texas, and a review of complaint and disciplinary data from these agencies provides a mixed picture.

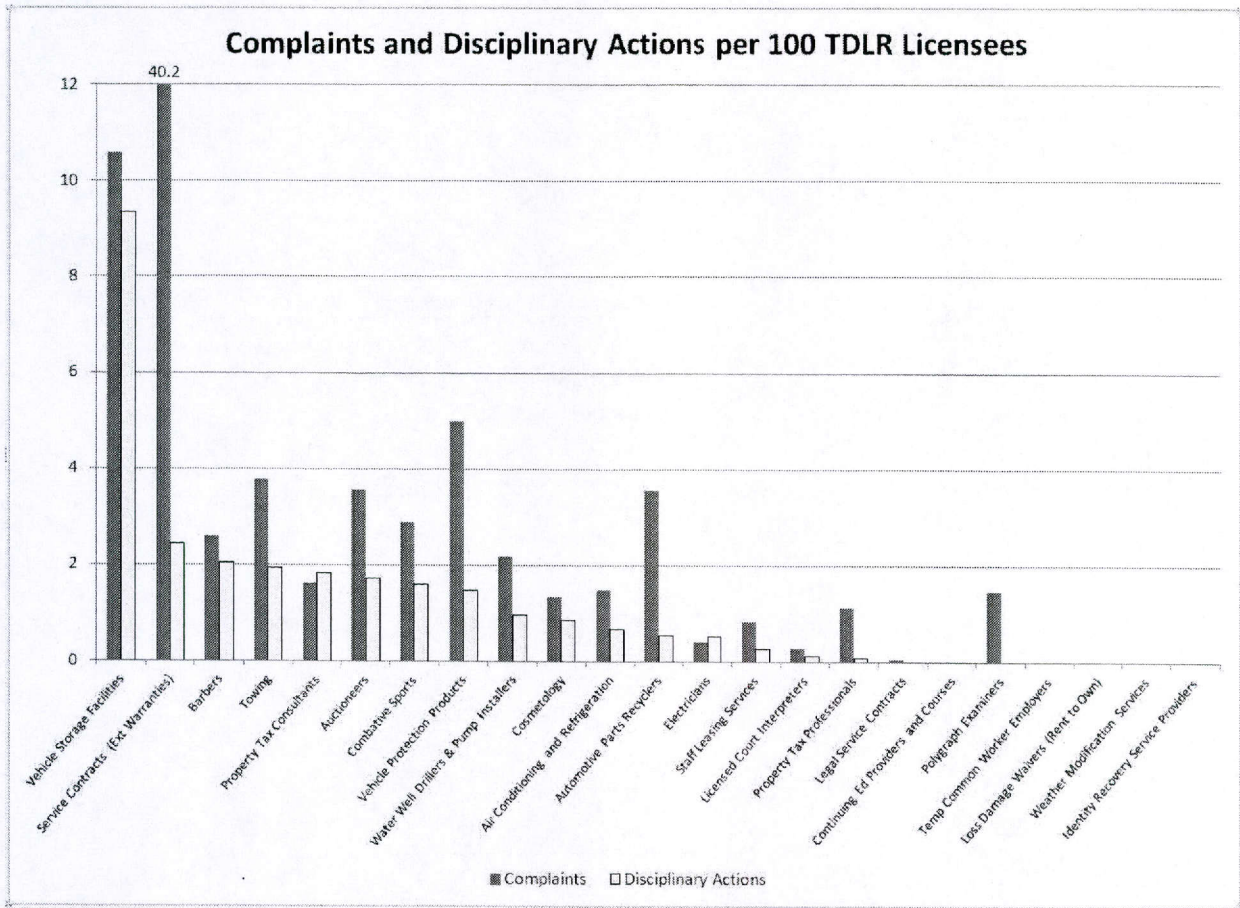
We examined data for 23 occupations under the purview of the Texas Department of State Health Services (“TDSHS”) and another 23 under the jurisdiction of the TDLR.⁶²

As the table below indicates, some TDLR occupations have so few licensees and so few complaints or disciplinary actions that they appear scarcely worth regulating. Among these include Weather Modification Services (a legacy from the 1960s), Identity Recovery Service Providers, Loss Damage Waivers, Temporary Common Worker Employers, and Polygraph Examiners.

⁶² The TDLR oversees 27 occupational fields but we excluded Architectural Barriers, Boilers, Elevators and Industrialized Housing and Buildings since these categories involve firms, rather than individuals, in most cases.

Profession	# Licensees FY 2012	Complaints per 100	Disciplinary Actions per 100
Cosmetology	301,832	1.33	0.86
Electricians	111,354	0.41	0.52
Air Conditioning and Refrigeration	50,398	1.48	0.67
Towing	30,937	3.77	1.93
Barbers	26,811	2.60	2.05
Legal Service Contracts	9,668	0.06	0.00
Vehicle Storage Facilities	5,786	10.58	9.35
Property Tax Professionals	3,977	1.13	0.08
Automotive Parts Recyclers	3,437	3.56	0.55
Combative Sports	3,053	2.90	1.60
Water Well Drillers & Pump Installers	2,579	2.18	0.96
Auctioneers	2,530	3.56	1.73
Property Tax Consultants	1,533	1.61	1.83
Continuing Ed Providers and Courses	1,278	0.00	0.00
Licensed Court Interpreters	544	0.28	0.12
Staff Leasing Services	363	0.83	0.28
Service Contracts (Ext Warranties)	302	40.23	2.43
Polygraph Examiners	257	1.46	0.00
Temp Common Worker Employers	108	0.00	0.00
Loss Damage Waivers (Rent to Own)	57	0.00	0.00
Vehicle Protection Products	45	5.00	1.48
Weather Modification Services	18	0.00	0.00
Identity Recovery Service Providers	2	0.00	0.00
	Average	3.61	1.15
	Median	1.46	0.55

On the other hand, several occupations regulated by the TDLR have high complaint and disciplinary action rates when compared to their peers.



Although complaint data alone do not necessarily provide an accurate measure of professional misconduct within an industry – after all, anyone can file a complaint for any reason, justified or not⁶³ – the measure provides a helpful starting point.

Disciplinary records are a better indicator of wrongdoing, but also do not tell the entire story.⁶⁴ This is especially true for occupations for which a significant number (or even a majority) of disciplinary actions stem from unlicensed practice rather than from substantive misconduct.

Allocating primary causes for the various disciplinary actions proved to be a tedious exercise. In order to separate the cases of wrongdoing from those where the disciplined party merely operated without a license, we examined the TDLR “Administrative Orders” database (August 2010 through September 2012) and then sorted through the listings line-by-line for eight

⁶³ Personnel in several regulatory agencies informed us that certain practitioners within their purview routinely file complaints against commercial rivals – complaints which are later dismissed but nevertheless still have to be investigated.

⁶⁴ Disciplinary actions in a particular year do not necessarily correlate with the number of complaints, as a variable period of time elapses between the filing of a complaint and the ultimate resolution of the case.

of 23 professions.⁶⁵

The percentage of “No License” actions ranged from a high of 95 percent for Automotive Parts Recyclers to a low of 23 percent for Towing (cited above). Cosmetologists (42 percent) also ranked below average in terms of citation for unlicensed practice.⁶⁶

Automotive Parts Recyclers			Cosmetologists (Harris Co)		
# Actions	%		# Actions	%	
No License	51	94.4%	Health / Sanitation	243	39%
Conviction / Prison	2	3.7%	No License/Permit	263	42%
Impersonation	1	1.9%	Inspection / Admin	99	16%
Total	54	100.0%	Conviction/Prison	12	2%
			Fraud/Deceit Obtaining License	10	2%
			Total	627	100%

Professions with fairly high “No License” percentages also included Barbers (75 percent), Air Conditioning and Refrigeration Contractors (60 percent) and Electricians (60 percent - see above).

Barbers			AC / Refrigeration		
# Actions	%		# Actions	%	
No License/Permit	607	75%	Bad Work	130	17.0%
Health / Sanitation	113	14%	No Work Permit	60	7.9%
Conviction/Prison	83	10%	Fraud	23	3.0%
Inspection / Admin	5	1%	Invoice / Insurance Fail	5	0.7%
Fraud/Deceit Obtaining License	3	0%	No License	460	60.2%
Total	811	100%	Conviction / Prison	53	6.9%
			Admin / Inspection	33	4.3%
			Grand Total	764	100%

At the opposite end of the spectrum, we have already cited Towing (only 23 percent related to “No License”). Auctioneers also had a fairly high number of malfeasance-related disciplinary actions – most notably for failure to pay money due. By contrast, Water Well Drillers fell in the middle of the two extremes:

⁶⁵ Where an action stemmed from multiple violations and one of the violations was for unlicensed practice, we listed the case as one of “misconduct” rather than “no license.”

⁶⁶ Since there were over 7,000 statewide disciplinary actions against cosmetologists during this time, we used Harris County as a proxy for the state in order to make the analysis manageable. All other professions were analyzed on a statewide basis.

Auctioneers			Water Well Drillers		
	# Actions	%		# Actions	%
Failure to Pay Money Due	21	39.6%	No License	33	55.0%
Deceptive Ad	2	3.8%	Quality Issues	11	18.3%
Bad Records	1	1.9%	No Well Report	8	13.3%
No License	12	22.6%	False Statement	6	10.0%
Name not in Ad	8	15.1%	Conviction/Prison	1	1.7%
Admin / Continuing Ed	7	13.2%	Improper Supervision	1	1.7%
Conviction / Prison	2	3.8%	Total	60	100.0%
Total	53	100%			

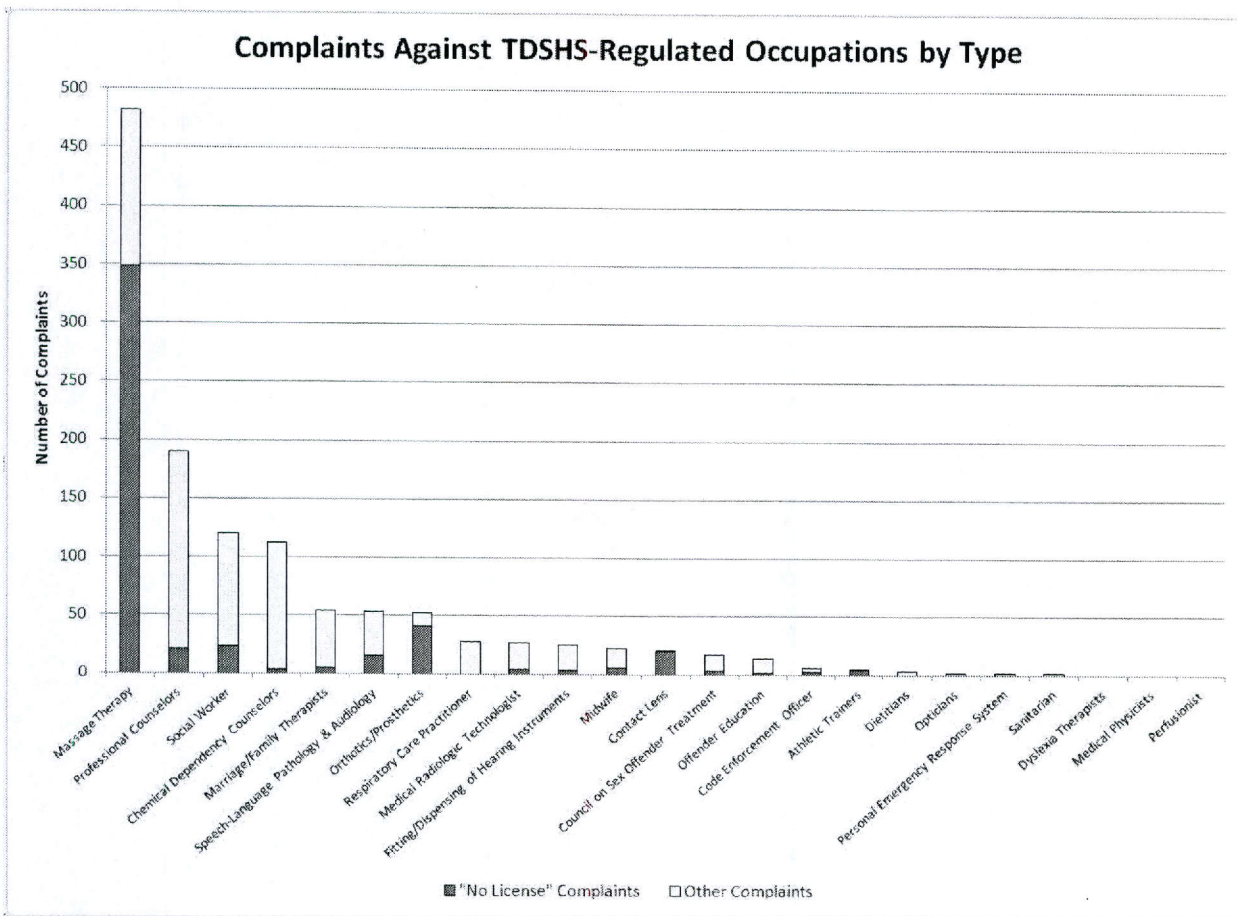
The following table sorts occupations regulated by the TDSHS by the number of licensees.⁶⁷

Occupation	# Licensees	Jurisdictional Complaints	Misconduct Related Disciplinary Actions per 100 Licensees
Massage Therapy	28,960	482	0.54
Medical Radiologic Technologist	27,306	27	0.07
<i>Social Worker</i>	21,457	120	0.31
Professional Counselors	18,405	190	0.30
Speech-Language Pathology & Audiology	15,605	53	0.24
Respiratory Care Practitioner	13,833	28	0.07
Chemical Dependency Counselors	8,207	112	0.57
<i>Dietitians</i>	4,659	3	0.02
Marriage/Family Therapists	3,195	54	0.75
Athletic Trainers	2,720	5	0.07
Offender Education	2,712	14	0.22
<i>Code Enforcement Officer</i>	2,169	6	0.05
Sanitarian	1,256	1	0.08
<i>Dyslexia Therapists</i>	842	0	0.00
Orthotics/Prosthetics	815	52	1.60
Fitting/Dispensing of Hearing Instruments	743	25	1.35
Medical Physicists	597	0	0.00
Council on Sex Offender Treatment	473	17	1.48
Perfusionist	361	0	0.00
Personal Emergency Response System	284	1	0.35
Midwife	217	22	1.84
Contact Lens Dispensing	181	21	1.66
<i>Opticians</i>	138	1	0.00

As with occupations regulated by the TDLR, “no license” complaints constitute a high proportion of total complaints for many TDSHS regulated professions; and these represent the predominant type of complaint against massage therapists, orthotics/prosthetics practitioners,

⁶⁷ Note that the occupations in red/italics are regulated under less restrictive “title protection” statutes – a subject we will address in greater detail later in this report. Source: Health Professions Council, *FY 2011 Annual Report*. <http://www.hpc.texas.gov/annual-reports/> (hereinafter cited as the “HPC FY11 Report”). “Misconduct Related Disciplinary Actions per 100 Licensees” were calculated by taking cases resolved in FY2011, then subtracting “no violation,” “not substantiated,” and “cease & desist” orders (which are almost always directed at unlicensed practitioners).

contact lens dispensers, and athletic trainers.⁶⁸



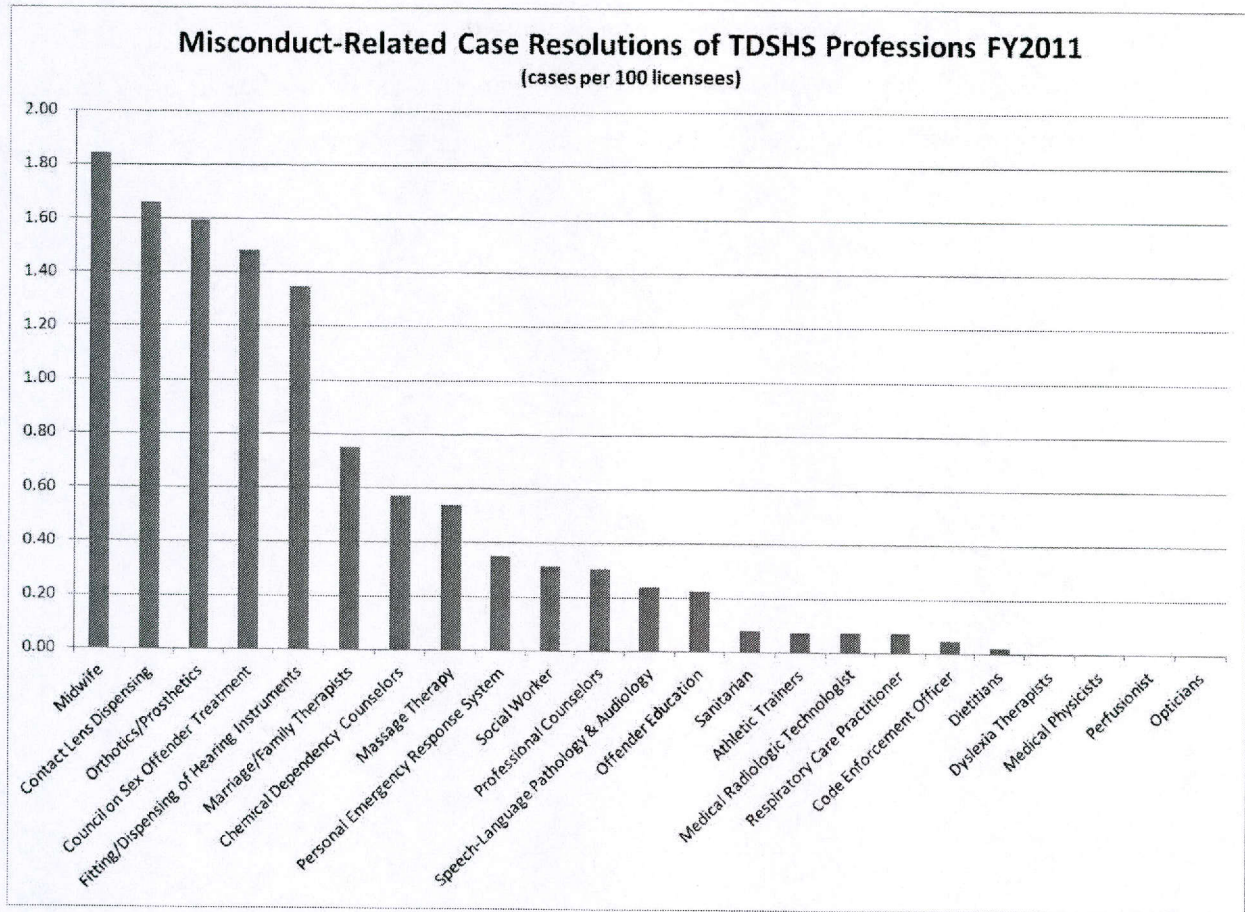
In terms of the rate of misconduct-related disciplinary actions against TDSHS regulated professionals, midwives top the list – an unsurprising result given the high risks and complications that often accompany childbirth.

At the opposite end of the scale, perfusionists⁶⁹ and medical physicists,⁷⁰ and opticians had no misconduct-related disciplinary actions in FY2011 (and TDSHS enforcement records show no disciplinary actions against medical physicists or opticians for the past decade).

⁶⁸ As with the TDLR occupations, complaints against TDSHS licensees must be viewed with the awareness that anyone may file a complaint for any reason. Many, if not most, “no license” complaints are brought by licensees against persons they view as unlicensed competitors.

⁶⁹ A Perfusionist operates the heart-lung machine during cardiac surgery as well as other surgeries that require cardiopulmonary bypass to manage the patient’s physiological status.

⁷⁰ A Medical Physicist is a person licensed to practice in one or more of the following specialties: Diagnostic Radiological Physics, Therapeutic Radiological Physics, Medical Nuclear Physics, and Medical Health Physics. For additional details, see http://www.dshs.state.tx.us/mp/mp_scope.shtm.



As with some occupations regulated by the TDLR, many of the above professions have such low complaint or disciplinary numbers that the value of the current regulatory regime is questionable.

For instance, sanitarians, athletic trainers and speech/language practitioners could be regulated just as effectively under voluntary certification or title-protection (versus practice protection) statutes. This is especially true given that their occupations would still remain subject to the provisions of the Texas Deceptive Trade Practices Act and other consumer protection statutes.

Licensing Regimes are Riddled with Inconsistencies

Even if the Legislature determines that certain occupations should be (or should remain) licensed, the criteria for obtaining a license should reflect the potential for public harm and not impose unreasonable barriers against people trying to enter a profession.

In its report concerning 102 mostly low to middle income occupations, the Institute for Justice compared the average burden for each profession in terms of education, length of

experience, average fees, and the need to pass an exam.⁷¹

Of the 102 ranked professions, Interior Designer topped the list as the most difficult to enter, followed by Preschool Teacher, Athletic Trainer, Social and Human Service Assistant, and HVAC Contractor.⁷²

Rank	Occupations	Number of Licensed States	Average Fees	Average Education & Experience (Days)
1	Interior Designer	4	\$364	2,190
2	Preschool Teacher	49	\$103	1,728
3	Athletic Trainer	46	\$443	1,460
4	Social and Human Service Asst.	7	\$200	1,251
5	HVAC Contractor (G/C)	40	\$250	891
6	Optician	22	\$184	710
7	Midwife	29	\$619	700
8	Dietetic Technician	3	\$30	800
9	Veterinary Technologist	37	\$209	710
10	Earth Driller	47	\$177	704
11	Conveyor Operator	1	\$142	730
12	Security Alarm Installer	34	\$213	535
13	Barber	50	\$130	415
14	Sheet Metal Contractor (G/C)	28	\$292	507
15	Glazier Contractor (G/C)	30	\$287	500
16	Mason Contractor (G/C)	29	\$287	491
17	Cosmetologist	51	\$142	372
18	Fire Alarm Installer	34	\$230	486
19	Cross-connection Survey Inspector	4	\$153	463
20	Pipelayer Contractor	29	\$301	466
21	Iron/Steel Contractor (G/C)	31	\$329	459
22	Carpenter/Cabinet Contractor (G/C)	30	\$286	450
23	Paving Equip. Operator Contractor	27	\$332	446
24	Drywall Instl. Contractor (G/C)	30	\$284	426
25	School Bus Driver	51	\$96	293

The alert reader will notice that the occupation most closely concerned with life or death situations – Emergency Medical Technician – is not on this list. EMT ranked 67th out of 102, behind Tree Trimmer (#33 – 7 states), Home Entertainment Installer (#39 – 3 states), Makeup Artist (#40 – 36 states), Massage Therapist (#50 – 39 states), Court Clerk (#55 – 4 states) and Manicurist (#65 – 50 states).

Though the rankings within Texas vary from the above list, the state requires many more hours of training to become a Preschool Teacher, Athletic Trainer, Barber, Cosmetologist,

⁷¹ This tabulation took the average criteria across all states that licensed a particular profession, and then ranked those averages by occupation. Since the result was an “averages on averages” list, the factors within a particular state may vary.

⁷² The required training (often 1,500 to 2,000 hours) can be prohibitively expensive, and seekers of licenses must often quit their existing jobs in order to participate – a additional burden that many workers simply cannot afford to take on, especially if they have families to support.

Massage Therapist, or Manicurist than to be licensed as an EMT.⁷³

Another factor which calls licensing requirements into question is the tendency of new licensing regimes to “grandfather” existing practitioners. If the public was truly at risk from unlicensed practice, logic would dictate that these persons attain the same level of education and demonstrate their competence by passing the same exam imposed on new entrants to the profession.

Earlier this year, the Sunset Advisory Commission – in recommending against the continued licensing of interior designers – noted that well over half of the state’s licensed practitioners are grandfathered in and were not required to meet the current standards for registration.⁷⁴ In making its determination, the Commission noted that:

“Grandfather provisions are not unusual in establishing regulatory programs, but *they do tend to undermine the promise of competence* assumed when engaging a licensed professional (emphasis added).”⁷⁵

In another example, Texas enacted a new “Eyelash Extension Specialty License” in 2011.⁷⁶ This statute required candidates qualifying under the grandfather provisions to have successfully completed a training program or to demonstrate at least 240 hours of experience in eyelash extension application. Candidates failing to meet these requirements by April 1, 2012 would be required to complete a more stringent eyelash extension training program that included 320 hours of instruction and practical experience as well as pass the required examination.⁷⁷

The inconsistency of licensing schemes becomes even starker when requirements are compared across the states. Why, for instance, does Texas require 600 hours of instruction (taken over a period of not less than 16 weeks) to become a manicurist,⁷⁸ while California mandates only 400 hours?⁷⁹

In jurisdictions where such occupations are licensed, are bill collectors (30 states), taxidermists (26 states), animal trainers (20 states), locksmiths (13 states), bartenders (13 states), or carpenters (10 states) truly better qualified than their unlicensed peers in other states?⁸⁰

⁷³ In fairness, we note that Texas has five levels of EMT certification, beginning with Emergency Care Attendant, followed by EMT-Basic, EMT-Intermediate, EMT-P, and culminating with Licensed Paramedic. The IJ’s rankings shown on the chart above are based on the equivalent of the EMT-Basic credential.

⁷⁴ *TBAE Sunset Report*, pdf p. 23. http://www.sunset.state.tx.us/83rd/ENG/ENG_SR.pdf.

⁷⁵ *Ibid.*

⁷⁶ SB 1170. <http://www.capitol.state.tx.us/BillLookup/Text.aspx?LegSess=82R&Bill=SB1170#>.

⁷⁷ <http://www.license.state.tx.us/PressReleases/eyelash030812.htm>.

⁷⁸ Texas Administrative Code §82.120(g).

⁷⁹ http://www.barbercosmo.ca.gov/forms_pubs/faqs.shtml#ae1.

⁸⁰ *License to Work, supra*, Table 4, pp. 18-19.

Moreover, studies that have examined variation between states have found no significant difference in work quality between licensed states and unlicensed ones.

For instance, a comparison of complaint rates or their proxies in the 1990s for physical therapists, respiratory care providers, and physician assistants between Wisconsin (where licenses were required) and Minnesota (where, at the time, they were not) revealed no significant variation between the two.⁸¹

Malpractice insurance premiums can also serve as a proxy for professional competence. One would expect such premiums to be lower for licensed personnel, but a comparison of rates for licensed versus unlicensed pastoral counselors, marriage and family therapists, professional counselors, and occupational therapists showed no difference when adjusted for age and experience.⁸²

A related study examined consumer complaints in Florida after the state reduced restrictions on roofers due to overwhelming demand following Hurricanes Frances (2004) and Katrina (2005).⁸³

Following the changes, “licensed roofers from out of state, as well as Florida contractors not licensed to roof, flooded into the counties worst hit.”⁸⁴ As the study noted, the hurricanes exacerbated the problem of market failure. Customers were less able to verify the reputations of the new entrants; moreover, many had their roofs torn away by the storms and were in no position to spend time in lengthy negotiations.

After comparing complaint rates and complaints later found to have probable cause in light of the increase in volume of overall construction activity following the hurricanes, the study concluded that the reductions in licensing restrictions did not lead to a fall in the quality of work, and that if citizens of Florida were capable of judging the quality of roofing services after a crisis, they were perfectly capable of doing the same in more relaxed circumstances.⁸⁵

⁸¹ Kleiner, Morris M., “License for Protection,” *Regulation*, Fall 2006.

⁸² Ibid. It is not known whether the licensed states were more lawsuit-prone than their unlicensed counterparts.

⁸³ Skarbek, David, “Occupational Licensing and Asymmetric Information: Post-Hurricane Evidence from Florida,” *Cato Journal*, Vol. 28, No. 1 (Winter 2008).

⁸⁴ Ibid.

⁸⁵ The study did note, however, that “natural disasters often make communities the targets of con men,” and that many of the complaints had been lodged against “smooth talking salesman, not contractors.” Nevertheless, of the 4500 contractors on file with the Martin County Contractor Licensing Office, only “a handful have caused problems.”

Cases that “Slip Through the Cracks”

Critics have often pointed out that many of the evils that licensing purports to address also fall within existing criminal or consumer protection statutes, such as the Texas Deceptive Trade Practices Act.⁸⁶

While this is generally true, licensing – on certain limited occasions – may allow regulators to address situations that might otherwise slip through the regulatory cracks.

A recent case in Tyler illustrates this point.⁸⁷ Earlier this year, a local hair salon operator offered “breast and buttocks enhancements” in the back room of her salon. Her procedures consisted of injecting women with a silicone-type material and sealing the wound with super glue. Shortly thereafter, several of the “patients” ended up in the emergency room – one in critical condition.

The salon’s owner later pled guilty to unauthorized practice of medicine. When questioned as to whether this misconduct could have been prosecuted in the absence of unauthorized-practice statutes, the local district attorney’s office said that it might have been possible to charge the defendant with aggravated assault, but that proving the case would have been difficult and uncertain, since the “patients” understood what the defendant was doing and consented to the procedures.

Licensing may also allow regulators to address wrongful conduct that may not – *as a practical matter* – rise to the level of a criminal offense. For example, sexual misconduct topped the list of disciplinary actions taken against massage therapists.⁸⁸

Massage Therapists	# Actions	%
Sexual Misconduct	77	37.6%
No License	73	35.6%
Missing Documents	17	8.3%
Conviction / Prison	14	6.8%
False Info on Application	7	3.4%
Failed Application	6	2.9%
Other	5	2.4%
Inspection / Admin	3	1.5%
Fraud	2	1.0%
Bad Checks	1	0.5%
Total	205	100.0%

⁸⁶ See House Committee on Government Reform; Texas House of Representatives Interim Report 2008, p. 52.

⁸⁷ “Queen Divas Owner Gets 18 Years,” *Tyler Morning Telegraph*, September 1, 2012. <http://www.tylerpaper.com/article/20120901/NEWS08/120909993>.

⁸⁸ We compiled the table from TDSHS disciplinary records(http://www.dshs.state.tx.us/mt_mtenforcement.shtm) for the period from September 1, 2003 through September 2012, using a similar methodology to that used in the categorization of TDLR disciplinary actions.

While every state maintains laws against sexual assault, we suspect that many of these incidents would present difficult questions of proof and would not be cases that an overworked district attorney's office would place at the top of its list.

Licensing authorities, on the other hand, have the ability to address the totality of a licensee's circumstances (such as multiple complaints serving as evidence of a serious problem) and suspend or revoke licenses as needed.

Licensing Can Impede Innovation

On the other hand, licensing can entrench the "conventional wisdom" and block innovation in a fast-changing field. Athletic Trainers and Dietitians are classic examples of this phenomenon.

In the book *The Perfect Mile*,⁸⁹ the author relates the story of a group of runners in the early 1950s who were attempting to run a sub-four minute mile. Since these athletes were endeavoring to break a record long seen as impossible to overcome, some of them worked under trainers who would be considered eccentric in any age, using methods that flouted the conventional wisdom of the day.

Among these trainers was the self-taught Australian Percy Cerutti, who developed his homespun "Stotan" training system in the process of rebuilding his life following a nervous breakdown.⁹⁰

While it is difficult to image Cerutti taking an exam or attempting to explain his philosophy to a licensing board, several of his athletes won Olympic gold medals and set world records in their respective events. Moreover, the runners training under his tutelage did so voluntarily and would have left in an instant had they not believed the program was helping them achieve their desired results.⁹¹

Diet and nutrition are even more controversial subjects. Although Texas regulates Dietitians under less restrictive "title protection" rules, Boards of Dietitians in other states have

⁸⁹ Bascomb, Neil, *The Perfect Mile: Three Athletes, One Goal, and Less than Four Minutes to Achieve It* (2005).
⁹⁰ "Stotan" was Cerutti's combination of "Stoic" and "Spartan." Decades ahead of his time, Cerutti believed that training should encompass a new philosophy of life – one of natural foods (such as whole grains only; with sugar and refined flour prohibited), mental stimulation and conditioning, and challenging workouts in a natural environment.

⁹¹ Some unconventional means of improving athletic performance, such as steroid injections, are already illegal under other statutes, and licensing laws did nothing to prevent the doping scandals that have unfolded around Lance Armstrong and other prominent cyclists.

taken an aggressive stance against what they perceive as unauthorized practice.

Three years ago in North Carolina, Steve Cooksey, an obese man with an array of medical issues, decided to change his life after learning he had Type II diabetes. He adopted the “Paleo” diet,⁹² lost a significant amount of weight, and “freed himself of drugs and doctors.”⁹³ Shortly thereafter, he started a blog to share his insights, which subsequently developed a large readership.

A year later, he had received so many questions that he added an advice column to his blog. This eventually came to the attention of the North Carolina Board of Dietetics/Nutrition (“NCBDN”), which informed Cooksey that giving out such advice required a dietitian’s license.

What happened next is the subject of some dispute. In May 2012, Cooksey filed a federal lawsuit against the NCBDN, complaining that the Board’s actions (including, allegedly, a threat to throw him in jail) violated his free speech right “to share advice among friends, acquaintances, readers or family about what is the healthiest way to eat.”⁹⁴

Since then, both Cooksey and the NCBDN appear to have back-pedaled. Cooksey modified several of the pages on his blog, and the Board recently posted a statement on its own web site denying ever having threatened Cooksey with criminal charges,⁹⁵ and concluding that:

In addressing all complaints the NCBDN considers multiple factors before deciding whether or not action should be pursued. Based upon these factors, as applied in Mr. Cooksey’s case, the NCBDN determined that Mr. Cooksey was in substantial compliance. As such, the Board concluded that no further action was required regarding this complaint.

While this will most likely render Cooksey’s lawsuit moot, we suspect that this case will not be the last of its type. In the last few years, as the obesity epidemic has exploded across the United States, more commentators – of varying scientific credentials – have begun to challenge the conventional dietary wisdom.⁹⁶

Resolution of these issues is obviously beyond the scope of this report. However, it will

⁹² The concept behind the “Paleo” diet is that we should eat what our Paleolithic ancestors ate before the development of agriculture – namely fresh vegetables, fish, meat, eggs, and nuts – while avoiding sugar, processed foods and agricultural starches.

⁹³ <http://www.thefreemanonline.org/features/when-free-speech-collides-with-occupational-licensing>.

⁹⁴ Liptak, Adam, “Blogger Giving Advice Resists State’s: Get a License,” *New York Times*, August 6, 2012. http://www.nytimes.com/2012/08/07/us/nutrition-blogger-fights-north-carolina-licensing-rebuke.html?_r=0.

⁹⁵ http://www.ncbdn.org/file_a_complaint/recent_press_inquiry/.

⁹⁶ These disputes mainly revolve around the role of dietary fat versus refined carbohydrates. For an overview of the reasoning behind both sides of this controversy, see Taubes, Gary, *Good Calories, Bad Calories: Fats, Carbs and the Controversial Science of Diet and Health* (2007).

be important for the state not to restrict legitimate scientific debate in the guise of protecting consumers – especially when existing rules seem to do little to stem the endless cascade of advertisements for fad diets, miracle pills and other patently absurd weight loss claims.

The Role of Voluntary Certification, Title Protection and the Challenge of Deregulation

To reiterate, we believe that occupational regulations should aim to impose the fewest restrictions on a citizen’s freedom to work compatible with legitimate public health and safety concerns.

One of the key ways to accomplish this objective is either through voluntary certification (private) or title protection (via state statute). In each case, credentialing organizations may administer exams and require specific education and experience levels before awarding a certificate, but individuals not certified remain free to work in the occupation in question.

Two examples – one “blue collar” and one “white collar” – illustrate the successful implementation of voluntary private certification.

In the field of auto mechanics, the National Institute for Automotive Service Excellence was founded in 1972 to help consumers distinguish between competent and incompetent auto service technicians. The ASE offers multiple levels of certification in more than 40 different aspects of auto service, and for a variety of vehicle types and component systems.

Over the intervening years, the ASE has established the value of its credential with both the mechanic community and with the public at large. Good mechanics, aware of their occupation’s dismal reputation for incompetence and fraud,⁹⁷ view the ASE Blue Seal as a way to demonstrate their professionalism versus their uncertified peers.⁹⁸

Though we have seen no published studies documenting this fact in a scientific manner, conversations with mechanics and our own personal experiences suggest that customers do look for the ASE Blue Seal when choosing a mechanic or repair shop.

A “white collar” example is the Chartered Financial Analyst certification, sponsored by the CFA Institute.

In the financial world, any bright person handy with a spreadsheet can refer to him or herself a “financial analyst.” However, only individuals certified by the CFA Institute may call

⁹⁷ Most readers will be familiar with local television hidden-camera exposés in which a reporter, usually an attractive but seemingly ditzy woman, takes a perfectly sound vehicle to a repair shop and is told she needs thousands of dollars of immediate repairs in order to avoid a fiery accidental demise.

⁹⁸ http://www.counterman.com/Article/74574/ase_certification_its_a_matter_of_common_s.aspx.

themselves “Chartered Financial Analysts.”

Becoming a CFA is a rigorous process that requires passing three levels of exams over an average of a four-year period, and reviews of online job postings lend credence to the CFA Institute’s claim touting the CFA’s value in the financial and investment advisory marketplace.⁹⁹

A perusal of advertisements in business magazines also reveals that the CFA Institute expends considerable resources extolling the value of its “brand.”

We emphasize that the ASE and CFA certifications are both illustrative of the way practitioners can distinguish themselves without governmental interference in the private marketplace. Rather than rely on the heavy hand of the state, both organizations worked diligently over time to convince their respective markets that their credentials added real-world value to their holders.

By contrast – though we will not cite any organization by name – we are aware of dozens of other “credentialing” organizations who have, as of this writing, either failed to accomplish the same objective, or who compete with rival entities within their profession – none of whom have established marketplace dominance.

Professional associations for work that does not present substantial risk to public welfare should be forced to demonstrate their credential’s practical commercial importance – and this applies even to currently state-licensed occupations.

If these organizations can convince the public that their certification signifies a higher degree of professionalism worth paying for, more power to them. But if an entity cannot convince the public that its credential has genuine, tangible value in the commercial marketplace, why should practitioners of that occupation be able to force by way of legislation what they could not obtain in the free market?

In the event that some form of official state involvement is deemed necessary, though, a reasonable alternative to licensing would be to shift the regulation of the profession in question to title protection rather than practice protection.

Rather than be licensed as they are today, the title “athletic trainer” (or better, “certified athletic trainer”) could be restricted to those individuals who meet the state’s criteria for that qualification, but others could perform the work of an athletic trainer provided they called

⁹⁹ Many such postings require the applicant to have either an MBA *or* a CFA (with preference given to applicants with both).

themselves something else.¹⁰⁰

In Texas, the TDSHS already regulates Code Enforcement Officers, Dietitians, Dyslexia Therapists or Dyslexia Practitioners, Opticians, and Social Workers under title protection statutes. Shifting currently licensed occupations to this less restrictive system appears to be a viable alternative.¹⁰¹

Other state commissions or legislative committees that have examined the issue have come down squarely on the side of reduced state mandates – though this has not necessarily translated into broader legislative changes.

Last year in Minnesota, the Judiciary and Public Safety Committee passed SF0380, which stated that:

“No government shall require an occupational license, certification, registration, or other occupational regulation that imposes a substantial burden on the person unless the government demonstrates that it has a *compelling interest* in protecting against *present and recognizable harm* to the public health and safety, and the regulation is the least restrictive means to furthering that compelling government interest (emphasis added).”¹⁰²

In 1997, the Georgia legislature considered the licensing of massage therapists and duly routed the bill through the state’s Occupational Regulation Review Council (“ORCC”).¹⁰³ Among its findings, the ORRC concluded that regulation of massage therapists was unnecessary, since:

“there is a voluntary national certification program administered by an independent, non-profit organization through which massage practitioners may obtain professional certification, [and that] there are at least two professional organizations which qualified massage practitioners may join ... By confirming that a practitioner is certified by the nonprofit organization and/or is a member of one of the professional associations, a prospective client currently can select a qualified massage practitioner.”¹⁰⁴

The Georgia legislature, however, proceeded to ignore the ORRC’s recommendations and later enacted licensing requirements for massage therapists.

¹⁰⁰ In such circumstances, though, it would be important that the title not be the only one in common use for the work in question, since this could have the practical effect of turning title protection into practice protection.

¹⁰¹ The *TBAE Sunset Report*, pdf p. 22, however, found that no nationally recognized licensing body for landscape architects exists apart from state licensing entities, and therefore, deregulating landscape architects could put professionals in Texas at a disadvantage when competing for out-of-state work, since they would no longer have credentials recognized by other jurisdictions.

¹⁰² <https://www.revisor.mn.gov/bin/bldbill.php?bill=S0380.1.html&session=ls87> (Section 1: Right to Engage in an Occupation). Although SF0380 passed the committee, it died later in the legislative process.

¹⁰³ Discussed in more detail, *infra*.

¹⁰⁴ “Review of Senate Bill 300 Which Proposes to Regulate Massage Therapists,” *Georgia Occupational Regulation Review Council*, October 1997. http://www.ramblemuse.com/articles/ga_opb_masgrev.html.

Making the Process More User Friendly

Our task in writing this report has led us to consider how the licensing process may become more user-friendly to all Texans, for in the course of our work, we discovered how difficult it is to learn 1) which occupations require a license; and 2) what the requirements to earn a license actually are.

As a first step, the state should create a central clearinghouse for licensing information – a “one stop shopping” web site that contains all current licensing related requirements, or at least one that provides updated links to the appropriate state agency.

Other states have also recognized the need to de-mystify the licensing process. For instance, the California Performance Review (“CPR”) stated that

“Licensing businesses and professions serves the important purpose of protecting consumers from unqualified professionals and unscrupulous businesses. At the same time, *a successful licensing system should make it easy for qualified individuals and businesses to get the certifications they need.* Unfortunately the current system does neither of these things well (emphasis added).¹⁰⁵

The report noted that licensing responsibilities in California are split among more than 45 independent department bureaus and commissions, and that “the state’s list of business and professional licenses takes up 15 single-spaced pages, listing hundreds of required licenses, permits, and certifications.”

Furthermore, “the statutes and regulations themselves are thousands of pages long.” As a result, “people seeking to obtain a license, or consumers trying to lodge a complaint about a problem, do not know where to turn.”¹⁰⁶

Though we have fewer licensed occupations than California, Texans seeking to obtain licensing information must wade through a bewildering thicket of similar obstacles.

For instance, we attempted to learn exactly what was required to obtain a cosmetologist’s or barber’s license in Texas. A quick trip through the TDLR’s web site for cosmetologists revealed no summary of the licensing requirements, nor any useful links to references elsewhere (or at least none that were readily apparent).

The TDLR’s barber site eventually told us what was required, though the process was not straightforward. A quick scan of the “Administrative Rules” page¹⁰⁷ revealed a link for “Licensing Requirements – Individuals,” which directed us to the Texas Administrative Code,

¹⁰⁵ http://cpr.ca.gov/cpr_report/Form_Follows_Function/Chapter_9.html.

¹⁰⁶ Ibid.

¹⁰⁷ <http://www.tdlr.state.tx.us/barbers/barberrules.htm#8220>.

where we eventually learned what we would have to do.¹⁰⁸

Though not perfect, Colorado has created something much closer to a “one stop” destination for licensing information.¹⁰⁹

If Texas is going to make unlicensed practice of certain professions a felony offense, the state should make it as easy as possible for people to learn which occupations are licensed and what the requirements to obtain a license are.

Sunset and Sunrise Commissions

Finally, in order to avoid unnecessary burdens on Texans seeking to exercise their fundamental right to work in the profession of their choice, the state should follow the example of other states¹¹⁰ and strengthen both Sunset reviews of existing licensing agencies as well as establish a “Sunrise” commission to vet new occupational licensing proposals.

Sunrise commissions would open such proposals to greater public scrutiny and make it more difficult for special interests to slip self-interested, protective measures through the legislative process. As the Virginia Governor’s Commission on Government Reform and Restructuring put it:

The short length of a General Assembly session doesn’t always allow for a thorough review and ample time for stakeholder input.¹¹¹

In Hawaii, the Office of the Auditor is charged, among other tasks, with sunrise analyses of proposed regulatory programs.¹¹²

Before a new professional and occupational licensing program can be enacted, the statutes require that the measure be “analyzed by the Office of the Auditor as to its probable effects”¹¹³ as measured against the legislative mandate that the

“regulation and licensing of professions and vocations shall be undertaken only where reasonably necessary to protect the health, safety, or welfare of consumers of the services; the purpose of regulation shall be the protection of the public welfare and not

¹⁰⁸ This is not to pick on the TDLR, as other agencies’ requirements can be equally obtuse.

¹⁰⁹ See Colorado Department of Regulatory Agencies. <http://www.colorado.gov/cs/Satellite?c=Page&childpagename=DORA%2FDORALayout&cid=1251628238000&p=1251628238000&pagename=CBONWrapper>.

¹¹⁰ The 2008 report of the House Committee on Government Reform explored Sunrise criteria in Colorado, Arizona, and Washington. <http://www.house.state.tx.us/media/pdf/committees/reports/80interim/GovernmentReform80th.pdf>, p. 61.

¹¹¹ http://www.reform.virginia.gov/docs/11-21-11_Report.pdf.

¹¹² See Hawaii Revised Statutes, §26H.

¹¹³ <http://www.state.hi.us/auditor/Reports/2008/08-04.pdf>, p. 2.

that of the regulated profession or vocation.”¹¹⁴

For such measures to be effective, though, the laws mandating these reviews must have teeth. As we noted above, Georgia requires that legislation intended to newly regulate a profession or business undergo a review by the state’s Occupational Regulation Review Council.¹¹⁵

Unfortunately, that particular title of the Georgia statutes also provides that “Nothing in this chapter shall be construed to limit the authority of the General Assembly to legislate as authorized by the Constitution” – effectively allowing the Legislature to ignore the ORCC’s recommendations.¹¹⁶

A more thorough vetting and review process for licensing legislation would also help prevent cases of blatant overreach, such as the 2007 Texas Private Investigator licensing bill¹¹⁷ that ensnared computer technicians.¹¹⁸

Willingness to Change the Status Quo

In the end, we are under no illusion that reforming occupational licensing will be an easy task. In recent years, commissions in other states have recommended the abolition of or relaxation of the criteria for many licenses. With few exceptions, however, legislation to this effect has gone nowhere.

In 2011, a Florida bill would have repealed the regulation of 20 different occupations, including athlete agents, barbers, cosmetology specialists, employee leasing companies, interior designers, and travel agents.¹¹⁹ However, various occupations were stripped away as the bill wound its way through the legislative process, and in the end, the bill died in conference committee.

Also in 2011, the Virginia Governor’s Commission on Government Reform and Restructuring released a report calling for a five year moratorium on the regulation of new

¹¹⁴ Hawaii Revised Statutes §26H-2(1).

¹¹⁵ See O.C.G.A. §43-1A.

¹¹⁶ O.C.G.A. §43-1A-9.

¹¹⁷ See HB 2833 (2007). <http://www.capitol.state.tx.us/tlodocs/80R/billtext/pdf/HB02833I.pdf#navpanes=0>.

¹¹⁸ Censky, Annalyn, “Should the Geek Squad need private investigator licenses?” *CNN Money*, July 21, 1008. http://money.cnn.com/2008/07/18/smallbusiness/texas_pc_pi_law.fsb/index.htm . HB 2730, the 2009 DPS Sunset Bill, modified the 2007 legislation to remove computer repair from the private investigator licensing requirements. <http://www.capitol.state.tx.us/tlodocs/81R/billtext/pdf/HB02730F.pdf#navpanes=0>.

¹¹⁹ For the full list, see PCB BCAS 11-01. <http://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName=pcb01.BCAS.DOCX&DocumentType=Analysis&CommitteeId=2604&Session=2011>; <http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=46688>.

professions in the state, as well as the deregulation of hair braiders, mold inspectors, mold remediators, interior designers, and landscape architects.¹²⁰

In April 2012, the Michigan Office of Regulatory Reinvention (“ORR”) released a report recommending the deregulation of 18 occupations, including Acupuncturist, Auctioneer, Community Planner, Consumer Finance Services, Dietitians and Nutritionists, Forensic Polygraph Examiner, Forester, Immigration Clerical Assistant, Insurance Solicitor, Interior Designer, Landscape Architect, Ocularist,¹²¹ Professional Employer Organizations, Proprietary School Solicitors, Respiratory Care, Security Alarm Contractors, Speech Pathologists, and Vehicle Protection Product Warrantor, as well as the elimination of 9 separate occupational boards.¹²²

Closer to home, in the 2011 session, the Texas legislature voted to deregulate talent agencies,¹²³ although the bill as originally filed would have also repealed licensing requirements for personnel services, interior designers, and weather modification services.¹²⁴

An examination of the witness lists for various Texas House and Senate committee hearings pertaining to licensing illustrates the main obstacle to reform: as a general rule, a large number of existing practitioners turn out to testify “for” increasing licensing requirements for their industry (especially if they are grandfathered out of any new requirements), while opposition is minimal – due to the failure of the issue to engage the general public.

This leads to a situation where

*The primary challenge in removing these legal barriers is that powerful interests with a stake in the status quo will resist change as long as possible, while the diverse and unorganized beneficiaries of change, new entrants and consumers, may not even be aware of how they lose from this protection of the existing order.*¹²⁵

When the Mississippi legislature held hearing on a proposal to exempt African hair braiders from having a cosmetology license, a handful of hair braiders testified in favor of the bill, while the line of cosmetologists testifying against “circled the building.”¹²⁶ (Though the

¹²⁰ November 21, 2011. http://www.reform.virginia.gov/docs/11-21-11_Report.pdf.

¹²¹ An “Ocularist” specializes in the fabrication and fitting of ocular prostheses for people who have lost an eye.

¹²² <http://www.michigan.gov/lara/0,4601,7-154-35738-275942--,00.html>.

¹²³ HB 3167. <http://www.capitol.state.tx.us/BillLookup/Text.aspx?LegSess=82R&Bill=HB3167#>.

¹²⁴ <http://www.hro.house.state.tx.us/pdf/ba82r/hb3167.pdf#navpanes=0>.

¹²⁵ See License to Grow: Ending State, Local, and Some Federal Barriers to Innovation and Growth in Key Sectors of the U.S. Economy, Kauffman Task Force on Entrepreneurial Growth, January 2012.

¹²⁶ Today, eleven states specifically exempt braiders from cosmetology licensing regimes: Arizona, California, Connecticut, Georgia, Kansas, Maryland, Michigan, Minnesota, Mississippi, North Carolina and Washington. In those states, braiders are simply required to comply with regulations governing all other businesses or to

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legislation ultimately passed.)

Until people try to enter a profession themselves, they are simply unaware of the obstacles that stand in their way.

Appendix to the Report "Occupational Licensing in Texas"

102 Occupations, sorted by order of # of states regulating w/ note re Texas status¹²⁷

Registered	Texas	Total
Bus Driver (City/Transit)	1	50
Cosmetologist	1	50
Emergency Medical Technician	1	50
Pest Control Applicator	1	50
School Bus Driver	1	50
Truck Driver	1	50
Vegetation Pesticide Handler	1	50
Barber	1	49
Manicurist	1	49
Skin Care Specialist	1	49
Preschool Teacher	1	48
Earth Driller	1	47
Athletic Trainer	1	45
Fisher	1	41
HVAC Contractor (General/Commercial)	1	39
Massage Therapist	1	38
Mobile Home Installer	1	39
Security Guard	1	36
Veterinary Technologist	1	37
Makeup Artist	1	34
Door Repair Contractor	1	34
Fire Alarm Installer	1	33
Milk Sampler	1	34
Security Alarm Installer	1	33
Auctioneer	1	32
Child Care Worker	1	33
Iron/Steel Contractor (General/Commercial)	1	30
Bill Collector Agency	1	30
Carpenter/Cabinet Maker Contractor (General/Commercial)	1	29
Drywall Installation Contractor (General/Commercial)	1	29
Glazier Contractor (General/Commercial)	1	29
Cement Finishing Contractor (General/Commercial)	1	28
Floor Sander Contractor (General/Commercial)	1	28
Insulation Contractor (General/Commercial)	1	28
Mason Contractor (General/Commercial)	1	25
Midwife	1	28
Pipefitter Contractor	1	28
Teacher Assistant	1	29
Terrazzo Contractor (General/Commercial)	1	28
Painting Contractor (General/Commercial)	1	27
Sheet Metal Contractor (General/Commercial)	1	27
Paving Equipment Operator Contractor	1	26
Animal Breeder	1	26
Taxidermist	1	26
Coach (School Sports)	1	23
Gaming Dealer	1	24
Weighter	1	24
Gaming Supervisor	1	23
Optician	1	22
Gaming Cage Worker	1	22
Slot Key Person	1	21
Travel Guide	1	20
Animal Trainer	1	20
Crane Operator	1	18
Backflow Prevention Assembly Tester	1	17
Animal Control Officer	1	17
Sign Language Interpreter	1	16
Catholic Protection Tester	1	16
Tank Tester	1	13
Bar tender	1	13
Locksmith	1	13
Pharmacy Technician	1	12
Taxi Driver/Chauffeur	1	12
Iron/Steel Contractor (Residential)	1	10
Carpenter/Cabinet Maker (Residential)	1	10
Insulation Contractor (Residential)	1	10
Landscape Worker	1	10
Mason Contractor (Residential)	1	10
Painting Contractor (Residential)	1	10
Cement Finishing Contractor (Residential)	1	9
Drywall Installation Contractor (Residential)	1	9
Farm Labor Contractor	1	9
Floor Sander Contractor (Residential)	1	9
Funeral Attendant	1	9
Glazier Contractor (Residential)	1	9
Terrazzo Contractor (Residential)	1	8
Travel Agent	1	8
Dental Assistant	1	7
Packager	1	7
Sheet Metal Contractor (Residential)	1	7
Social and Human Service Assistant	1	6
Tree Trimmer	1	7
Upholsterer	1	7
Title Examiner	1	6
Shampooer	1	5
HVAC Contractor (Residential)	1	5
Court Clerk	1	4
Interior Designer	1	3
Psychiatric Technician	1	4
Cross-connection Survey Inspector	1	4
Dietetic Technician	1	3
Home Entertainment Installer	1	3
Electrical Helper	1	2
Log Skiler	1	2
Nursery Worker	1	2
Psychiatric Aide	1	2
Stell Machine Setter	1	2
Florist	1	1
Forest Worker	1	1
Conveyor Operator	1	1
Pipefitter Non-contractor	1	1
Fire Sprinkler System Tester	1	1
Total	34	

¹²⁷ Also note that "Barber" is not listed as being licensed in one state. We believe this was an error, and points out the difficulty of tabulating precise data. Rather, the lists should be viewed as "directionally correct." For instance, "tree trimmers" require licensing in far fewer states than do "makeup artists" or "school bus drivers."

APPENDIX C: Hearing Summaries

October 4, 2011

The Senate Committee on Business and Commerce

The Senate Committee on Business and Commerce (committee) met on Tuesday, October 4, 2011, to adopt rules, discuss the committee's work plan for the 82nd legislative interim, and receive updates from the Public Utility Commission (PUC), Texas Department of Insurance (TDI), Texas Windstorm Insurance Association (TWIA), Texas Department of Licensing and Regulation (TDLR), and Texas Real Estate Commission (TREC).

Senator Carona called the meeting to order. The committee adopted rules that were previously adopted during the 82nd Legislature, Regular and First Called Sessions. Senator Carona said that the committee would meet quarterly to consider important issues relating to the committee.

Donna Nelson, chairman, PUC, discussed the implementation of legislation passed by the 82nd Legislature and issues pending before PUC. She said that the summer heat and drought in Texas caused problems for the electric utility infrastructure and that the Electric Reliability Council of Texas (ERCOT) is monitoring issues relating to electric generation as the drought continues. She stated that the fact that ERCOT was able to keep electricity running in spite of extraordinary weather proves how robust the electric system is in Texas. Nelson said that the Emergency Interruptible Load Service (EILS), established by the PUC in 2006, helped avoid rolling outages and "brownouts" during the summer months.

Nelson said that retail electric prices in Texas are low and that the restructuring of the electric wholesale market to a nodal market has been working well since it was implemented in December, 2010. She said that ERCOT and stakeholders have been adept at integrating large and variable amounts of wind energy to the electric grid. She said that recent rulemaking by the federal Environmental Protection Agency (EPA), particularly relating to the Cross-State Air Pollution Rule (CSAPR), is a threat to electric generation in Texas. Nelson said that PUC is reviewing ways to communicate methods of conservation during times of stressful weather.

Senator Van de Putte asked how PUC informed customers, particularly military bases throughout the state, that they should decrease their electric usage. Nelson replied that PUC reached out to retail electric companies to contact their customers about the need to conserve energy.

Senator Van de Putte asked whether PUC rules address electric bill payment plans for customers. Nelson stated that PUC rules state that companies cannot suspend services on the day and two days following a heat advisory declared by the National Weather Service. She said that PUC rules require that payment plans be offered to customers whose electricity would have been suspended had a heat advisory not been in place, if requested by the customer.

Senator Watson, referencing an audit of the System Benefit Fund (SBF) at PUC, asked whether PUC has reviewed the amount of money in SBF that is not utilized for the specific purposes for which the SBF was created. He asked whether PUC has determined how much money could

have been used to make SBF benefits available instead of being used to balance the state budget. Nelson said that SBF has a balance of more than \$607 million and that PUC will be looking at those figures. She said that PUC is appropriated a certain amount of money from SBF every year. Senator Watson expressed concern that customers are charged a fee for specific purposes and that those fees are used for other purposes.

Senator Watson asked Nelson to comment on PUC's position regarding non-wind renewable energy. Nelson replied that PUC supports diversifying the state's renewable energy portfolio but is faced with the challenge of providing financial incentives for diverse renewable energies. She expressed concern that PUC rulemaking regarding non-wind renewable energy will be costly and stated that it is questionable whether PUC has the authority in statute to set non-wind energy targets.

Senator Watson asked Nelson to offer suggestions for diversifying energy resources and promoting the development of diverse energy technologies. He said that a Renewable Portfolio Standard (RPS) has been a preferable approach to promoting diverse energy sources. Nelson discussed the difference between the initial RPS and non-wind targets, stating that the initial RPS encouraged people to invest in technology that was the least costly. She said that legislators should be careful not to craft policies that will distort the market and discourage other sources of generation. Nelson said that she would provide recommendations to the committee.

Senator Jackson stated that the only way to comply with EPA requirements by January 2012 is to shut down certain power plants. He asked Nelson to discuss the amount of electric generation that will be shut down in order to comply with CSAPR and how that decrease in energy relates to the need for energy during summer months of record heat and drought. Nelson replied that ERCOT analyzed the effect of CSAPR on generation sources in different situations. She said that Texas would have had rolling outages this past summer had CSAPR been implemented. Nelson said that PUC is working with EPA to address concerns relating to the effect of CSAPR on electric reliability in Texas. She said that PUC is doing everything to help transmission and distribution utilities avoid implementing rolling blackouts.

Following an inquiry by Senator Carona, Nelson said that PUC is currently in the process of upgrading *PowerToChoose.org*, stating that the improved website should be accessible within the next month.

Eleanor Kitzman, commissioner, TDI, was called to testify. She discussed her personal experiences prior to being appointed TDI commissioner, which included an unsuccessful run for lieutenant governor of South Carolina in 2010. Senator Whitmire expressed hope that Kitzman would be non-partisan and professional in her new role as TDI commissioner. Kitzman stated that she hopes to use her knowledge and experience in the insurance industry to benefit the consumers of Texas.

Senator Carona asked what accounts for the anticipated increase in automobile insurance rates. Kitzman replied that TDI is currently reviewing the individual components that go into increased rates, stating that increases in automobile insurance limits and the increasing costs of medical care are factors being considered.

Senator Carona asked whether TDI has examined a certain proposal to increase homeowners' insurance rates and to require that deductibles be a percentage of claims rather than a fixed dollar amount. Kitzman replied that TDI is reviewing a recent filing by State Farm Insurance that proposes no change in the base rate of insurance but includes percentage deductibles that may increase consumers' out-of-pocket costs.

Senator Carona said that Texas is often reported as having the highest property coverage premium in the nation. He asked Kitzman to prepare a report for the committee that provides reasons why premiums are high, whether such high premiums are appropriate, and ways to improve the competitiveness of insurance in the state.

John W. Polak, interim general manager, TWIA, was called to testify. Polak discussed the history of TWIA and stated that TWIA currently insures 251,000 policyholders, covers \$69.7 billion in property, and represents approximately 57 percent of the coastal residential market. He said that TWIA has undergone many operational changes, including improvements to TWIA controls and processes, communication with customers, management development, and transparency. Polak said that there are additional changes to TWIA operations that are being implemented as a joint effort with TDI. He said that TWIA is in the process of approving policy forms and endorsements and that TWIA holds ongoing meetings to discuss the implementation of legislative changes. He said that information relating to H.B. 3 (Smithee; SP: Carona), 82nd Legislature, First Called Session, 2011, is available on the TWIA website for interested stakeholders and that meeting broadcasts, frequently asked questions, and other additional information will be added to the website in order to provide more transparency on TWIA operations.

Senator Van de Putte asked how the timelines for the implementation of sections of H.B. 3 are determined. She asked how members of the public and the industry will be able to adequately respond to multiple postings of timelines. Polak replied that H.B. 3 references different sections of the Insurance Code and that TWIA worked with TDI to determine timelines based on those references. Senator Van de Putte expressed concern that H.B. 3 be implemented in a timely fashion and in manner that is understandable for customers.

Senator Van de Putte and Polak discussed the process of issuing pre-event bonds. Polak said that TWIA is working with the Texas Public Finance Authority (TPFA) and TDI to certify bonds. He said that the decision whether to utilize pre-event bonds will be made by the TWIA board during the first quarterly board meeting before the 2012 hurricane season.

Senator Carona asked what is TWIA's account balance for the payment of claims. Polak replied that the Catastrophe Reserve Trust Fund (CRTF) has approximately \$130 million, and that barring a major storm before the end of the year, TWIA will add approximately \$140 million to CRTF. Following a question by Senator Carona, Polak stated that an additional \$90 million of collectible reinsurance will be used to settle outstanding disputed claims. He said that there is not enough information to determine whether TWIA will need to establish more than \$300 million for pre-event bonding.

Senator Carona asked what it would take for TWIA to be actuarially sound. Polak replied that based on the latest actuarial analysis, TWIA would need to increase rates by 15 to 20 percent to be actuarially sound but is authorized by statute to increase rates by no more than five percent.

William Kuntz, executive director, TDLR, discussed the implementation of legislation passed by the 82nd Legislature that streamlined TDLR programs. He said that the transfer of new programs into TDLR licensing models have resulted in fee reductions of approximately \$23.1 million since 2004, and that proposed fee reductions for other TDLR programs will result in a total savings of \$26 million. Kuntz said that TDLR improved its online interface for licensees in order to allow for the payment of penalties and registration for certain licensees online. He said that TDLR has implemented an electronic file management system. Kuntz stated that TDLR has redesigned its website to provide a better format for its licensees and has become active in social media such as Facebook and Twitter to address concerns in a timely manner.

Senator Carona commended TDLR on recent awards and recognition.

Douglas E. Oldmixon, administrator, TREC, discussed the implementation of SB 100 (Eltife et al.; SP: Geren), 82nd Legislature, Regular Session, 2011, which established the self-directed and semi-independent status of TREC. He stated that TREC and its independent subdivision, the Texas Appraiser Licensing & Certification Board (TALCB), together known as the agency, became a self-directed and semi-independent agency on September 1, 2011. He said that the governing bodies of TREC and TALCB approved operating budgets for the agency and provided input to agency staff to propose policy guidance for financial monitoring, management of seasonal cash flow fluctuations and contingencies, and guidelines for potential fee reductions in the preparation of future budgets.

Senator Carona asked whether there have been problems or whether Oldmixon anticipates future obstacles in the agency's transition to a self-directed and semi-independent status. Oldmixon replied that the agency has not encountered any significant obstacles and that the Texas Comptroller of Public Accounts and the Texas Treasury Safekeeping Trust have been valuable resources for the agency's transition.

Senator Carona opened the hearing for public testimony.

Cyrus Reed, Sierra Club, discussed supply issues in the electric market, stating that while EPA rules could lead to some idling, PUC and ERCOT could take steps to prepare for future challenges.

Senator Carona asked how the state can avoid the constant risk of brownouts in a deregulated market. Reed replied that PUC is reviewing the use of non-spinning reserves, EILS, and load acting as a resource (LaaR) while encouraging electric generators to invest in Texas. He said that opening up the market for demand-response programs will help balance energy needs. Reed stated that the implementation of SB 981 (Carona; SP: Anchia), 82nd Legislature, Regular Session, 2011, allows third-party ownership of solar resources in the Texas competitive market. He said that SBF can be used to help customers with weatherization in order to lower their energy use for the long-term.

Senator Van de Putte discussed the decision by CPS Energy to provide financial incentives for investment in solar energy by retiring old power plants earlier. Reed said that CPS Energy is investing in solar, wind, and coastal energy resources, and energy efficiency programs instead of

using resources to retrofit old power plants. He said that applying such a strategy statewide should be considered.

Senator Watson stated that questions still remain regarding how the state can diversify its energy portfolio. He said that a two-party system of renewable energy versus nonrenewable energy sources has inadvertently been created. Senator Watson said that the committee should investigate the appropriate policy for diversifying energy resources.

The committee recessed subject to the call of the chair.

January 10, 2012

The Senate Committee on Business and Commerce

The Senate Committee on Business and Commerce (committee) met on Tuesday, January 10, 2012, to receive quarterly updates from state agencies and entities, including the Texas Department of Insurance (TDI) and the Texas Public Utility Commission (PUC), and to hear invited and public testimony regarding the following interim charge:

Assess the impact of current and anticipated drought conditions on electric generation capacity. Identify those regions of Texas that will be most affected by a lack of capacity. Analyze response plans and make recommendations to improve and expedite those plans.

Senator Carona called the meeting to order and called on Senator Watson for opening remarks. Senator Watson said that the committee will discuss whether the current drought in Texas will likely lead to an energy shortage. He said while there is a need for grid management plans to avoid rolling outages in times of extreme weather and drought, there is also a more general need to address whether the Electric Reliability Council of Texas (ERCOT) is facing a capacity shortage in which there are insufficient power plants and generators in place to ensure reliability. Senator Watson asked the witnesses who would be testifying before the committee to discuss why capacity shortage is a concern and what can be done to address it. He expressed his support for a state energy plan that ensures reliability for a growing population and economy, stating that Texas has a state water plan that encourages conservation. Senator Watson stated that plans relating to the supplies of energy and water, which serve the same population in Texas, are not considered in the same manner. He said that reliable and affordable energy is vital to the state economy.

Senator Carona called Donna Nelson, chairman, PUC, and Eleanor Kitzman, commissioner of insurance, to testify.

Nelson discussed the United States Environmental Protection Agency's Cross-State Air Pollution Rule (CSAPR), stating that a federal appellate court granted PUC's motion for a temporary stay of the rule. She said that CSAPR would have caused two large generating units in ERCOT to cease operations and would have significantly increased electricity prices in the state. She stated that PUC has devoted significant time over the last nine months to ensuring that PUC market rules incent developers to build new generation when needed and that PUC has asked ERCOT to make a number of changes to market rules that will improve the signals being sent to generators.

Nelson said that the wholesale market in ERCOT is an “energy only” market, in which generation companies get paid when they generate electricity, and not a “capacity” market, in which generators get paid to install capacity and to generate electricity.

Nelson said that there are a variety of reasons why there is concern for energy capacity shortage. She said that natural gas prices are low, which makes it difficult for merchant generators to access capital and that capital investment in other energy sources occurs when natural gas prices are higher. She stated that extreme weather and drought have also contributed to the capacity shortage. Nelson said that the transition to a nodal market that occurred in December, 2010, made the wholesale electric market more efficient but that the market is not recovering enough money to build new generation. She said that during times of scarce supply, prices should increase to incent generators to bring their units online and to encourage electricity users to reduce their consumption.

Nelson discussed ways in which PUC is expanding demand response in which users reduce usage during times of scarcity. She stated that ERCOT is also working with two electric utilities on a pilot project that would use advanced meters and aggregate the electric load of participating customers. Nelson stated that PUC is continuing to promote energy conservation among consumers and that she expects more demand response participation from industrial customers who were shocked by the price of energy last summer.

Nelson stated that PUC is in the process of reviewing and evaluating whether the Texas Universal Service Fund accomplishes its intended purposes and whether any changes are needed, pursuant to SB 980 (Carona, Van de Putte; SP: Hancock), 82nd Legislature, Regular Session, 2011, and that PUC has hired Quanta Technology to prepare a report on Extreme Weather Preparedness Best Practices to address a number of weather-related issues, including drought, pursuant to SB 1133 (Hegar; SP: Harless), 82nd Legislature, Regular Session, 2011.

Senator Van de Putte asked whether communication between ERCOT and PUC has improved since the transition to the nodal market. Nelson replied that problems relating to the transition to the nodal market resulted from a lack of leadership and that there is ample communication between ERCOT and PUC.

Senator Van de Putte stated that there should be some proactive planning and coordination with the United States Department of Defense to ensure electric capacity on growing military bases and surrounding areas in Texas.

Senator Watson stated that Nelson's testimony confirms that the legislature should consider the impact of the free market on prices and how low natural gas prices have disincentivized new electric generation. Senator Watson and Nelson discussed the System Benefit Fund (SBF), an account within the general revenue fund to which money is appropriated for certain purposes, including low-income customer energy programs and consumer information and outreach. Senator Watson said that the portion of SBF that was dedicated for customer outreach was reduced in 2003 and has not been restored to its original level. He said that money that was intended for customer outreach was diverted from SBF to balance the state budget.

Senator Carona, noting that the United States Department of Energy selected Duke Energy to build a 36 megawatt storage facility in Texas, asked when PUC expects to grant ERCOT the

ability to implement pilot programs for energy storage. Senator Carona asked when PUC will determine whether storage should pay load costs designed for retail electric consumers, given that PUC has determined that storage is considered a wholesale transaction. Nelson replied that PUC commissioners will consider rulemaking relating to energy storage by February 2012.

Senator Lucio asked whether more money should be appropriated to SBF for low-income customers. At Senator Lucio's request, Nelson explained how PUC determines the amount of money that should be budgeted for low-income customer programs and stated that she would provide the committee with information detailing what percentages of a low-income consumer's electric bill is being paid by the dedicated SBF appropriation.

Kitzman discussed reports relating to automobile and homeowners insurance prepared by the National Association of Insurance Commissioners (NAIC). She said that the NAIC reports use outdated data and do not account for variations in state insurance policies and how insurance companies report to state agencies.

Senator Whitmire asked what is the actual ranking of Texas regarding automobile and homeowners insurance compared to other states. Kitman replied that the NAIC report shows that Texas has the highest average homeowners insurance premiums in the nation. She said that high weather-related risk is a simple explanation for such high insurance premiums, noting that Texas has had more Federal Emergency Management Agency declarations than any other state in the past six years. Kitman stated that 99 percent of residents have homeowners insurance through the voluntary insurance market and that the homeowners insurance market is competitive outside of tier one counties, or counties that are covered by the Texas Windstorm Insurance Association. She discussed rate changes by the top 10 insurance carriers that were reviewed by TDI.

Senator Carona asked whether a 10 percent rate increase filed by Allstate Insurance Company has not been contested by TDI. Kitman replied that TDI is reviewing Allstate rate filing and that the state's "file and use" policy allows insurance companies to file for rate increases and to put those rates into use while under TDI review.

Senator Carona asked whether a company that offers homeowners and automobile insurance in other states should be required to offer both in Texas and whether it is beneficial to tie both insurance policies together to ensure more participation in the insurance market. Kitman replied that the insurance market is cyclical and that there have been times in past when insurance companies prefer to write one type of policy instead of another. She stated that she is not aware of any state that mandates insurance companies to provide one type of insurance in order to provide another type.

Senator Lucio asked why costs for physical damage and for repairing or replacing an automobile are so high in Texas. Kitman replied that although she did not have access to specific data explaining reasons for such high costs, there is some speculation that higher value of vehicles in Texas may account for higher costs. Senator Lucio asked whether it is strange to say that Texas has a competitive market when the state's insurance premiums are the highest in the nation. Kitman responded that her definition of competition means having many carriers willing to write policies in Texas even though the costs of writing insurance is higher in most states. She

said that she would continue to examine reasons that drive up insurance costs, such as higher frequency of claims and costs of coverage.

Senator Van de Putte asked Kitzman to also investigate how legislative actions and policies have affected high automobile insurance rates. She stated that policies relating to automobile-theft programs and secondary automobile parts that were eliminated due to budget concerns would have helped lower insurance rates.

Senator Carona asked Kitzman to prepare for the committee an outline of legislative actions that may help lower the costs of insurance in Texas.

Senator Lucio said that a statement regarding insurance policy premiums increasing only 10 percent is of small comfort to policyholders. He asked what percentage of insurance policies in Texas had high deductibles. He said that policyholders shoulder most of the burden and cannot pay high deductibles. Kitzman responded that a 10 percent increase in policy premiums is related to a 40 percent increase in the amount of coverage provided. She stated that homeowners insurance premiums are partially determined by the costs to rebuild the home. Kitzman said that a 10 percent increase is a significant amount to many people and that TDI will access more data to answer the committee's questions.

Senator Carona said that the committee should examine ways that homeowners and automobile insurance can be improved. He said that it is not acceptable to allow insurance companies to continue to ask for rate increases without knowing whether the state has done everything possible to keep rates low. Kitzman expressed concern that consumers are not given enough information to understand the types of coverage they purchased. Senator Van de Putte suggested that Kitzman examine and define what is termed a "junk policy" so that consumers will be better protected.

Senator Carona called George Bomar, meteorologist, Texas Department of Licensing and Regulation; Donna Nelson, chair, PUC; H.B. "Trip" Doggett, president, ERCOT; and Michael E. Webber, assistant professor, Department of Mechanical Engineering, The University of Texas, to testify.

Bomar stated that Texas faced the worst one-year episode drought and driest weather in its history in 2011 and that the drought is not over. He said that extreme heat and lack of ample rainfall are manifestations of an intense episode of La Niña, a weather pattern that results in an abnormal cooling of the surface waters in the Pacific Ocean. Bomar stated that recent rains in large portions of Texas were beneficial to the agricultural drought, but that the "hydrologic" drought has barely been impacted. He said that water levels in streams, creeks, lakes, and aquifers remain low. He said that the second phase of La Niña is currently near its peak and that all of the computer models predict it will end by summer 2012. Bomar stated that the hydrologic drought will not ease until an abundance of thunderstorm days occur in Texas and that it is unlikely such rains will occur before the summer. He stated that there is little reason to expect major relief from drought, especially the "hydrologic" variety, until deep in 2012, if then.

Nelson stated that PUC is working with ERCOT to assess the potential effect of drought conditions on electric generating capacity. She said that ERCOT is researching which regions in Texas will be most affected by drought. She stated that PUC is also working with the Texas

Division of Emergency Management (TDEM) and the Texas Commission on Environmental Quality (TCEQ) to ensure that preparations are made for drought conditions. She said that certain electric generation plants have been taken off the grid or "mothballed" so that they may be available during drought and high temperatures. Nelson said that market signals should encourage generators to address water supply shortage in the future.

Senator Watson asked what market signals are being sent to generators to lessen their water usage. Nelson replied that generators cannot make money if they cannot produce electricity in extremely high temperatures and that drought and environmental conditions encourage the use of less water. Senator Watson said that the state should encourage more energy capacity in concert with the conservation of water. He asked what is being done to meet electric generation needs while reducing water use. Nelson stated that PUC is not sending specific market signals for the building of new energy infrastructure but that much has already been done to encourage renewable energy infrastructure that uses less water. Senator Watson said that many of the things that have been done to meet the state's energy needs result from some form of government regulation.

Doggett stated that ERCOT has implemented a seasonal basement of resource adequacy and reliability. He said that the capacity should be adequate through the winter of 2012. He stated that ERCOT has taken actions to manage the impact of the drought. He said that ERCOT will be around the reserve margin target for 2012 and 2013. He discussed demand response initiatives within ERCOT that include promoting conservation, expanding energy efficiency, and using demand-response load tools. Doggett said that ERCOT has surveyed generation entities in the state and reviewed drought concerns and possible mitigation plans. He stated that ERCOT has identified surface water that is most impacted by drought and projected impacts to generation for 2012 and has identified water sources used by electric generation that are at historically low levels. He said that persistent drought conditions are impacting electric generation resources, but are unlikely to cause significant generation shortfalls in 2012. He stated that if the drought continues into 2013, consequences to electric generation availability are likely to become more severe. Doggett said that ERCOT will continue to keep regulatory authorities well-informed and will work with generation and transmission entities to coordinate best practices and mitigation efforts.

Webber stated that droughts and other weather extremes expose vulnerabilities in the Texas power sector but that vulnerabilities can be mitigated by switching the fuel mix and implementing advanced cooling technologies. He said that the electric power sector is highly dependent on water, with nuclear power plants using the most water and solar and wind power plants using the least water. He stated that implementing advanced cooling technologies reduces the drought vulnerability of the Texas power sector. He stated that switching to cleaner fuels saves water and reduces emissions in Texas. Webber suggested that the state provide low-interest loans to reduce the costs of retrofitting advanced cooling technologies; include water availability in the permitting process; require advanced cooling technologies; and encourage a price on nitrogen oxide in order to reduce emissions and water withdrawals by power plants.

Senator Carona called Carolyn Brittin, deputy executive administrator, Texas Water Development Board (TWDB); Bryan W. Shaw, chair, TCEQ; Sheri Givens, public counsel, Office of Public Utility Counsel (OPUC); and John Fainter, president and chief executive officer, Association of Electric Companies of Texas, to testify.

Brittin discussed the 2012 state water plan. She said that the state plan includes plans for irrigated agriculture, municipal, electric power generation, manufacturing, mining, and livestock water uses. She stated that the 2012 state water plan accounts for a state population increase of 82 percent and a water demand increase of 22 percent by 2060. Brittin said that there is a need for 3.6 million acre-feet of water within the next decade. She said that the state plan recommends water management strategies that include water conservation, reuse, and development of new supply from reservoirs and surface water. She stated that capital costs are projected to be \$53 billion by 2060 if all recommended strategies to develop new water supplies, deliver to a water supply system, and treatment of existing water supplies are implemented.

Senator Carona asked what would be some options to fund the capital costs associated with water supply strategies discussed by Brittin. Brittin replied that certain reports have suggested the implementation of taxes and user fees. She said that some states provide assistance at the state level but that funding is typically undertaken by local jurisdictions. Brittin stated that Texas has previously considered a bottled water tax, tap water connection fees, and user fees. Senator Carona expressed hope that the next legislative session will address funding for future water needs.

Shaw testified that Texans weathered the worst one-year drought on record and that as of December 27, 2011, the U.S. Drought Monitor showed **67 percent of Texas to be in extreme or exceptional drought conditions. He discussed TCEQ's drought-related activities.** He said that for areas of the state needing more active management of water rights, watermaster programs monitor stream flows, reservoir levels, and water use; coordinate diversions during times of shortage; and ensure compliance with water rights. Shaw discussed the prioritization of senior and junior water rights, stating that senior calls have resulted in the suspension or curtailment of over twelve hundred (1,200) water right permits. He said that suspended water rights do not include junior municipal or power generation users due to concerns for public health and safety.

Senator Watson expressed appreciation for TCEQ's approach to the prioritization of water rights.

Shaw stated that TCEQ provided intensive, targeted outreach and assistance to public water systems as drought conditions began to develop and intensify in 2012. He said that TCEQ closely monitors the status of public water systems. He stated that TCEQ serves as a member of TDEM's Emergency Drinking Water Task Force and Drought Preparedness Council, working with other state agencies to provide state-level emergency assistance. He stated that TCEQ serves as a member of TDEM's Emergency Drinking Water Task Force and Drought Preparedness Council, working with other state agencies to provide state-level emergency assistance and that TCEQ has worked with TDEM, ERCOT, and PUC on a number of items relating to the impact of the drought on electric generating capacity. Shaw stated that because of the prolonged nature of the drought, TCEQ is responding to new issues, several of which are related to electric generation. He said that there is some concern that entities feel that they need not plan for drought conditions because they understand that their water supply will not be shut off. He said that the state needs to ensure greater incentives to plan for adequate water supply.

Shaw stated that TCEQ has proposed rules relating to bills passed by the 82nd Legislature that amended the Texas Water Code to authorize the executive director of TCEQ (executive director)

to temporarily suspend or adjust rights during times of drought or emergency shortage of water and require the executive director to assess the need for watermaster programs at least once every five years in basins where programs do not currently exist. He expressed support for policies that would incentivize new technologies in order to improve water supply and electric generation in the state.

Senator Watson expressed concern that Texas is not planning for different factors such as affordability, new technologies, water supply, and capacity and generation, in tandem. Shaw said that the drought has raised awareness among state agencies and public officials to work together to address drought-related issues.

Following an inquiry from Senator Watson, Shaw stated that TCEQ cannot force municipalities to implement drought reduction plans, but that TCEQ encourages municipalities to conserve water because they have junior water rights that are not restricted.

Senator Van de Putte asked what role TCEQ plays in the discussion of the Eagle Ford shale. Shaw replied that TCEQ's role is to provide information and resources to help assess the impact on the water supply and that TCEQ does not regulate underground water.

Senator Lucio asked how budget constraints have affected TCEQ. Shaw replied that TCEQ is able to meet requirements but in a slower timeframe. He said that TCEQ could be more efficient with more funding and that he would work with the committee to determine where funding could be most useful at TCEQ.

Givens discussed ways that OPUC works with all stakeholders to address the challenges and concerns brought on by the drought. She said that OPUC has collaborated with other state agencies and ERCOT and has communicated with consumers about electric choices. She stated that OPUC has been able to address many electric customer complaints through its updated website and the use of social media. Givens stated that there is no quantifiable estimate on the impact of the drought on electric generation to consumers. She said that OPUC will continue to participate in ratemaking proceedings at PUC and will keep the committee informed about any drought-related cost recovery issues.

Fainter stated that electric generating companies need water for the cooling process for electricity generation but that electric generating companies consume less than three percent of the state water usage. He stated that AECT has worked with PUC, ERCOT, and TCEQ to ensure that members are conserving as much water as possible while having an adequate supply to generate power and to be a reliable source of electricity for domestic, industrial, and commercial uses in the state. Fainter stated there is a need for a diverse fuel portfolio that is consistent with environment requirements in order to provide reliable electricity at a reasonable cost.

Senator Van de Putte said that statewide planning is critical to ensure that drought and extreme weather conditions do not negatively affect the Texas economy and that it is incumbent on state leadership to ensure that there is continued investment in Texas. She expressed concern that uncertainty regarding electric generation in the state will discourage economic growth and investment in the state.

Senator Carona called Mark Zion, executive director, Texas Public Power Association (TPPA); David Freeman, testifying on behalf of himself; Rudy Garza, Texas Coalition for Affordable Power (TCAP); and Laura Ross, Sierra Club, to testify.

Zion said that electric generation is a relatively low consumer of water statewide and that public power systems are preparing for continued drought conditions by working with ERCOT to plan and implement drought responses, maximize water rights, examine alternate water sources, and modify equipment.

Freeman stated that power plants break down when they are most needed because equipment is stressed. He said that there are insufficient incentives to encourage the building of new generation plants. He stated that the lack of water limits growth in the electric generating industry because the industry cannot be assured that there will be water for future generations. Freeman said that the state should encourage sources of energy that are water-proof and drought-proof. He said that the need for water supply and electric generation capacity are a combined problem.

Garza stated that the legislature should ensure that principles of the competitive electric market are not compromised as they work to enhance the reliability of the electric grid. He stated that TCAP supports electric generators having an adequate supply of water and would oppose efforts to curtail water rights of electric generators. He said that the state should investigate ways to maximize the efficiency and usefulness of the competitive renewable energy zone (CREZ) transmission system with diverse generation alternatives such as solar energy. Garza stated that TCAP encourages building codes for new construction that mandate the use of best available technology for conserving both electricity and water.

Ross discussed research that illustrated that water use data can be unreliable. She said that the best estimate is that water demand is 279,000 acre-feet per year for the coal portion of electric generation. She stated that drought-proof generating technology is available and that water should be preserved and planned for other essential uses. Ross discussed amounts of water that can be saved with various types of power generation. She said that there is a need to prioritize accurate water accounting for electrical generation.

Senator Carona opened the hearing to public testimony.

Rich Herweck, Texas Combined Heating and Power (CHP) Initiative, stated that CHP is the most economical, efficient, and less water intensive power generation technology that is available to convert natural gas to kilowatt hours.

Tommy John, Texas CHP Initiative, stated that CHP produces approximately 20 percent of energy in Texas. He said that CHP requires no water for cooling and saves an estimated 28 billion gallons of water per year in Texas. John said that other benefits of CHP include lower emissions and improvement reliability of the electric grid. He discussed policy changes that would encourage CHP development, including allowing thermal energy to be sold to more than one customer; recognizing off-site air emission reductions when permitting CHP facilities; implementing a CHP a portfolio standard modeled after the renewable portfolio standard; and developing guidelines for evaluating CHP when building or remodeling critical government buildings.

Robert Webb, Texas Renewable Energy Industries Association (TREIA), stated that, according to PUC, there are no new power generation plants other than renewable energy power plants that are scheduled to be online in 2012 and 2013. He said that new energy capacity is coming from wind, solar, and biomass sources. Webb said that photovoltaic solar resources do not use water and, like wind power, photovoltaic solar energy is a proven technology. Webb said that the committee should encourage PUC to consider ways of bringing solar and other peaking renewable energy sources that do not require water quickly online.

The committee recessed subject to the call of the chair.

—by *Endi Silva, SRC*

April 10, 2012

Senate Committee on Business and Commerce

The Senate Committee on Business and Commerce (committee) met on Tuesday, April 10, 2012, to receive quarterly updates from state agencies and entities and to hear invited and public testimony regarding the following interim charges:

- Interim Charge 1: Study and make recommendations for workforce training programs in Texas to ensure that such programs meet business and worker needs. Specifically, study whether such programs target economic growth areas and future workforce needs of the health care, skilled trades, construction, manufacturing, aerospace, and information technology industries and help retain workers in those trades and fields; and
- Interim Charge 2: Study the state's approach to licensing and regulation of occupations to ensure protection of public welfare, trust, health, and safety and eliminate unnecessary, overly restrictive, or anti-competitive regulation. Review guidelines and other states' approaches for determining when regulation is necessary and make recommendations for improving Texas' regulatory system.

Senator Van de Putte called the meeting to order, and called Alan Steen, administrator, Texas Alcoholic Beverage Commission (TABC); Brian Lloyd, executive director, Public Utility Commission of Texas (PUC); and H.B. "Trip" Doggett, president, Electric Reliability Council of Texas (ERCOT), to testify.

Steen discussed legislation that was passed by the 82nd Legislature, 2011, and been implemented by TABC. He said that the importation limits and fees set forth in H.B. 1936 (Gutierrez; SP: Lucio) have resulted in an increase in revenue. He stated that SB 1331 (Watson, Ellis; SP: Gallego), relating to criminal offenses regarding the possession or consumption of alcoholic beverages by a minor, has received national attention and that other states have been interested in the success of its implementation. Senator Watson explained that SB 1331 provides that a minor who calls 911 because another minor is in an emergency situation due to alcohol will not be subject to the alcohol-related criminal offense. He commended TABC for the implementation of

SB 1331. Steen said that H.B. 2582 (Murphy; SP: Whitmire), relating to the repeal of the partial tax exemption for certain beer, was intended to reduce potential litigation. He said that there have been legal challenges to the constitutionality of the Alcoholic Beverage Code, noting that lawsuits are filed regarding the 14th amendment and the Commerce Clause of the United States Constitution.

Senator Van de Putte and Steen discussed the nature of lawsuits against TABC. Senator Van de Putte asked whether court cases are resulting from inconsistencies within the Alcoholic Beverage Code. Steen replied in the affirmative.

At Senator Lucio's request, Steen discussed the impact of additional revenue gained through the implementation of S.B. 1936. Steen stated that the federal government created additional ports of entry that allow more movement of alcohol and cigarettes on which a fee must be assessed. He said that the extra revenue is directed to the General Revenue Fund.

Senator Lucio asked whether TABC is able to determine how many criminal citations are given to individuals who are visiting from out of state and asked how the number of those citations differs by year. Steen replied that he will provide the committee with research that compares citations to individuals from in state and out of state and that the number of citations has been approximately the same each year. He stated that the number of complaints against TABC has decreased.

Senator Van de Putte commended TABC as the leading state agency that has combated human trafficking. She said that a working group might be necessary to address inconsistencies in the Alcoholic Beverage Code and potential litigation against TABC.

Lloyd discussed implementation of legislation that was passed by the 82nd Legislature and ongoing activities related to generation resource adequacy at PUC. He said that H.B. 971 (King et al.; SP: Fraser) required PUC to reexamine the economic tests utilized in the ERCOT planning process to justify new transmission projects. He said that PUC decided to eliminate one of the current tests out of concern that it over-incentivized the building of new transmission. Lloyd said that PUC adopted rules that clarify that transactions relating to the purchase and sale of energy as part of a storage process that are considered wholesale transactions and that exempt energy storage from certain charges such as ancillary services and transmission costs. He said that PUC is publishing rules for comment relating to pilot projects for new technology and relating to the exemption of certain customers from the application of demand ratchets as part of the billing for their electricity service. Lloyd discussed other rules PUC will consider relating to the ownership of distributed generation and energy efficiency.

Lloyd said that S.B. 980 (Carona, Van de Putte; SP: Hancock) requires PUC to review and evaluate whether the Texas Universal Service Fund (TUSF) accomplishes its purposes and whether any changes are needed. He discussed rules relating to TUSF that have been considered or published for comment, including reductions to TUSF support for large telephone companies, workshops related to the Small and Rural Company Fund, and clarification whether certain companies utilizing Voice over Internet Protocol (VoIP) technology should be required to contribute to TUSF.

Lloyd stated that generation resource adequacy in the ERCOT region is the highest priority at PUC. He stated that ERCOT and PUC activities focus on ensuring that reliability tools used by ERCOT do not unduly distort market prices and signals to generators to invest in new capacity. He said that PUC promotes demand-response and conservation programs and evaluates rules to ensure that prices appropriately reflect scarcity of supply. He stated that PUC will publish rules for comment that would raise the wholesale market prices caps in order to more appropriately reflect the value of power during times of scarcity and to ensure that adequate incentives exist for the installation of new capacity and customer demand response. Lloyd stated that PUC expects these decisions to be informed by a study being conducted by the Brattle Group for ERCOT.

Senator Estes asked whether Texas will be able to "keep the lights on" this summer. Doggett replied that his testimony will address Senator Estes' inquiry and that while ERCOT expects some emergency energy alerts (EEAs), rolling outages are not anticipated.

Senator Van de Putte asked what the purpose of the Brattle Group study was if the PUC expects to publish the rule relating to wholesale market caps before the study is concluded. Lloyd replied that PUC commissioners want the rule to be in place by early fall in order to give electric companies enough time to adjust and understand the rule. He said that PUC will use public comments and the Brattle Group study, which will be done by June 1, in finalizing the rule.

Senator Van de Putte asked Lloyd to explain how Texas would be at risk of inappropriately depressing electric prices. Lloyd stated that when ERCOT runs out of offers in the marketplace, it uses emergency reserves to meet energy demand. He said that in 2011, ERCOT deployed those reserves and electric prices dropped. Lloyd said that electric prices are supposed to be high in times of scarcity to incentivize electric generators to squeeze every megawatt from their power plant and to encourage customers to reduce their usage.

Senator Carona assumed the chair and quorum was established.

Doggett discussed seasonal assessments and resource adequacy concerns within ERCOT. He said that the Seasonal Assessment of Resource Adequacy (SARA) is designed to improve the assessment of near-term conditions and are based on the most current available data on seasonal weather, the status of power plants, and the impact of factors like economic activity and the ongoing drought. He said that SARA determines the extent by which the various uses of reserves will further exhaust available reserves.

Senator Estes asked how United States Environmental Protection Agency (EPA) rules have affected ERCOT reserves and planning at PUC. Doggett replied that ERCOT's reserve margin will be similar to last summer due to the stay on EPA's Cross-State Air Pollution Rule (CSAPR) rule. He said that if CSAPR had been allowed to take effect, Texas would be in trouble this summer. He said that two large power plants that were taken off the grid due to CSAPR were reconnected after the rule was stayed. Doggett said that there are more concerns about energy adequacy after 2013 if the stay on CSAPR is lifted.

Doggett stated that ERCOT expects tight reserves this summer and that there is a significant chance that ERCOT will need to declare EEAs on multiple occasions during the summer of 2012. He said that these EEAs are not likely to result in the need for rotating outages. He said that drought conditions have improved during the winter and spring on many river basins and

that reservoir levels are not expected to drop below power plant physical intake limits during summer 2012, but that potential risks exist while much of Texas remains under drought conditions.

Doggett discussed the Next Capacity Demand Reserves report, which will detail a 10-year outlook for planned generation, and the Brattle Report, which examines factors that influence investment decisions for the financing and development of projects to meet ERCOT's resource adequacy goals. He said that both reports will be completed by June 1, 2012.

Following an inquiry from Senator Van de Putte, Doggett stated that very small quantities of power were used from other electric grids last summer. Senator Van de Putte asked whether ERCOT or PUC was monitoring nationwide grid hookups, such as the Tres Amigos project that transmits energy to New Mexico from three electric grids and the Southern Cross transmission project that transmits excess wind generation from Texas to eastern parts of the nation. Doggett replied that ERCOT is participating in the discussions of interconnection with the grid. Lloyd stated that the projects are under the jurisdiction of the Federal Energy Regulatory Commission but that PUC makes comments when appropriate to ensure jurisdictional and reliability concerns are addressed. Senator Van de Putte asked Doggett and Lloyd to update the committee about the Tres Amigos and Southern Cross projects as those projects progress.

Senator Carona called William Kuntz, executive director, Texas Department of Licensing and Regulation (TDLR); Sherri Greenberg, director, Politics and Governance, Lyndon Baines Johnson School of Public Affairs; and Marc Levin, Center for Effective Justice, Texas Public Policy Foundation, to testify on Interim Charge 2.

Kuntz stated that when considering new occupational licensing programs, TDLR evaluates whether there is sufficient critical mass of licensees to justify that program. He said that the cost of regulation and the expected revenue that will result from licensure is also considered. He said that each of the 28 programs within TDLR is funded from fees from its own licensees and that no occupation subsidizes another. Kuntz said that TDLR considers the experience of other states, public safety needs, and occupational trends when developing licensing programs. He said that TDLR ensures that licensing provisions do not impede efficiency. Kuntz discussed licensing and regulation of occupations in Colorado, which provides for "sunrise" provisions of license programs.

Greenberg stated that licensing and regulation should address public policy issues and meet public safety and welfare needs. She stated that sometimes the intention of bills requiring licensure of occupations is to prohibit competition. She said that the cost-benefit and public need for certain regulation should be considered in any future legislation relating to licensure.

Levine testified that one-third of the workforce in Texas, higher than the national average, is directly licensed by or works for a licensed entity. He provided recommendations to the committee, including avoiding licensing unnecessary occupations; eliminating certain licensing categories; identifying occupations that could be regulated with less government bureaucracy through private accreditation; and avoiding duplicative licensing of both the company and its employees. Levine suggested that an optional bonding route be created for occupations in lieu of annual bureaucratic oversight. He stated that more apprentice categories should be created so that people can start working immediately under someone who is already licensed. Levine

suggested that initial and continuing licensing requirements be reviewed in order to ensure that they do not unnecessarily exclude qualified individuals and that overly broad statutory provisions be clarified. He said that the Code of Criminal Procedure should be amended to allow for citation without arrest for misdemeanors and to prohibit arrest for regulatory Class C misdemeanors. Levine said that the state can reduce the burden of rules governing some occupations without endangering the public.

Senator Carona stated that a study and analysis by the University of Dallas regarding all professions regulated in Texas will be submitted to the committee in the fall. Senator Van de Putte asked that the study analyze the reciprocity of licensure in Texas and the difficulty for individuals who hold licenses from other states to obtain the same license in Texas.

Senator Carona called Joe Arnold, workforce chair, Texas Association of Manufacturers (TAM); Jane Hanna, president, Construction Education Foundation (CEF); and Hector Rivero, president and chief executive officer, Texas Chemical Council, to testify on Interim Charge 1.

Arnold stated that there is currently a need to address the shortage of skilled workers in Texas. He said that without access to a skilled and educated workforce, manufacturing operations cannot grow or be sustained in Texas. He stated that in March, 2012, the San Antonio Manufacturers Association estimated that more than 1,500 manufacturing jobs in the area remained unfilled due to a lack of skills among potential workers. He said that nine of the 131 jobs currently posted by Texas Instruments are open to high school graduates and that the rest necessitate some post-secondary education or training. Arnold stated that the Alliance for Science & Technology Research in America estimates that by 2018, Texas will need to fill 758,000 jobs that focus on science, engineering, technology and mathematics. He said that TAM supports education with relevance to job training. He stated that that students need to be able to apply skills they learned in high school to a career.

Senator Lucio asked Arnold to discuss specific recommendations to ensure career readiness in kindergarten through grade 12. Arnold stated that flexibility should be provided within the education system that recognizes different student talents and provides different options and approaches to students. He said that schools need to be able to provide vocational courses with the same rigor that prepares students for a four-year institution of higher education. Senator Lucio asked how Texas compares to other states in career readiness. Arnold replied Texas is neither at the top nor at the bottom regarding career readiness. He stated that Alabama, Florida, and Louisiana are considering workforce issues and incentives in their current legislative session.

Senator Van de Putte asked whether other workforce development boards in different regions have surveyed the workforce needs of employers, as was done for manufacturing jobs in San Antonio. She said that there is a disconnect between what the educational system is providing and the type of workers that employers need. Arnold replied that TAM is working on a report on types of jobs in different areas in the state and is working with community colleges to determine what skills are needed most in different regions of the state. Senator Van de Putte stated that career and technical education (CTE) programs have been decimated at the local level.

Hanna stated that CEF is the result of a combined effort to provide a trained workforce. She said that there is a shortage of skilled workers, noting that 20 percent of skilled workforce in the construction industry will retire within the next four years. She stated that skilled workers are

not migrating to areas of the state where jobs are available as they previously did. Hanna stated that it is critical that students from public schools have rigorous CTE training in order to be ready to enter the workforce.

Rivero said that the petrochemical industry is a big economic engine for the communities where the petrochemical facilities operate, noting that the economic job multiplier within the petrochemical industry is seven. He said that with the advent of shale gas, companies within TCC have identified between \$15 and \$20 billion of new investment and 10,000 new jobs for the construction and expansion of petrochemical facilities. He said that skilled craftsman are in the most demand within TCC and are not readily available in communities where petrochemical facilities are located. He stated that while community colleges do a tremendous job of preparing workers for skilled jobs, the educational policy of the state is not meeting the needs of Texas employers. Rivero said that skilled crafts and training are not available in Texas high schools as most of the education policies focus on college readiness. He discussed statistics from the United States Census Bureau that show that less than half of Americans attend college and less than one-third receive a college degree. Rivero said that education policies should ensure that students receive a high school education that prepares them for a meaningful job and that school districts should have the ability to offer courses that meet the workforce needs of the employers within the community.

Senator Carona called Tom Pauken, chairman, Texas Workforce Commission (TWC); MacGregor Stephenson, assistant commissioner, Academic Affairs and Research, Texas Higher Education Coordinating Board (THECB); and Thomas Palladino, executive director, Texas Veterans Commission (TVC), to testify on Interim Charge 1.

Pauken stated that the manufacturing sector has undergone a severe decline over the past decade and must be restored. He discussed surveys that show that the hardest jobs to fill in the United States are for skilled trades. Pauken said that even though the demand for skilled workers is increasing, Texas has deemphasized CTE and promoted an approach that says that everyone should attend a four-year university. He stated that a four-year university is not the best path for every student, noting that less than one-third of the students who start out at the state's public four-year institutions actually graduate in four years. He said that CTE is neglected in favor of preparation classes for the state-mandated tests even though statistical data shows that students involved in CTE in high school do better academically. Pauken suggested that students be tested for career readiness as well as college readiness to determine which path would better suit them. He said that school districts should be allowed to partner with community colleges to provide CTE programs.

Pauken discussed the challenges of the drug culture in the workforce, stating that many young individuals cannot pass drug tests and are eliminated from consideration for some careers. He stated that a public campaign should be undertaken to teach students that drugs harm their future economic success.

Senator Eltife assumed the chair.

Senator Lucio stated that providing students with more choices for their future economic success leads to better quality of life for Texans.

Senator Williams stated that prescription drug abuse as well as illegal drug abuse prohibits many people from entering the workforce. He said that an anti-drug campaign should address both prescription and illegal drug abuse.

Senator Van de Putte stated that the public school accountability system should be reconsidered. She said that one school campus in her district will be ranked lower because students in the school's CTE and drug recovery program will take longer to graduate.

Stephenson stated that the goal of higher education, whether it is at two-year or four-year institutions, is to provide pathways to students. He said that THECB has considered curriculum for college and career readiness, pursuant to H.B. 1 (Chisum et al.; SP: Shapiro, Ogden), 79th Legislature, Third Called Session. He stated that community colleges are the frontline for CTE and that employers rely on community colleges to train their workforce. Stephenson said that community colleges do well at providing CTE because they are connected to the industry that serves their community. He said that industry representatives are involved in the development of CTE curriculum so that institutions of higher education remain updated with changes in the industry. He discussed the College Credit for Heroes program that allows military members to receive college credit for skills they obtained while on duty. He stated that higher education policies should recognize that learning gained through experience can be just as valid as learning gained by sitting in a classroom.

Senator Carona reassumed chair.

Senator Van de Putte, Stephenson, and Monica Martinez, Curriculum Division, Texas Education Agency, discussed the recommended high school graduation plan for entrance to the state's public four-year institutions. Martinez said she would provide more information to the committee relating to the implementation of the state's four-by-four plan, which requires students to earn four credits in four core subjects and is now the recommended plan for entrance to the state's public institutions of higher education.

Palladino discussed veteran employment services at TVC that include 168 representatives in workforce centers in 75 cities across the state. He said that businesses need to be informed that veterans are available to be hired. He stated that TVC reaches out to the business community through its Veterans Business Outreach program. He said that the Transitional Assistance Program, which assists services members during their period of transition to civilian life by offering employment and training services, will no longer be administered through TVC. He said that the United States Department of Labor (DOL) is now required to contract with a private entity to provide transitional counseling and services to veterans. Palladino stated that TVC is considering the approval of the Veterans Education Program On-the-Job Training, which allows veterans to utilize their education benefits while training for certain jobs.

Senator Van de Putte asked how budget cuts will affect TVC services. Palladino replied that Texas will have a larger veteran population as many service members have come to the state through Base Realignment and Closure (BRAC) policies. He said the need for services will increase while funding for veteran services will remain the same. Palladino stated that TVC may need to find funding from other sources and may ask the state for additional funds if federal funding is reduced.

Senator Carona called Ann Matula, president, Craft Training Center of the Coastal Bend (CTCCB); Bob Parker, chairman of the board, National Center for Construction Education and Research (NCCER) and CTCCB; David Setzer, executive director, Workforce Solutions for North Central Texas (WSNCT); Isabel Soto, SkillsUSA; Mike Reeser, chancellor, Texas State Technical College (TSTC); and Brenda Hellyer, chancellor, San Jacinto College, Texas Association of Community Colleges, to testify on Interim Charge 1.

Matula said that training centers such as CTCCB fill gaps that are present in workforce training. She stated that direct funding from the industry subsidizes the tuition fees for students at CTCCB. She provided statistics relating to students at CTCCB that show that close to 100 percent of students are employed in the field in which they trained. Matula stated that many students at CTCCB have stated that they would have dropped out of school had they not participated in CTE at CTCCB. She said that students at CTCCB represent different intelligences, not lesser, than other students. She said that many students need CTE and Texas needs those students as workers.

Parker testified that NCCER determines curriculum for many CTE programs in the state. He said that CTE in public high schools has declined and that few schools have the facilities to provide CTE. He said that because school districts are reluctant to pass bonds to build such facilities, CTCCB built its own training facility and 14 feeder schools have adjusted their schedules to bring students for CTE at the facility. Parker stated that the high school dropout rate for students who participate in CTE at CTCCB is reduced because they must stay in regular high school classes to be part of the CTE program. He said that if the four-by-four plan is enforced on every student, not enough time will be allowed in their student schedule for CTE. He stated that the four-by-four plan should be reevaluated to determine whether it benefits every student.

Setzer discussed the workforce initiatives taking place at WSNCT, stating that all of the 28 local workforce development boards in Texas operate with similar coordination with their local business community. He said that WSNCT has collaborated with business, economic development organizations, chambers and other government and non-profit groups to identify training gaps and opportunities that address the specific industry training needs. He said that the North Central Texas Workforce Development board elected to focus on logistics and formed an industry-based advisory group to advise the board on workforce development issues. He stated that, as a result, the Certified Logistics Technician (CLT) program was developed as a collaboration between the public and private sector and has certified over 700 students in North Texas and over 2700 students nationwide with over 160 employers in Texas. He said that WSNCT recently won a \$5 million DOL technical skills grant that will provide education, training and job placement in information technology, professional, scientific and technical services within the North Central Texas area. Setzer said that North Central Texas receives a significant portion of funds from the Texas Skills Development Fund and has a wide distribution of funded projects across the region targeted toward manufacturing and health care. He stated that CTE helps make the North Central Texas region more attractive to new companies and demonstrates the positive business climate that exists in Texas.

Soto discussed her personal experience as a CTE student at SkillsUSA. She said that CTE provides students with the behaviors and skills that are necessary to participate in the workforce as well as at institutions of higher education. She stated that CTE gives students the motivation

to complete their education. Senator Lucio commended Soto on her education and commitment to promoting CTE.

Reeser stated that TSTC is the only state-supported, two-year technical college system in Texas. He said that TSTC is first in the nation in the creation of associate degrees in engineering-related fields. He said that Texas has a good supply chain for a skilled workforce but that the shortage of workers will get worse if the state does not change its policies. He said that Texas industries will be lacking workers in crucial sectors of the workforce. Reeser said that not enough students are entering CTE. He said that the Texas Workforce Investment Council has recommended a strategy to get students engaged in CTE by informing families about the economic opportunities that can be gained from vocational training. Reeser stated that solutions to workforce-related issues will require coordination between policy makers, educators, and businesses.

Senator Lucio asked whether TSTC experiences more difficulty placing students in jobs in areas of the state with higher unemployment rates. Reeser replied that TSTC funding is based on its placement of students in jobs and that areas of high unemployment provide many opportunities for TSTC to place students. He said that TSTC programs are aligned with the demands of the industry that are within the community.

Hellyer discussed examples of community colleges that have collaborated with businesses to meet the workforce needs in their region, including Bell Helicopter and Amarillo College, McLennan Community College and the Heart of Texas Workforce Center, Odessa College, The Laredo Community College Economic Development Center, Alamo College, and San Jacinto College. She said that emphasis needs to be placed on career readiness as well as college readiness and that students need to be given options for CTE in high schools.

Senator Lucio asked how difficult it is for individuals seeking to enter post-secondary CTE programs to find the necessary funding for tuition. Hellyer replied that the majority of assistance for individuals is provided by funds from the Skills Development Fund, TWC, and DOL. Senator Lucio stated that financial aid is extremely important and that it is detrimental to the lives of Texans and to the Texas economy when funding is not available for workforce programs.

Senator Carona opened the hearing to public testimony.

Brandon Comisarenco and Elizabeth Bell discussed their personal experiences and future goals with CTE at SkillsUSA.

Andy Ellard, CNC Machining, said that manufacturers are desperate for skilled labor. He said that high school graduates must be ready for skilled employment or to obtain an associate degree without remedial courses.

Michael Cunningham, executive director, Texas State Building and Construction Trades Council, expressed concern that workers in the construction industry will be retiring at a faster rate within the next few years. He said that funding for apprenticeship programs in the state should be increased, stating that apprenticeships provide job training by individuals who are already in the industry.

Richard DePue, director of operations, Certified Welding and Testing Company, discussed the need for skilled labor in the welding and metal trades, stating that the current average age of welders is 58. He said that CTE should be available in Texas high schools.

Morgan Little, chair, Texas Reserve Officers Association, discussed reservists in the workforce, stating that the United States Department of Defense released over 14,000 guardsmen and reservists in January, 2012. He expressed hope that Texas will be able to provide veterans and reservists employment and education opportunities.

Jim Brennan, director, Texas Coalition of Veteran Organizations (TCVO), stated that legislation relating to service contracts for veterans that was passed by the 80th Legislature, 2007, should be amended to address the needs of small businesses. Senator Carona asked Brennan to work with the committee to address concerns raised by TCVO.

Dan Barrow, Zachry Industrial, discussed statistics that highlight the need for skilled workers, noting one prediction that stated that 185,000 new workers will be needed in Texas within the next 10 years to fill the positions vacated by retiring workers. He said that CTE should begin at the high school level. Barrow expressed support for compact agreements between high schools and community colleges for dual credit of CTE.

Bubba Norman, president, Board of Directors, Texas Industrial Vocational Association (TIVA), stated that CTE instructors prepare students for entry-level occupations or post-secondary education. He said that the majority of instructors maintain their industry certification and licenses in order to teach relevant skills to students with the same rigor that is involved in the industry. Norman asked that CTE be funded and supported in Texas schools.

Linda Holcombe, executive director, TIVA, testified that CTE plays an important role in communities in Texas. She said that there has been an increase in CTE enrollment in Texas high schools but that CTE should be expanded in order to ensure that it provides rigorous and relevant skills to students.

Jim Quinten, president, Automotive Parts and Services Association, discussed the changes in the automotive service industry, stating that highly technical skills are become more necessary as automobiles become more complex and computerized. He said that it is a challenge to keep automotive programs in high schools and that APSA fights for funding for such programs every legislative session.

Mike Hollen, representing himself, stated that the commercial construction industry is in dire need of construction workers. He said that clarification should be made such that unlicensed commercial craftsman are not classified as independent contractors.

The committee recessed subject to the call of the chair.

—by *Endi Silva, SRC*

July 10, 2012

The Senate Committee on Business and Commerce met on Tuesday, July 10, 2012, to receive quarterly updates from state agencies and to take invited and public testimony on the following interim charges:

- Interim Charge 7: Review current and pending Electric Reliability Council of Texas (ERCOT) protocols as they apply to all generation technology, and identify those protocols that may provide operational, administrative, or competitive advantages to any specific generation by fuel type. Consider the impact any revisions to the protocols may have on grid reliability and electricity rates. Make recommendations for revisions or statutory changes to limit distortions in the Texas electrical market;
- Interim Charge 4: Study the relationship between city governments and municipally owned utilities (MOUs), including any duplicative or redundant functions, the amounts and justifications required for transfer payments between the entities, and the benefits and disadvantages of alternative governance structures; and
- Interim Charge 3: Conduct a broad review of the Texas homeowners insurance market and make recommendations to improve transparency and consumer education, ensure fair practices, and lower rates.

Senator Carona called the meeting to order and called Ken Anderson, commissioner, Public Utility Commission of Texas (PUC), to testify. Anderson discussed the status of implementing legislation passed by the 82nd Legislature, Regular Session, 2011, and recent rulemaking proposals by PUC. He said that PUC has adopted rules relating to distributed renewable generation. He said that PUC has adopted rules that update PUC's procedures regarding demand ratchets and that establish the standards by which certain nonresidential customers of transmission and distributions utilities are exempted from the use of ratchets with respect to their billings for electric service. He stated that recently adopted rules provide reductions in Texas High Cost Universal Service Plan support for local exchange carriers.

Anderson stated that amendments to rules regarding energy efficiency have been proposed and include the addition of an evaluation, measurement, and verification framework that will result in more accurate estimation of energy and demand impacts and program performance. He said that other amendments include updating cost calculations to account for the transition to a nodal market in ERCOT; increasing the demand reduction goals of annual growth in demand beginning in 2013; adding provisions for utility self-delivered programs; revising load management programs by requiring more coordination with ERCOT; increasing the budget for targeted low-income programs; formalizing the energy efficiency implementation project process; and revising the customer protection standards.

Anderson said that PUC has proposed a rule that requires an electric utility to give nursing facilities, assisted living facilities, and hospice facilities the same priority that it gives to a hospital in the utility's emergency operations plan for restoring power after an extended power outage, pursuant to S.B. 937 (Lucio; SP: Naishtat), 82nd Legislature, Regular Session, 2011. He

expressed concern that adding more facilities to the priority list will limit the amount of circuits that can experience electric outages and that facilities on other electric circuits will be without electricity for a longer period of time.

Anderson said that PUC held a workshop to give interested parties an opportunity to provide input regarding whether the Texas universal service fund accomplishes the purposes set forth by the Public Utility Regulatory Act and whether changes are necessary to accomplish those purposes.

Anderson discussed non-legislative mandated rulemakings. He said that PUC adopted a rule that provides that electricity purchased by the owner or operator of energy storage equipment or facilities for later regeneration and resale will be a wholesale transaction. He stated that rules were adopted relating to the ERCOT Pilot Program that will allow projects involving advanced technologies, such as large scale energy storage, to be explored within the ERCOT region. Anderson said that the system wide offer cap was increased from \$3,000 per megawatt hour (MWh) to \$4,500 per MWh in order to ensure that the price signals in the ERCOT market are adequate to maintain continuous electric supply. He said that the Emergency Interruptible Load Service was renamed the Emergency Response Service (ERS) and that distributed generators are allowed to participate in ERS by injecting energy onto the grid.

Senator Carona called H.B. "Trip" Doggett, president and chief executive officer, ERCOT; Dan Jones, independent market monitor, ERCOT and Potomac Economics; and John Fainter, president and chief executive officer, Association of Electric Companies of Texas (AECT), to discuss Interim Charge 7.

Doggett stated that a protocol revision request is a request to make additions, edits, deletions, revisions, or clarifications to ERCOT protocols and may be initiated by ERCOT staff or by stakeholders. He said that the stakeholder process allows market participants to participate in developing business rules and practices that govern the ERCOT market. He discussed the process of creating and revising protocols. Doggett said that protocols govern how electric generating resources interconnect and interact with the transmission grid and that protocols are different for certain generators because they use a variety of technologies and fuel resources. He stated that different technologies necessitate different protocols for generators based on how fast the unit can start or restart and whether the unit is dependent on weather conditions, whether the unit's output can be controlled to what is required, or how the unit is available on a particular day affect transmission congestion on that day.

Doggett stated that when ERCOT purchases additional capacity to meet reliability needs, the costs of those purchases are allocated to entities with a capacity shortfall. He said that the capacity shortfall for intermittent renewable resources (IRRs) is calculated based on forecasted values because IRR ability to plan for scheduled capacity depends on the weather. He said that IRRs are allowed relaxed penalties when meeting capacity schedules due to the variability of the weather. Doggett stated that in the event that ERCOT needs to take generators offline for reliability reasons, nuclear and hydro power generators will only be taken offline after all other plants.

Senator Van de Putte asked how the amounts of penalties for generators who go outside ERCOT standards are determined. Doggett replied that every generator has a responsibility to generate

according to its capacity schedule and that every generator has a bandwidth that is either a megawatt value or percentage of its schedule. He said that the bandwidth is held tighter for non-intermittent resources than for IRRs. Doggett stated that IRRs are held to a tighter standard if ERCOT is experiencing operational issues and has to curtail resources. Senator Van de Putte asked Doggett to provide examples of generators that have been penalized for going outside ERCOT standards. Doggett responded that it is not unusual for generators to go outside the bandwidth and stated that he will provide information to the committee regarding how often the generators are penalized.

Senator Watson asked what the ERCOT protocol for day-ahead forecasting is and how it affects the price and availability of electricity. Doggett responded that ERCOT provides day-ahead forecasts early in the morning so that parties will have information regarding the level of generation capacity that will be available the following day. Doggett said that Senator Watson was referring to an incident in which the day-ahead forecast was provided late in the afternoon. He said that there have been some challenges to completing the day-ahead forecast on time. Doggett stated that the day-ahead market combines bids to procure energy, offers to sell energy, and network configurations. He said that there is an algorithm that determines the least-cost generation for the day-ahead market but that a significant number of transmission outages makes the execution of the algorithm more difficult. Senator Watson asked why the price of electricity was doubled from the day before, when the day-ahead forecast was not executed on time. Doggett replied that the next day was projected to be much warmer than the previous day and stated that he was not aware of fewer generators being available that day.

Senator Watson asked what can be done to ensure that there is not some effort to manipulate the electric market, that the day-ahead forecast is provided on time, and that ERCOT protocols are followed. Jones responded that ERCOT will provide a formal response to the committee.

Senator Van de Putte asked whether ERCOT believes the reserve margin of 13 percent should be treated as a target or as a minimum requirement, as discussed in the Brattle Group Report. Doggett stated that ERCOT will be discussing the reserve margin in an upcoming PUC workshop. He said that PUC will make the decision whether the reserve margin should be a target goal or a minimum requirement and that ERCOT will provide information to PUC regarding various consequences of lower reserve margins. Senator Van de Putte asked to be kept informed on the timeframe of that PUC decision.

Jones stated that power plant operators are required to provide a plan to ERCOT each day about how they intend to operate and that plant operators are subject to penalties if they do not follow those plans. He said that IRRs are not subject to schedule control requirements unless an IRR is required by ERCOT to reduce its production to manage congestion on the transmission system. He said that this differing treatment for IRRs makes sense because lower output from one IRR may offset the lower output from another. Jones stated that it is more cost effective for ERCOT to centrally manage the deviations of IRRs in aggregate than to impose requirements on individual IRR facilities.

Jones said that ERCOT manages variations in demand by customers through the use of ancillary services, which are services that are provided by power plants and are paid to be available to ERCOT in order to balance supply and demand. He said that ERCOT has also increasingly used these services to manage deviations in the output of IRRs but that under the current ERCOT

protocols, the costs of these ancillary services are born solely by retail electric providers, MOUs, and electric cooperatives. Jones stated that it is appropriate to consider whether IRRs should bear a portion of these costs since IRRs impose similar burdens and receive similar benefits relating to the provision of ancillary services. He said that one approach would be to include the actual production from IRRs in ERCOT's allocation of ancillary service costs.

Senator Watson asked whether Jones, as the independent market monitor, has any concerns regarding the volatility of the electric market this summer. Jones stated that the ERCOT wholesale market is already volatile but that he expects no additional volatility based on changes made by PUC or ERCOT.

Fainter testified that AECT supports the flexibility of current ERCOT protocols. He said that the state will continue to have emerging technologies and that flexibility is needed when dealing with IRRs and new technologies, such as energy storage and demand-side management. He stated that all market participants have the opportunity to work with ERCOT and PUC in order to establish protocols. Fainter said that the growing state population and increased industrial and commercial development will increase electric demand. He said that AECT supported the creation of the independent market monitor in 2005 and that any indication of market manipulation should be reported to PUC. Fainter said that the protocol process at ERCOT works well for a fast changing market in a growing state.

Senator Lucio asked whether the electric industry is keeping up with the demands of industrial and residential growth. Fainter replied that the state will have to make more investments in infrastructure than other states in order to meet growth. He said that AECT supports the rulemaking at PUC and protocol amendment process at ERCOT that includes the collective input of stakeholders.

Senator Carona called Mark Zion, executive director, Texas Public Power Association (TPPA); Doyle Beneby, chief executive officer, CPS Energy; Lee Leffingwell, mayor, City of Austin (Austin); and Mike Schultz, mayor, City of Boerne (Boerne), to testify on Interim Charge 4.

Zion discussed MOUs and the financial relationship between MOUs and municipal governments. He said that 72 MOUs provide power to approximately 4.1 million Texans, which represents 15 percent of the state's electricity market. He said that MOUs are full-service electric utilities that own poles, wires, and power plants. Zion stated that local authorities set MOU rates and policies that are responsive to community priorities. He said that financial support for local government is a key part of the value proposition of MOUs and stated that almost all MOUs make payments or transfers to local government to fund municipal services and to help grow the local economy. He said that MOUs throughout the state are governed by either city councils or citizen boards. Zion discussed MOU ratepayers who reside outside the city limits (outside ratepayers). He said that the majority of MOUs serve outside ratepayers and that a survey by TPPA shows that outside ratepayers represent an average of 12 percent of MOUs' customer base. He stated that PUC determined electric service territory boundaries in the 1970s based on the location of utility infrastructure at that time and did not consider city limits in the process. He said that outside ratepayers have access to local public processes regarding utility policies and rates and have the authority to appeal rates to PUC. Zion stated that appeals are rare and that outside ratepayers have been treated fairly by MOUs.

Senator Lucio stated that MOUs provide millions of dollars to municipalities throughout the state.

Beneby discussed the history of CPS Energy, which serves the City of San Antonio (San Antonio) and its vicinity. He stated that CPS Energy is the largest MOU in the nation that provides both electricity and natural gas to its customers. He said that CPS Energy's average residential electric rate is \$.09 per kilowatt hour (kWh), which is among the lowest rates in the state. Beneby stated that CPS Energy is governed by an independently appointed board of trustees that includes the mayor as an *ex officio* member and four members representing each quadrant of the utility's service area. He stated that the citizen advisory committee serves as a liaison between CPS Energy and its customers and provides input to the CPS Energy board of trustees. He said that approximately 14 percent of CPS Energy's gross revenues is transferred to San Antonio every month, which provides for nearly 30 percent of the city's general operating budget. Beneby discussed CPS Energy's renewable energy portfolio that includes wind, landfill gas, and solar energy projects. He stated that the goal of CPS Energy is to diversify its energy portfolio so that its customers are less exposed to fuel price increases. Beneby stated that there will be no rate increase by CPS Energy in 2012.

At Senator Van de Putte's request, Beneby discussed the 40-megawatt solar energy project in San Antonio. He said that the city received so many bids that the project was increased to 400 megawatts of solar energy infrastructure. He stated that the project is expected to result in approximately 500 new jobs, \$115 million of initial capital investment, and an ongoing payroll of \$38 million per year for San Antonio. He said that the costs of the project will be offset by the resulting economic development benefits.

Senator Carona stated that the cost for solar energy equipment is decreasing and that solar energy projects are becoming cost-neutral. Beneby agreed and said that although there is an increase in competition in the solar energy business, the costs for implementing solar energy are decreasing.

Senator Van de Putte commended the CPS Energy citizen advisory committee for being an instrumental part of the decision by CPS Energy to retire older power plants in 2018, earlier than what was initially planned.

Leffingwell discussed Austin Energy (AE), noting that AE is the eighth largest MOU in the nation. He said that AE is vertically integrated and is governed by the Austin city council. He stated that AE provides financial assistance to low-income customers and is known for award-winning energy efficiency and load control programs. He stated that AE owns and operates a diverse generation portfolio of 2,500 megawatts of generation capacity and expects to add 1,000 megawatts of new generating capacity. Leffingwell stated that AE recently completed a two-year public process of restructuring its electric rates. He said that the process included 14 city council work sessions and several public hearings in which stakeholders helped formulate a new rate structure that resulted in the first rate increase by AE since 1994. He said that a petition to appeal the rate increase is being filed by outside ratepayers. Leffingwell stated that 9.1 percent (\$105 million) of AE's gross revenue was transferred to Austin's general fund to support city services including public safety, roads, parks, and libraries. He stated that AE is in the process of reviewing its governance structure and reassessing the general fund transfer to better account for AE revenue of non-fuel resources. Leffingwell stated that if an appeal against the recent rate increase is submitted to PUC, PUC will review all of AE's expenses to ensure that rates are fair.

He said that AE will continue to encourage public participation and community discussion on utility issues.

At Senator Watson's request, Leffingwell discussed why AE had not implemented a rate increase since 1994, stating that AE was making a profit until recent years. He said that in the past two years, AE has had to use some of its reserves to cover operating costs. Leffingwell stated that the rate increase is the result of a two-year public process and will go into effect in two phases; the first phase will be implemented in October 2012 and the second phase will be implemented in 2015 when AE contracts with industrial customers expire.

Senator Carona asked how AE rates for residential customers compare to rates in other major Texas cities. Leffingwell replied that AE has remained in the bottom 40 percent of rate structures of other cities and stated that the Austin city council adopted a financial policy that intended to keep AE in the bottom 50 percent statewide for all electric utilities.

Senator Watson asked Leffingwell to describe the process of reviewing the governance structure of AE. Leffingwell stated that the Austin city council has asked the city manager and the citizen electric utility commission to study various forms of governance for MOUs similar to AE that also have outside ratepayers and to determine what form of governance will best fit AE. He expressed his opinion that AE should move to a governance structure more similar to that of CPS Energy in which a separate board of directors manages the MOU. Leffingwell stated that he would support having outside ratepayers on the governing board of directors should AE move to that model.

Senator Lucio, Senator Watson, Leffingwell, and Zion discussed MOU service territories within city limits. Zion stated that it is not uncommon for a city to be serviced by more than one electric utility company.

Schultz discussed Boerne Utilities (BU), which is owned by the City of Boerne and governed by the mayor and city council. He stated that approximately \$1.5 million is currently transferred from BU funds to the city general fund annually and an additional \$750,000 for specific projects will be transferred within the next year. Following an inquiry from Senator Watson, Schultz stated that amount represents approximately eight percent of Boerne's general revenue. Schultz stated that BU has received awards for transparency. He stated that extra sales tax revenue is used for property tax reduction and that BU revenues provide for economic development projects. He stated that BU serves 427 customers outside the Boerne city limits.

Senator Carona called Shane Menking, president and chief financial officer, Data Foundry, to testify. Menking expressed concern that dramatic increases in AE rates will limit the ability of businesses to grow and hire additional employees. He stated that Data Foundry actively participated in the public discussions regarding the rate increase by AE. Menking stated that costs shifting and duplication of services between the Austin city government and AE is enabled by the current governance structure. He said that Austin shifts costs to AE and uses AE to fund activities not related to electricity in lieu of using taxpayer funds. He stated that CPS Energy is not increasing its rates and that it might be time to consider creating an independent board for AE similar to the CPS Energy board of trustees.

Senator Carona called Eleanor Kitzman, commissioner, Texas Department of Insurance (TDI), to testify on Interim Charge 3.

Kitzman stated that TDI compared Texas' homeowners insurance premiums with those of other states and studied different factors that affect insurance premiums in other states. She said that the TDI research found that the primary driver of high premiums is high losses, both actual ordinary losses and potential catastrophic losses. She said that no other factor appears to be correlated with premium levels. Kitzman noted that there is a difference between rates and premiums, stating that rates are what insurers file with TDI and that premiums are what insurers actually receive from customers. She said that the amount of homeowner insurance is the amount it would cost to completely rebuild the structure and that the average amount of insurance purchased by policyholders in Texas has increased every year since 2000. She said that there is regional variation in average premiums and average losses across Texas, noting that the highest loss per policy is in the first and second tier coastal counties due to their exposure to hurricanes.

Kitzman discussed analysis of other cost components that insurers use to justify their rates in their filings to TDI. She stated that underwriting expenses, or the costs of issuing and selling insurance policies, are also causes of high premiums. She said that there have been changes in the way insurers view catastrophic risk.

Kitzman recommended measures to mitigate loss costs in order to reduce homeowner insurance rates in the long term. She said that licensing of roofing contractors would ensure that contractors have the needed qualifications and training and ensure that roof repairs are made to better withstand the next event. She said that premium credits for the use of impact-resistant building materials would reduce hail losses. Kitzman said that reducing fraudulent activity would reduce costs to both consumers and insurers and that stronger building codes and rigorous enforcement of those building codes have been shown to decrease loss costs.

Kitzman discussed a recent conversation she had with Representative Smithee regarding the Texas Windstorm Insurance Association (TWIA). She said that there was concern regarding TWIA's ability to pay claims and confusion among insurers and policyholders regarding whether the state would pay claims that could not be paid by TWIA. She said that a meeting that was scheduled at TDI to adopt rules regarding surcharges to tier one insurance policies pursuant to legislation passed by the 82nd Legislature, First Called Session, 2011, was postponed at the request of legislators and the public.

Senator Carona commended Kitzman for her candor regarding TWIA. He said that it is an issue that should be taken very seriously. Kitzman stated that it is her intent to see that the claims of every policyholder are paid. She said that the solution to TWIA's insolvency is not to solely raise rates for coastal policyholders and that TWIA rates need to be higher.

Senator Hinojosa said he was satisfied with his recent conversations with Kitzman regarding TWIA. He said that long-term solutions for TWIA should be statewide and should not pit one part of the state against another.

Senator Lucio expressed disappointment that the TDI meeting was postponed and asked whether other meetings are scheduled in which those affected by an increase in TWIA premiums will be

able to participate. Kitzman replied that the meeting was postponed at the request of a delegation of state representatives from the coast and that a TWIA summit, where members of the public can voice their concerns, might be scheduled in August of 2012.

Senator Lucio asked whether TDI has any recommendations to lower insurance rates in the short-term. Kitzman responded that there are no short-term solutions that will have an immediate impact. She said that weather-related losses are causing high insurance premiums.

Senator Van de Putte stated that postponing the recent TDI hearing might have added to the confusion regarding TWIA and stated that TDI should not be afraid of transparency and openness regarding the problems of TWIA.

Senator Van de Putte, referring to the cost components that Kitzman discussed in her testimony, asked whether it is fair to say that weather-related loss costs is the only reason for higher insurance premiums. Senator Van de Putte stated that, according to written testimony provided by TDI, the cost of reinsurance has doubled and underwriting profits have tripled. Kitzman replied that reinsurance and underwriting costs are directly related to loss costs which can be attributed to the weather. She said that weather-related losses are not only along the Texas coast, noting that recent hail damage claims have exceeded hurricane-related claims. Senator Van de Putte asked why policy acquisition costs are 43 percent higher and fee expenses are 47 percent higher in Texas than the rest of the nation. Kitzman replied that it is difficult to determine a reason with the data that is available.

Senator Carona called Heather Morton, program principal, National Conference of State Legislatures; Deeya Beck, public counsel, Office of Public Insurance Counsel (OPIC); Eli Lehrer, president, R Street; and Ware Wendell, director of legislative affairs, Texas Watch, to testify.

Morton said that states have taken an active role in addressing issues related to homeowners insurance. She said that the goal of state legislation is to ensure that insurance rates are fair and that insurers are able to remain financially sound. She discussed legislation recently enacted by other states relating to transparency and consumer education, the impact of inquiries and claims history on insurance policies and premiums, mitigation policies, and residual market issues. Morton said that the issues relating to insurance rates are complex and involve many variables, which make it difficult for legislators to find one single solution to address high insurance premiums.

Beck discussed some of the challenges of evaluating rate filings by insurers. She said that some factors within the rate filings are not subject to evaluation. She said that some filings are incomplete and OPIC has to ask the insurer for additional information in what she deemed a "file and haggle" system. She stated that templates developed by TDI for rate filings have minimized haggling but that insurers are not required to use such templates. Beck stated that reinsurance is being purchased by insurers to cover losses that are not catastrophe losses. She said that reinsurance should be subject to evaluation in order to determine whether it diversifies risk and whether the amount of reinsurance purchased is reasonable. She said that consumers should be encouraged to participate in the insurance marketplace and to shop around for different policies. Beck expressed concern that many consumers do not know what types of coverage they have and what other insurance policies may offer.

Lehrer testified that Texas' homeowners insurance premiums rank among the highest in the country but stated that they are not the highest for the amount of risk that is covered. He said that the primary factors determining insurance premiums in the state relate to natural risks and are beyond the legislature's control. He stated that Texas must clarify its insurance regulatory legal systems in order to attract capital. Lehrer said that the state should consider ways to encourage stronger building codes and should adopt nationally recognized standards for reinsurance capital in order to improve competition in the insurance and reinsurance market.

Wendell said that homeowners are paying higher insurance premiums for less coverage. He said that the insurance marketplace should be simplified so that consumers can make better comparisons on the value of their insurance policies. He stated that consumers often shop for the least expensive policy but are unaware of what the policy covers until they file a claim. Wendell stated that insurers should provide checklists that detail what policies do and do not cover at different prices. He said that policyholders should not be penalized by insurers for inquiries regarding their coverage.

Senator Carona called Lee Loftis, director of government affairs, Independent Insurance Agents of Texas (IIAT); Beaman Floyd, director, Texas Coalition for Affordable Insurance Solutions; and Dwayne Baker, Texas Association of Builders, to testify.

Loftis stated that independent agents work with multiple insurance companies rather than representing a single insurer. He said that by working with multiple carriers, IIAT members offer comparative quotes for their residential and commercial customers. He said that consumers should consider coverage options, stating that the options offered to a customer are as important as the price of the policy. Loftis stated that IIAT members will better serve consumers by participating in *TrustedChoice.com*, a website that will allow consumers to input underwriting information online and receive multiple quotes from various carriers writing in their area. He said that few people know about *HelpInsure.com*, which is maintained by TDI to help consumers compare insurance information. He said that one way to promote *HelpInsure.com* is to model an advertising campaign after the Texas Department of Transportation's "Don't Mess with Texas" and "Click It or Ticket" advertising programs. Loftis said that a committed advertising campaign by TDI may be the best way to get the word out to consumers about *HelpInsure.com* and other tools.

Floyd testified that the committee needs to consider short-term and long-term losses when discussing of price of insurance in Texas. He said that insurers are paying out more in expenses and direct claims than they are bringing in from premiums. He said that Texas insurers have had low returns on equity in recent years. Floyd said that the committee should consider policies for loss mitigation and that the benefits of mitigation efforts will be incrementally efficacious. He said that insurers should be provided with mechanisms, such as surcharges or nonrenewal policies, in order to incentivize consumers to better manage risks.

Senator Carona and Floyd discussed changes in the international hurricane insurance model.

Baker stated that many older homes are not properly insured. He said that having forms for consumers to better understand their coverage is important. He said that affordable insurance is directly related to affordable housing. He said that building codes in Texas can sometimes be

convoluted and stated that the international residential codes have helped the construction of buildings to a higher code. Baker said that ensuring that policies make insurance more affordable for consumers in Texas will be challenging.

Senator Carona opened the hearing to public testimony.

Richard Howe, representing himself, stated that there should be more encouragement for the use of solar resources. He said that there are plenty of solar resources in Texas and that solar technology is readily available. Senator Carona discussed a recent forecast that predicted that by 2014 solar energy resources will be as competitive as natural gas resources.

A. R. "Babe" Schwartz, representing himself, stated that non-admitted insurance companies are writing policies in Texas and are not covered by the insurance guaranty fund. He said that national flood insurance premiums will double in the next four years.

John Cobarruvias, a resident of Clear Lake, Texas, testified that his insurance premiums have increased by 25 percent since 2010. He said that there have been no changes to his coverage but his premiums have continuously increased since 2003. He said that he has shopped for other policies but other insurance companies cannot compete with his current USAA insurance policy.

M. G. Johnson, Jr., discussed his personal experience and dissatisfaction with an automobile casualty insurance claim against USAA.

Roger Borgelt, general counsel, Homeowners United for Rate Fairness (HURF), discussed HURF's opposition to AE's rate increase. He said that the governance structure of AE should be reevaluated. He said that a recent American Public Power Association survey shows that the majority of MOUs that are the same size of AE are governed by an independent board rather than a city council. Borgelt recommended that an independently appointed and geographically representative board of trustees be established to manage AE. He stated that benchmarks by which AE can be periodically evaluated in relation to the performance of other MOUs should be required.

Mark Farrar, executive director, HURF, testified that the spending practices of AE are beyond the norms for public power systems. He discussed the differences between AE and CPS Energy. Following an inquiry from Senator Watson, Farrar stated that HURF has not received the required amount of petitions to file a rate appeal to PUC.

Dick Brown, representing himself, testified that although he lives outside the Austin city limits, he is required to be a customer of AE. He said that outside ratepayers cannot vote for Austin city council members who are charged with setting AE rates. Brown said that AE's financial problems stem from spending on projects that have nothing to do with the utility and are not related to rate adequacy.

Andrew MacFarlane of Data Foundry, Inc. expressed concern that an increase in AE rates will affect Data Foundry's ability to remain competitive and hire employees. He said that implementing distributed generation will help mitigate rate increases and alleviate shortages in energy resources.

Leo Wadley stated that, as a roofing contractor, he is willing to serve as a resource to the committee.

Kelsey Southerland, Texas Energy Storage Alliance, stated that thermal energy storage has been proven to be cost effective. She said that energy efficiency programs should include thermal energy storage.

Tom "Smitty" Smith, director, Public Citizen, stated that there have been many myths concerning the governance structures and general fund transfers of MOUs. He said that three of the seven members of the citizen advisory commission of AE were outside ratepayers. He stated that AE implemented a five-tiered rate increase structure in which the majority of customers who use less than 1,000 kilowatt per hour will have a rate increase of \$.08 per kWh. Senator Carona asked whether customers who live in a larger home will pay a higher rate than those who live in smaller homes. Smith replied that the rate is determined by how much energy is consumed in each home. Senator Watson asked whether the impact of the tiered rate structure on outside city ratepayers will be considered by PUC if appeal is filed. Smith replied in the affirmative and stated that MOUs are working well.

The committee recessed subject to the call of the chair.

—by *Endi Silva Ollis, SRC*

August 14, 2012

The Senate Committee on Business and Commerce

The Senate Committee on Business and Commerce (committee) met on Tuesday, August 14, 2012, to take invited and public testimony on the following interim charge:

- Interim Charge 5: Analyze the state of the telecommunications market in Texas, including the costs and benefits of full deregulation of the market; the impact and viability of the Texas Universal Service Fund (TUSF) and Provider of Last Resort (POLR) requirements; the impact of S.B. 980 (Carona, Van de Putte; SP: Hancock), 82nd Legislature, Regular Session, 2011, relating to telecommunications regulation and rulemaking; the availability of broadband; telecommunications service discounts; and rights-of-way charges. Make recommendations to enhance services, support the industry, and ensure adequate and affordable access for consumers.

Senator Carona called the meeting to order and called Brian Lloyd, executive director, Public Utility Commission of Texas (PUC); Bill Peacock, director, Center for Economic Freedom, Texas Public Policy Foundation; Lanetta Cooper, staff attorney, Texas Legal Services Center; Daniel Gibson, legal counsel, Texas Statewide Telephone Cooperative Inc. (TSTCI); Ron McMillan, regional vice president of government relations, Time-Warner Cable, representing the Texas Cable Association; Richard Lawson, legislative committee chairman, Texas Telephone Association; and Charles Land, executive director, TEXALTEL, to testify regarding the state of the telecommunications market.

Lloyd discussed the history of deregulation market tests. He said that telecommunication markets with populations in excess of 100,000 were deregulated through S.B. 5 (Fraser; SP:

King, McClendon), 79th Legislature, Second Called Session, 2005. He stated that PUC is required to approve deregulation of markets with populations between 30,000 and 100,000 where at least three competitors are unaffiliated with the incumbent with at least one non-facilities-based, one wireless, or one facilities-based competitor. He said that PUC adopted rules to provide standards for deregulation of markets with populations under 30,000. Lloyd said that S.B. 980 provided that, for all markets with populations under 100,000, companies can request deregulation if there are two competitors that are unaffiliated with the incumbent and provide voice service through any technology. He stated that S.B. 5 provided that the incumbent retained POLR obligation in a market after deregulation of the market while S.B. 980 provided that an incumbent does not have POLR obligation in a market after deregulation of the market.

Peacock stated that while the results of deregulating the telecommunications market have been phenomenal, there are still plenty of subsidies, regulations, or taxes that need to be significantly reduced or eliminated. He said that the price floors should be eliminated from laws regarding the telecommunications industry and rates in rural areas should be allowed to increase. Peacock stated that PUC should be given the authority to deregulate markets on its own initiative.

Cooper expressed concern regarding the absence of POLR obligations in areas of Texas that have been deregulated. She stated that data concerning whether subscriber penetration rates have been affected is not readily available and that the legislature should gather information regarding subscribership penetration, whether access to 911 services has been affected, and how access to reliable broadband service is achieved. Cooper stated that until data proves that affordable basic and reliable telecommunications service is readily available and accessible in the deregulated areas of the state, POLR obligations should remain for all areas in Texas that are currently not deregulated. She said that POLR obligations should be met through wireline telephone service availability. Cooper discussed research that has found that a large percentage of the elderly citizens retain wireline service. She stated that telephone service is a Lifeline for elderly citizens who may be physically immobile or who cannot use a cell phone.

Gibson stated that TSTCI is an association of 38 small and rural independent telephone companies and cooperatives that provide telecommunications services in rural areas of the state. He said that TSTCI members are often the only provider in rural areas due to the high costs associated with providing services to a low-density population in those areas. He said that the network necessary to provide those services cannot exist without some form of support. Gibson said that it is important that POLR obligations be maintained so that every Texan has high quality telecommunications service. He said that rural telecommunications companies have evolved as technology and the demand for advanced telecommunications services have grown. He said that continued investment in rural networks by telecommunications companies depends on the certainty of federal and state support they will receive to provide high quality service.

McMillan said that the current Texas telecommunications market is competitive and diverse. He stated that S.B. 980 ensures that retail Voice over Internet Protocol services (VoIP) will be free of unnecessary regulatory constraints. He stated that S.B. 980 also encourages fair competition by authorizing PUC to make adjustments to public subsidies that are provided to incumbent telephone companies who compete with other providers in the marketplace. He said that S.B. 980 ensures that non-regulatory policies regarding VoIP services do not impact PUC's authority over wholesale services or its ability to resolve carrier disputes. McMillan said that S.B. 980 also lessens unnecessary regulatory burdens on telecommunications providers, particularly

incumbent local exchange carriers (ILECs) that have deregulated some of their exchanges. He said that the role of PUC is important to the success of the telecommunications market.

Lawson stated that while competition is thriving in the Texas telecommunications market, competition may not exist in every part of the state. He said that a recent Federal Communications Commission (FCC) report shows that 95 percent of zip codes in Texas are served by one or more wireline competitors. He said that it is important to recognize the diversity of the state, noting that competition is lagging in the most rural parts of the state. He said that PUC has found that rural areas are the most costly to be served by telecommunication companies. Lawson said that the Texas Legislature has created an environment in which investment and competition can thrive.

Land urged the committee to consider the deregulation of retail and wholesale telecommunication markets separately. He stated that PUC should continue to ensure that the wholesale market is level between small and large providers. Land said that other states have declined responsibilities that were delegated to them by FCC and as a result, large providers have few regulatory restraints and competition has decreased in those states.

Senator Carona called Don Shirley, executive director, Connected Texas; Jim Lewis, vice president of governmental affairs, Comcast; Richard Lawson, legislative committee chairman, Texas Telephone Association; Gibson; Lawson; and Bob Digneo, assistant vice president, AT&T, to testify on the availability of broadband.

Shirley said that Texas ranks 21st in the nation in the availability of broadband services. He said that broadband at the lowest speed is available in 93 percent of rural areas without mobile wireless access and in 99 percent of rural areas with mobile wireless access. He stated that the need for broadband expansion exists primarily in the Rio Grande Valley of the state along Interstate 1-10, areas between Dallas and Midland and Odessa, and all of East Texas that is north of Houston and along the Oklahoma and Arkansas borders. Shirley stated that improving broadband availability is useless when only 60 percent of households and 80 percent of businesses in Texas subscribe to broadband services. He said that the uses of broadband are misunderstood by businesses and individuals and digital literacy and training programs should be implemented to show how businesses and individuals can benefit from broadband services.

Senator Carona and Shirley discussed declines in broadband usage in areas that experience slow download speeds. Shirley stated that the providers are not expanding services in rural areas because they are not getting the market share for the services they already provide.

Lewis discussed Internet Essentials, a program provided by Comcast to expand broadband adoption by low-income families. He said that Internet Essentials is a solution by the private sector to increase broadband adoption.

Gibson stated that broadband, telephone, and wireless services are often provided through one network in rural areas and that TSTCI companies have upgraded networks where capacity is needed. Senator Carona asked whether 100 percent of copper networks are being replaced with fiber networks. Gibson replied in the negative, stating that some upgrades are based on whether providers will recover the costs for investing in upgrading those networks.

Lawson stated that according to FCC, 83 percent of Texas households served by ILECs have access to broadband. He said that that the availability rate is better than other states with a

greater population density, like New Jersey. He discussed some of the technical challenges that ILECs face when deploying broadband services. Lawson said that in order to encourage broadband deployment, public policy should not favor certain providers over others and that any incentives should be technology-neutral.

Digneo stated that the demand for broadband services is greatly increasing, noting that AT&T invested approximately \$6 billion in Texas broadband networks from 2009 to 2011. He said that state policy that continues to encourage investment in both wireless and wireline broadband is crucial to state growth. Digneo said that policies regarding taxes on telecommunication investment and locating, erecting, or relocating wireless towers should be considered in order to accelerate the investment in broadband services in Texas.

Senator Carona asked how providers currently recover costs for relocating underground facilities that are along toll roads and highways in the state. Digneo said that current statute provides that the state and the utility evenly split the costs of relocating facilities. He said that he supports a shift in policy similar to those regarding the relocation of network facilities along interstate highways that requires the state to pay 100 percent of costs. He said that AT&T absorbs costs for relocating facilities in cities and counties but is reimbursed 100 percent for interstate highways.

Senator Carona called Eric F. Craven, senior vice president, Government Relations and Legal Affairs, Texas Electric Cooperatives (TEC); Todd Baxter, vice president of government relations and general counsel, Texas Cable Association (TCA); Kristie Ince, vice president of regulatory affairs, TW Telecom, Inc. (TW); and Snapper Carr, attorney, Texas Municipal League (TML), to testify regarding right-of-way charges.

Craven stated that TEC is the statewide association for 66 electric distribution cooperatives and nine generation and transmission cooperatives serving Texas. He discussed pole attachments, or hardware that is attached to cooperative property and should not be confused with right-of-way fees. He said that a cooperative is responsible for the placement and maintenance of poles. Craven said that cooperatives grant telecommunication providers access to their facilities through contracts. He said that discussions between cooperatives and telecommunication providers have addressed issues regarding attachment rate formulas and unauthorized, unsafe, and abandoned attachments. He stated that cable companies want cooperatives to set their attachment rates using an FCC formula that was revised in 2010 to reduce the attachment rate but cooperatives believe that the FCC formulas require electric utilities to subsidize the large cable and telecommunication companies by setting pole attachment fees artificially low. Craven said that TEC has proposed provisions that require a contract and permit before attachment in order to address the widespread problem of cable companies placing unauthorized and unsafe attachments on cooperative property. He said that TEC has also proposed that cable companies post a bond to pay for the removal of abandoned attachments and agree to authorize cooperatives to dispose of those attachments.

Baxter stated that TCA members have little choice but to attach their cable wires to existing utility poles in order to provide services. He said that installing duplicate sets of poles in the public rights-of-way are typically prohibited by local governments. He said that there is currently no state regulation that governs access to electric cooperative poles in Texas and that the lack of legislation has created conflicts between telecommunication companies and

cooperatives. He said that investor-owned utilities are required by federal law to allow nondiscriminatory access to poles at just and reasonable rates and are subject to regulatory oversight. He said that municipal pole owners are subject to pole attachment rental price caps and are also required to make poles available on a nondiscriminatory basis. Baxter said that there is no statute requiring electric cooperatives to provide access to poles and to do so with reasonable rates, terms, and conditions. He stated that cooperatives charge rates that are three times higher than the rates charged by other entities. He said that legislation is necessary to guarantee cost-based and efficient access to utility poles.

At Senator Carona's request, Craven discussed reasons why electric cooperatives charge up to three times more than other entities. Craven said that higher rates are being charged in urban, congested areas. He said that electric cooperatives are at a disadvantage when contracts with cable companies are being negotiated and that they use higher rates as a bargaining ploy. Baxter stated that TCA is asking for the same regulatory structure for electric cooperative pole attachments that is in place for investor-owned and municipal electric companies in order to avoid costly conflicts. Following an inquiry by Senator Carona, Baxter stated that TCA is looking for cost-based, fair, and equitable predictability. He said that FCC rate formulas provide compensation rather than a subsidy, as Craven had testified.

Senator Estes asked that TEC and TCA continue negotiating and to keep his office updated on any progress.

Ince stated that the rights-of-way compensation structure for telecommunication providers is unwieldy and imposes fees on telecommunication services. She stated that the committee should consider an alternative compensation structure. Ince discussed how rights-of-way fees translate into customers' bills. She said that there should be a correlation between rights-of-way fees and the actual burden imposed on the rights-of-way or the actual cost that a city incurs to manage its public rights-of-way. She said that there is no correlation between the cost of the service and the amount of the fee under the current scheme.

Carr stated that right-of-way fees are rent for use of public land. He said that statute requires cities to receive fair market value for the use of their land. He said that even though rights-of-way are on public land, they cannot be leased for free to for-profit companies.

Senator Carona asked whether the differences between all involved parties have been bridged. Carr said that the legislature required PUC to consider the definition of access lines and that TML has supported attempts by TW and TEXALTEL to amend the definition of access lines. Ince said that TW and TEXALTEL have participated in discussions with PUC. Senator Carona and Senator Watson discussed the need to find a solution regarding right-of-way fees.

Senator Carona called Lloyd, Peacock, Lawson, Gibson, and Ince to provide testimony regarding telecommunications service discounts (discounts).

Lloyd stated that the H.B. 2128 (Seidlits, et al.; SP: Sibley) 74th Legislature, Regular Session, 1995, provides that companies opting into incentive regulation were required to offer broadband digital services to certain public entities, such as schools and libraries, at a price of 105 percent of the company's long-run incremental cost. He stated that S.B. 773 (Zaffirini et al.; SP: Gallego

et al.) 82nd Legislature, Regular Session, 2011, extends the requirement to offer these services through January 1, 2016 and increases the price to 110 percent of long-run incremental cost.

Peacock stated that the discounts should be allowed to expire in 2016 and that consumers who actually use digital services should pay for the services.

Lawson said that a varied regulatory approach might better serve the diverse needs of Texas consumers. He said that rural ILECs should be given greater upward pricing flexibility in order to shore up revenue streams and to increase competition in rural markets. He said that POLR reforms, including line extension charges that more accurately reflect a company's underlying costs and allowances for new technologies and removal of legacy requirements would reduce costs for new investments. He said that ILECs are subject to burdensome regulations after deregulation and that certain triggers should be placed in statute that remove those remaining regulations.

Ince stated that there are still laws and regulations that cause harm to competition, such as mandatory discounts for the competitive services required by S.B. 773. She said that the committee should recognize how the telecommunications market has changed since these discounts were first implemented in 1995 and realize the negative effects they have on competition as a whole. She said that steeply discounted prices required to be offered by companies to schools, libraries, and medical centers means that no competitor can compete for those customers. Ince said that the mandated discounts create a monopoly market for those services. She stated that the committee should explore why public universities continue to need a rate-capped price for digital services when tuition at these institutions has been deregulated. Ince stated that the committee should determine whether the public entity market can transition to competitive market rates or whether a program could be instituted to allow all ILECs to compete for services.

Gibson testified that TSTCI supports the telecommunications service discounts.

Senator Carona called Roosevelt Weeks, deputy director, Houston Public Library System; Paul Chavez, network manager, Region 13 Education Service Center, Texas Association of Community Schools; Hank Fanberg, Technology Advocacy and Information Management, Christus Health; Wayne Wedemeyer, director, Office of Telecommunication Services, University of Texas at Austin; and Walter R. Magnussen Jr., director of telecommunications, Texas A&M University, to provide testimony regarding telecommunications service discounts.

Weeks testified in support of the discounts, stating that the Houston public library system would not be able to provide services without the discounts for telecommunication services. He said that because of the availability of the discounts, public libraries and schools have been able to deliver quality network connectivity to millions of citizens, making a wide variety of information readily available. Weeks discussed the public library system in Texas, stating that over 550 public libraries in the state offer Internet services to people within the communities they serve. He said that 64 percent of libraries in Texas report that they are the only source of free Internet access in their communities. He stated that the vast majority of libraries in Texas serve small and rural communities and provide access to technology, technology instruction, and electronic resources and databases that are only available electronically.

Chavez stated that schools in metropolitan areas have choices regarding services provided by ILECs that are required to extend discounts based on S.B. 773, but that schools in rural areas typically do not have a choice. He said that without the discount provided by S.B. 733, many school districts with only one ILEC could face a significant increase in rates. Chavez said that any increase in costs to provide additional Internet bandwidth would limit a school district's ability to provide a robust online experience.

Fanberg said that healthcare is a "connected activity," noting that entities have to share information and records across different settings. He said that the rate of change of medical technology is very rapid and broadband must be affordable and available to all Texas hospital facilities.

Wedemeyer stated that the goals of H.B. 2128 were to allow for a competitive telecommunications market, encourage investment in the state, and provide a world class telecommunications infrastructure in Texas. He said that component institutions of The University of Texas System spent approximately \$4.9 million in 2011 on infrastructure services that were acquired through the use of the discount. He stated that if national and state tariffs were imposed to acquire these services, the estimated cost would increase by more than five times, to \$27.5 million per year. Wedemeyer stated that bandwidth demand to meet academic, healthcare, and research needs increases every year and that the telecommunication discounts are vital to making those broadband services affordable for The University of Texas System.

Senator Watson asked how the discounts relate to tuition deregulation. Wedemeyer replied that The University of Texas System would have to increase tuition, increase payment amounts from patients, or reduce the number of people the system serves to cover costs associated with broadband services should the discounts no longer be available.

Magnussen testified that the annual fiscal impact of eliminating the telecommunications discount to the Texas A&M University System is approximately \$1.3 million per year. He said that broadband services are crucial to the delivery of education services in both urban and rural areas. He stated that competition in the telecommunications market is non-existent in rural areas. Magnussen said that broadband services in some rural areas are not available or affordable. He said that some estimates show that costs will increase 500 times more without the telecommunication discounts. Magnussen said that ILECs are authorized to make 110 percent of long-run incremental costs and if costs increase, ILEC profits might be exorbitant.

Senator Zaffirini asked what arguments could be made to the committee in favor of extending the telecommunication discounts beyond 2016. Magnussen replied that the total impact of costs for providing telecommunication services should be considered. He said that public schools and libraries are more dependent on broadband services and are unable to pass fee increases onto the public. Wedemeyer stated that the ability to deliver quality education and medical services, particularly to rural areas of the state, will be severely reduced if the telecommunication discounts were permanently expired.

Senator Zaffirini asked what should be included in a bill relating to the discounts. Wedemeyer responded that legislation should include a permanent continuation of the provisions set forth by H.B. 2128 and S.B. 773. Magnussen replied that legislation should provide that discounts are made available to ILECs in rural areas should the telecommunication discounts be discontinued.

Senator Zaffirini stated that the pros and cons of extending the telecommunication discounts will be considered and asked how arguments against continuing the discounts can be rebutted. Magnussen said that the cons of extending the discounts are based on faulty calculations. Wedemeyer replied that the implementation of higher broadband services in remote areas of the state exist because the universities and healthcare facilities have asked for those services to be implemented pursuant to H.B. 2128, providing a customer base for ILECs in areas that they would not otherwise serve.

Senator Carona opened the hearing to public testimony.

Clifford Gay, representing himself, stated that fraud within the telecommunication services in Texas is a public safety issue, particularly among elderly citizens. He discussed his personal experience with customer relations at AT&T.

Andrew McFarlane of Data Foundry, Inc. stated that Data Foundry's customers and patrons have traditional privileges, contractual nondisclosure agreements and statutory obligations to maintain confidentiality of corporate, governmental, and individual consumer proprietary information. He stated that Internet providers are increasingly inspecting network traffic and, as a result, more companies will be taking confidential information and communications offline, and returning to traditional, inefficient means of conducting business. McFarlane stated that the legislature should protect consumer privacy and ensure that consumers are not waiving their right to privacy every time they connect to the Internet.

Senator Van de Putte stated that the Texas Department of Information Resources has a task force on cybersecurity that is charged with protecting consumer privacy. McFarlane stated that cybersecurity should include safety from outside threats and from unintended access to confidential information for marketing purposes.

The committee recessed subject to the call of the chair.

—by *Endi Silva Ollis, SRC*

October 9, 2012

The Senate Committee on Business and Commerce

The Senate Committee on Business and Commerce (committee) met on Tuesday, October 09, 2012, to hear invited and public testimony on the following interim charges:

- Interim Charge 5: Analyze the state of the telecommunications market in Texas, including the costs and benefits of full deregulation of the market; the impact and viability of the Texas Universal Service Fund and Provider of Last Resort requirements; the impact of S.B. 980 (Carona, Van de Putte; SP: Hancock), Regular Session, 82nd Legislature, 2011, relating to telecommunications regulation and rulemaking; the availability of broadband; telecommunications service discounts; and rights-of- way charges. Make recommendations to enhance

services, support the industry, and ensure adequate and affordable access for consumers;

- Interim Charge 8: Monitor the implementation of legislation addressed by the Senate Committee on Business & Commerce, 82nd Legislature, Regular and Called Sessions, 2011, and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, review the implementation of H.B. 2592 (Truitt et al.; SP: Carona) and H.B. 2594 (Truitt et al.; SP: Carona) relating to payday lending, and make recommendations relating to consistency and coordination with local ordinances and federal law; and
- Interim Charge 9: Study whether advanced meters, or smart meters, that have been, and will be, installed in Texas have harmful effects on health. Report findings on whether an independent testing company analysis on the safety of advanced meters should be commissioned and the appropriate organization to conduct such a study.

Senator Carona called the meeting to order and asked William Rea, president, Environmental Health Center, Dallas, to testify on the effects of smart meters on health. Rea discussed his experience as a cardiovascular surgeon and discussed studies that are currently investigating the physiological changes that occur in response to exposure to electromagnetic frequency (EMF) and radio frequency (RF), such as that emitted by smart meters. He stated that certain individuals are predisposed to health problems associated with EMF and said that approximately nine million Americans have reported that they are bothered by wireless connections and smart metering.

Senator Carona called Leslie Pettijohn, commissioner, Office of Consumer Credit Commissioner (OCCC), to provide testimony regarding payday lending. Pettijohn stated that OCCC has been implementing new rules to regulate credit access businesses (CABs), pursuant to H.B. 2592 and H.B. 2594. She said that better procedures have resulted from meetings that involved all stakeholders. She said that OCCC has licensed 3,329 locations as CABs and has begun an examination process to ensure compliance with OCCC rules. She stated that OCCC received 306 complaints against CABs between December 1, 2011, and August 31, 2012, and that those complaints represent the second-highest number of complaints filed with OCCC behind complaints relating to motor vehicle sales finance. Pettijohn stated that OCCC has improved data reporting for CABs and said that approximately \$1.7 million in extensions of credit were obtained by CABs in the first six months of the fiscal year. She discussed regional variations in the distribution of payday loans by metropolitan statistical areas, stating that the highest average size of a payday loan was in the McAllen-Edinburg-Mission area.

Pettijohn suggested that the committee consider policy issues relating to uniformity of law, definition of CAB activity, and the 180-day time limitation for payday lending transactions. She stated that various municipalities have enacted ordinances that place limitations on payday and auto title loans and that the Finance Commission of Texas (finance commission) has adopted a resolution urging the legislature to articulate its intent to treat CABs uniformly in all jurisdictions. She said that provisions relating to the limits of CAB activity should be clearly defined in order to prevent payday and title lenders from disguising their transactions to avoid regulations. Pettijohn stated that there is uncertainty whether the 180-day limitation applies to the whole transaction of the loan or whether it applies to the completion of credit service organization (CSO) services. She said that the legislature should clarify its intent that the transaction of the loan must be completed within 180 days.

Senator Van de Putte and Pettijohn discussed the provisions of the federal Talent Amendment, which caps the annual percentage rate (APR) at 36 percent for service members and their dependents who obtain payday loans. Senator Van de Putte asked whether regional variances on the frequency of payday lending transactions in certain areas in Texas are related to military presence in those areas. Pettijohn replied that military presence could have an impact on the number of payday loans transacted in the McAllen-Edinburg-Mission area and that the third-quarter report that is due at the end of October will provide more information on the payday lending trends.

At Senator Lucio's request, Pettijohn discussed the Texas Financial Educational Endowment (endowment) that was implemented through H.B. 2594. She said that each CAB is required to pay an annual assessment into the endowment as part of their licensing procedure. Pettijohn stated that OCCC is currently collecting funds for the endowment and is working with the finance commission to establish an administrative structure and grant procedures for the endowment.

Senator Carona stated that there is a need for uniformity of law for payday lending when municipalities are creating a patchwork of regulations. He said that the committee has been generous to the payday lending industry but that the committee will not tolerate lenders who disguise loan products in order to circumvent regulation.

Senator Carona called Ann Baddour, Texas Fair Lending Alliance, and Stephen Reeves, Texas Faith for Fair Lending.

Baddour stated that payday lending continues to keep families in a cycle of debt and drain dollars from charitable organizations, even after legislation passed by the 82nd Legislature. She said that Texans are paying more for payday loans than borrowers in other states and that the refinancing of payday loans is common. She said that payday and auto title loans are failed products. Baddour stated that loan fees and the number of times a fee can be paid on a loan should be limited and that an affordability requirement that takes into consideration the borrower's ability to repay the loan should be implemented. Following an inquiry from Senator Van de Putte, Baddour stated that payday lending is regulated in those states that have lower fees for payday loans.

Reeves stated that H.B. 2592 and H.B. 2594 have improved the data collection and complaint process relating to payday lending but that payday lending continues to harm those individuals who seek financial help. He said that members of the payday lending industry have organized themselves to avoid Texas usury laws and charge unlimited fees. He said that the structure of payday loans is problematic because there is a profit incentive for the CAB if the borrower fails to repay the loan. Reeves stated that payday loan financial disclosures should be required to be made available in Spanish and that the finance commission should allow OCCC to examine the contract between CABs and third-party lenders.

Senator Carona called Jerry Allen, council member, Dallas City Council; Bill Spelman, council member, Austin City Council; and James Kopp, assistant city attorney, City of San Antonio.

Allen said that there is a choice whether to maintain the status quo with regard to payday lending or to limit payday lending as other states have done. He said that it is not in the state's best interest to allow businesses to charge 400 percent APR and to require that full payment be made within two weeks before additional fees are charged. Allen discussed ordinances passed by the City of Dallas, the City of Austin, and the City of San Antonio that limit payday lending within their jurisdictions. He stated that access to payday loans is necessary for citizens but that a fair APR should be considered. He said that cities in Texas are looking for state leadership to ensure that Texas will no longer have the highest rate for payday loans. Senator Carona asked whether cities object to standardized regulation of the payday lending industry. Allen replied that the state must provide uniformity.

Spelman discussed examples of charitable organizations that try to help individuals pay off the debt incurred by payday loans. He said that the financial difficulty associated with payday loans is greater than the financial difficulty that necessitated the loan in the first place. He said that there is a need for uniformity in state law regarding payday lending because people who live in cities that place restrictions on payday lending are able to travel to another jurisdiction to obtain payday loans. Spelman said that short-term unsecured credit is necessary but not with the terms that are currently being made available.

Kopp discussed the similarities and differences of the ordinances passed by the City of Dallas, the City of Austin, and the City of San Antonio, stating that the City of San Antonio supports statewide regulation of payday loans.

Senator Carona called Rob Norcross, Consumer Service Alliance of Texas (CSAT). Cross said that the legislation passed in 2011 preserves access to credit and consumer choice while establishing a rigorous system of supervision to protect small loan borrowers. He said that there are 300 fewer CABs in the state as a result of the new licensing process. He said that approximately 3,600 CSOs were registered with the Office of the Secretary of State in 2010, and that there are currently an estimated 3,300 CABs licensed with OCCC today. He said that 306 complaints submitted to OCCC relating to payday loan transactions represent one complaint for every 86 transactions. Cross stated that in order to prevent consumers from being trapped in a cycle of debt, CSAT member companies are expanding their industry best practices to include no-cost extended payment plans, transaction limits, and mandatory fee reductions with the refinance of single payment auto title loans.

Senator Carona asked how fee reductions are mandatory for CSAT members when fee reductions are not mandated by statute. Cross replied that CSAT has adopted a compliance and accountability program that every CSAT member company has agreed to follow. He stated that CSAT members agree to allow third-party audits of their operations for compliance and that 90 percent of CABs are members of CSAT. Cross said that the new best practices are a comprehensive solution to the limitations applied in recent municipal ordinances and are consistent with negotiations that occurred during the last legislative session. He said that the best practices help every consumer fully repay their debt.

Following an inquiry from Senator Carona regarding information relating in order to complaints against CABs, Cross stated that CSAT is working with OCCC to obtain data and identify the types of complaints against CABs. Senator Carona asked that the summaries of such complaints be provided to the committee.

Senator Carona asked Cross to explain how certain CABs are disguising loan products to avoid regulation. Cross said that during a course of examination, OCCC discovered one CAB providing unauthorized services. He expressed his understanding that the incident was isolated to one company and that the company in question has agreed to stop disguising its loan products.

Senator Carona asked how the best practices adopted by CSAT are received by cities that have ordinances that limit payday lending. Cross said that the framework of CSAT best practices is the same as ordinances adopted by those cities but while city ordinances address single-payment cash advances, CSAT addresses more than one loan type. He said that the intent of CSAT best practices is to provide solutions for the cycle of debt for each loan type. Senator Carona said that there is public outcry to address the issues relating to payday lending. He said that while payday lending belongs in the marketplace, the committee is sensitive to the concerns of city leaders.

Senator Van de Putte discussed an example of one elderly constituent who paid \$102 every month toward a payday loan for six years for a total of \$7,200. She asked whether a similar situation can occur under CSAT best practices. Cross replied in the negative, stating that there is no fee for repayment once the transaction has been refinanced four times. Senator Van de Putte said that the community needs these loan products but not with the unfair provisions. At Senator Watson's request, Cross explained the process of paying off a hypothetical \$500 loan. He said that fees and interest on the \$500 loan are paid the first four times that loan is refinanced. He said that under current statute, a borrower can pay down the principle during the first refinance. Cross said that paying on a loan for six years is unthinkable and can only occur if a CAB employee is giving bad advice to the borrower.

Senator Carona reopened the hearing to the discussion of smart meters and called Brian Lloyd, executive director, Public Utility Commission of Texas (PUC), to testify. Lloyd discussed rules adopted by PUC since 2005 regarding the implementation of smart meters since 2005. He said that PUC has no authority over smart meter deployment by municipally owned utilities and electric cooperatives. Lloyd said that H.B. 2129 (Bonnen; SP: Armbrister), 79th Legislature, Regular Session, 2005, required PUC to establish a surcharge on residential accounts to allow an electric utility to recover reasonable and necessary costs incurred by deploying advanced metering. He said that H.B. 2129 listed benefits of smart metering, including "the potential to increase the reliability of the regional electrical network, encourage dynamic pricing and demand response, make better use of generation assets and transmission and generation assets, and provide more choices for consumers."

Senator Carona asked whether PUC has studied the effect of smart metering on health. Lloyd replied that the issue of potential effects on health was not presented during the rulemaking process at PUC. He said that the PUC has relied on the fact that the EMF of smart meters meets Federal Communications Commission (FCC) standards. Senator Carona asked whether PUC is considering an opt-out provision for smart meter implementation. Lloyd responded that PUC has adopted market rules that help take advantage of smart meters and that utilities have integrated smart meter systems in their management systems. He said that the competitive retail electric market complicates the feasibility of providing consumer opt-outs but that PUC is currently analyzing what pieces of the electric market would need to be adjusted should certain customers choose to opt out.

Senator Carona called Edward Gelmann, professor of oncology and chief of hematology/oncology, Columbia University Medical Center. Gelmann said that smart meters are devices that use RF that are regulated by FCC and are the same frequencies used by wireless phones and baby monitors. He said that such devices do not have adverse side effects to individuals and the World Health Organization has not found any evidence of individuals who are particularly sensitive to RF. He said that smart meters, which are placed outside of a person's house, pose no threat to human health and provide a much smaller exposure to RF than other household devices. Following an inquiry by Senator Carona as to whether Gelmann disagrees with testimony provided earlier by Rea, Gelmann stated that the anecdotes provided by Rea of individuals who attributed health problems to smart meters are not consistent with research studies. He said that California, Maine, and Vermont have concluded that adverse effects from smart meter devices are nonexistent. Senator Carona asked whether Gelmann has received compensation from Oncor or its affiliates and Gelmann replied in the affirmative.

Senator Estes asked how RF emitted from smart meters compares to the frequency emitted from cell phones. Gelmann replied that smart meters emit frequencies between 100 and 1,000 times less than cell phones. He said that studies have shown that cell phone use has no adverse health effects.

Senator Carona called Mark Moore, senior director of measurement services, Oncor; Jeff Stracener, manager, Advanced Metering Infrastructure, AEP Texas; and Bruce Young, senior director of hardware development, Landis+Gyr. Senator Carona recalled Lloyd and asked whether other states offer opt-out provisions for smart meter implementation. Lloyd replied that he would provide the committee with information regarding opt-out provisions in other states and the costs associated with customers who opt out of smart meter installation.

Moore testified that Oncor has deployed over 3.1 million smart meters and that Oncor has conducted an extensive customer education campaign since it began deploying smart meters in 2008. He said that Oncor has worked with customers who have expressed concern regarding smart meters and in most cases, has been able to address customer concerns. He stated that Oncor is using smart meters that are manufactured by Landis+Gyr and comply with the standards of PUC, FCC, and American National Standards Institute.

Senator Carona asked what procedure is undertaken at Oncor when customers say that they do not want a smart meter installed at their home. Moore replied that Oncor will skip that residence and let the team at AskOncor contact and provide the facts to the customer. He said that Oncor is currently halting the installation of meters for customers who have posed objections.

Senator Estes asked what Oncor has done to ensure customer privacy. Moore stated that Oncor has implemented a fully encrypted network system that is subject to penetration tests and third-party audits to ensure that customer data is protected. He said that customers have control over electric usage but can choose to have their electric provider manage energy usage for reduced rates.

Stracener stated that AEP Texas began deployment of an advanced metering system across its service area in 2010 and has installed nearly 650,000 smart meters across West and South Texas to date. He said that the advanced metering system deployed by AEP Texas was developed by Landis+Gyr, also referred to as Gridstream. Stracener said that Gridstream utilizes an RF Mesh Network in which the data communication payload is encrypted. He said that before deploying

smart meters AEP Texas undertakes an extensive customer education effort, including community meetings and outreach to the local media.

Senator Carona asked whether customers should be allowed to opt out of smart meter installation. Stracener said that AEP Texas believes in customer choice and will work with PUC regarding the issue. Moore replied that customers should have the option to decline the use of smart meters but that there will be additional costs for allowing customers to decline the use of smart meters.

Senator Lucio and Stracener discussed the deployment of smart meters by AEP Texas in the Rio Grande Valley.

Young discussed the process of developing, certifying, and testing products by Landis+Gyr. He said that Landis+Gyr's smart meters operate in the unlicensed 900 megahertz frequency band, the same frequency band used by cordless telephones, baby monitors, and certain wireless networks. He said that this frequency band is regulated by the FCC and that Landis+Gyr adheres to FCC guidelines and standards in testing and obtaining certification and verification of its products. He stated that the smart meters sold by Landis+Gyr have been certified to have output power levels in accordance with FCC limits and that the equivalent generated exposure to RF density has been found to be significantly below FCC limits.

Senator Carona called Beth Biesel, Texas Eagle Forum; John Marler, steering committee member, Texans United Against Smart Meters; Pam Colquitt, representing herself; and Liz Miller, representing herself, to testify.

Beisel expressed her objections to smart meters. She said that the cumulative effect of smart meters on a person's health is unknown. She said that the amount of time a person is exposed to smart meters, the number of devices installed in one place, and the proximity of exposure are factors that have not been considered. She stated that unlike other devices regulated by the FCC, she does not have the option to decide not to use a smart meter. Beisel asked the committee to consider an immediate moratorium on the deployment of smart meters and a rule that enables customers to opt out of smart meter installation.

Colquitt discussed her experience with Oncor's smart meter implementation. She said that customers are forced to pay for smart meters that they do not want and are charged a fee if they do not allow the smart meter to be installed. She said that the mass installation of smart meters is premature and warrants further investigation. Colquitt said that she has not seen any customer education efforts by Oncor.

Miller discussed the experiences of residents in her precinct with the installation of smart meters. She expressed concern that customer privacy and property rights are not being protected.

Marler stated that there is a misinterpretation by PUC that H.B. 2129 mandates, rather than encourages, the use of smart meters. Marler provided the committee with a letter from Representative Bonnen, author of H.B. 2129, asking PUC to modify its rulings. He provided information from the American Association of Environmental Medicine, the American Pediatric Association, *The Journal of Bioelectromagnetic Medicine*, and the Multiple Chemical Sensitivity America Report indicating that smart meters present a danger to human beings. He said that

customers have been told that they have no choice regarding the implementation of smart meters. He asked the committee to consider a moratorium on the installation of smart meters until they are proven to be safe and stated that smart meters should only be provided to those customers who opt in for the service.

Senator Carona called Elizabeth Biesel, president, Dallas Teen Eagle Forum, and Michon Hawkins, chiropractor, to testify.

Beisel stated that her generation is being overwhelmed with EMF. She said that the free market rather than government should encourage the use of technology.

Hawkins discussed health complaints by her patients relating to EMF exposure. She said that FCC standards for frequencies are for individual devices and that the cumulative effect of having many devices in one home is not considered. She stated that there is not enough information regarding what is needed to protect citizens from EMF exposure.

Senator Carona opened the hearing to public testimony on the interim charges relating to payday lending and smart meters.

Joshua Houston, general counsel, Texas Impact and Texas Interfaith Center for Public Policy, stated that smart meters allow consumers to monitor and adjust their electric usage. He said that smart meters are demand-response tools that help ensure electric resource adequacy. He said that the business model associated with payday lending is one that allows the lender to profit from a borrower's failure to pay the loan. Houston said that there is a need for available credit for families but that the payday lending market is not driven by market forces or price competition.

Barbara Mabray, Texans Against Smart Meters, testified that she is a survivor of environmental illness. She asked the committee to consider a moratorium on the installation of smart meters until more studies can be done on possible health effects.

Wayne Richards, radio host, Dallas, said that the state will be held liable and negligent if health risks are determined to be associated with the use of smart meters. He said that the absence of a law is better than a bad law based on unknown facts. Senator Estes and Richards discussed an incident of a homeowner pulling a gun on a smart meter installer.

Joanne Groshardt stated that payday loans are weapons of mass destruction aimed at the poor. She said that 15 states have banned payday lending and that Texas needs to exert more control over the payday lending industry.

Sharlyn Wall, Texans Against Smart Meters, stated that electric utility companies are using aggressive tactics to install smart meters. She discussed the Castle Doctrine, which in Texas authorizes a person to stand his ground. Senator Carona stated that the committee does not support the idea that the Castle Doctrine could be applied to smart meter installers and that guns should not be pulled on smart meter installers. Wall said that she does not support an opt-out provision for smart reader installation because she will still be exposed to RF emitted from neighbors' smart meters. She said that a moratorium should be placed on the deployment of smart meters.

Bobby Reed, Oncor worker and union representative, discussed technical problems associated with smart meter devices. He said that many burned-out devices have been returned to Oncor and that burned meters can cause damage to homes.

Ollie Besteiro, American Association for Retired Persons (AARP), stated that AARP supported H.B. 2592 and H.B. 2594 but that additional legislation is needed to end the cycle of debt by considering a person's income during the transaction of the loan and limiting the number of payments to two four-week terms.

Jerry Mitchell, Society of St. Vincent de Paul, discussed parishioners who had no other option but to obtain payday and auto title loans. He said that churches and other charitable organizations help these individuals pay expenses incurred from payday lending. He said that payday loans leave borrowers in worse condition than when they first obtained the loan. Mitchell stated that there is no value in allowing usury to exist and that payday loans negatively affect the ability of churches and nonprofit organizations to help families in need.

Senator Carona recalled Lloyd to testify on the interim charge relating to the Texas Universal Service Fund (TUSF). Lloyd said that the original concept behind TUSF was that all citizens should have access to basic telecommunications services. He said that the cost of providing telecommunication service is higher in rural areas. He said that long distance rates originally subsidized low rural local rates but that once the telecommunications markets became open to competition, the subsidy became unsustainable. He said that TUSF assists telecommunications providers in providing basic local telecommunications service at reasonable rates in high-cost rural areas and provides low-income rate discounts and subsidized communications services to the disabled. Lloyd said that there have been reductions in the amounts paid into TUSF.

Senator Carona asked whether there is a trigger that keeps amounts paid into TUSF from being too low. Lloyd responded that PUC maintains a two or three month reserve amount in TUSF and tries to maintain between \$60 and \$90 million in TUSF.

Lloyd discussed the Texas High Cost Universal Service Plan, to which the majority of disbursements are made from TUSF. Lloyd stated that S.B. 980 requires PUC to evaluate all TUSF programs, make changes, and report whether funding is meeting its purpose and provides that deregulated areas do not receive TUSF support. He said that markets with a population of less than 30,000 in population can receive support if a provider demonstrates that support is needed to continue service at reasonable rates. He said that H.B. 2603 (Smithee; SP: Hegar), 82nd Legislature, Regular Session, 2011, increased TUSF disbursements to small and rural phone companies through September 1, 2013.

Senator Carona expressed concern that the legislative directive regarding TUSF is too vague, stating that some areas of the state have unique and costly needs and that telecommunication companies in those areas would not survive without TUSF support. Lloyd said that PUC determined reasonable rates based on the idea that support was paid into TUSF from everyone in the state. He said that there are telecommunication companies that have a low density of customers and incur high costs to provide network services. Lloyd said that the goal of TUSF is to provide telecommunication services at reasonable rates.

Senator Van de Putte asked how federal subsidies interplay with compensation from TUSF and how it affects decision making at PUC. Lloyd replied that the Texas Public Utility Regulatory Act allows certain providers who have lost federal funding from FCC to request funding from TUSF and that PUC is charged with determining the balance between company rate increases and TUSF support. He said that PUC monitors FCC decisions and Texas statutes are set up to consider cases on an individual basis.

Senator Watson assumed the chair and called Katherine Von Haefen, United Way of Greater Houston, to testify on payday lending. Von Haefen stated that H.B. 2592 and H.B. 2594 did not address the cycle of debt incurred through high fees and the rollovers of payday loans. She said that the amount of time and resources that staff at the United Way use to assist individuals with their payday loans is undermining other investments that could be made in the community,

Senator Watson called Nathan Benedict, assistant director of regulatory analysis, Office of Public Utility Counsel (OPUC). Benedict stated that OPUC has been involved in rulemaking procedures regarding TUSF to ensure that universal service is accomplished in a way that keeps TUSF sustainable. He said that certain broadband commitments are expected to be implemented with federal funding. Benedict stated that it is important to ensure that any disbursement from TUSF is not working at cross purposes with federal attempts to ensure universal broadband deployment.

Senator Watson called Bob Digneo, assistant vice president, AT&T-Texas; Doug Fulp, vice president of regulatory and governmental affairs, Verizon; Scott Stringer, director, State Regulatory and Legislative Affairs for Texas, Louisiana, and Massachusetts, Century Link; Jennie Chandra, vice president of government affairs, Windstream; and Cathy Webking, attorney, Coalition of Rural Cooperative Competitive Local Exchange Companies (CLECs), to provide testimony relating to the Texas High Cost Universal Service Plan.

Digneo discussed a chart that shows the decrease in support that AT&T has drawn from TUSF for the high-cost areas of the state. He said that AT&T drew more than \$180 million from TUSF in 2001 to provide low-priced service in high-cost areas. He said that AT&T expects to draw \$30 million from TUSF by the end of 2012 and, based on a new settlement agreement that was reached recently with PUC, AT&T will be reducing its support from TUSF to zero by 2016. He said that with rate increases to customers, AT&T will draw less from TUSF.

Following a question by Senator Van de Putte relating to providers of last resort (POLR) in the deregulated market, Digneo stated that 90 percent of AT&T customers will be in deregulated exchanges. He said that there will be no effect on AT&T's ability to provide service.

Fulp discussed reductions by CLECs from the TUSF. He said that AT&T and Verizon decided to eliminate support from TUSF by 2016. Fulp stated that it was the right public policy for the sustainability of TUSF to allow large companies to balance their rates over time in order to adjust for reductions in TUSF support. Fulp expressed support for further reductions to TUSF for large companies.

Stringer stated that the need for a strong and ongoing TUSF has never been greater than it is today. He said that other changes in the telecommunications industry, such as adjustments to federal universal service support, are threatening the ongoing viability of the networks in Texas.

Stringer said that certain communities in Texas are not economical to serve, characterized by very small populations spread over very large geographic areas. Stringer said that there is an ongoing need for TUSF and that reasonable rates for basic local telecommunications service in rural and high-cost communities require a healthy and sustainable TUSF.

Chandra stated that Windstream provides services to the most rural parts of Texas. She said that there is a misconception that existing telephone networks are fully paid. She said that POLRs continue to require ongoing TUSF support to build, maintain, and operate existing high-cost connections.

Webking said that there are other companies in rural areas that do receive money from TUSF and that CLECs serve the majority of customers in rural communities. She said that TUSF is essential for CLECs to provide services in those areas.

Senator Watson called Michael Shultz, vice president of regulatory and public policy, Consolidated Communications; Delbert Wilson, general manager, Hill Country Telephone Cooperative; and David McEndree, general manager and chief executive officer, Poka-Lambro Telephone Cooperative (Poka-Lambro), to discuss the Small and Rural Incumbent Local Exchange Company (ILEC) Universal Service Plan.

Shultz stated that federal changes have a great impact on TUSF and that the impact of minimizing TUSF funding to smaller ILECs should be considered.

Wilson testified that ILECs provide critical infrastructure to rural areas in the state. He said that H.B. 2603 provided 46 rural ILECs a sufficient level of funding from the Small Company USF plan. He expressed hope that provisions of H.B. 2603 that are set to expire in 2013 will be reenacted.

McEndree stated that Poka-Lambro serves 0.5 customers per square mile. He stated that voice over Internet protocol (VoIP), broadband, and wireless networks in rural areas are provided by small rural ILECs. He said that Poka-Lambro provides services to special-needs customers and new customers, including wind farms.

Senator Carona called Joe Gillan, economic consultant, TUSF Reform Coalition, and Charles Land, executive director, TEXALTEL.

Gillan stated that after PUC reforms are implemented at the end of 2017, large CLECs will continue to receive \$100 million per year in public subsidies and more work needs to be done to determine whether large CLECs still need such funding.

Land stated that some CLECs do not need to draw from TUSF while many other communication companies will continue to need TUSF money. He said that POLR requirements should be eliminated.

Senator Carona called a panel of consumers, comprised of Tim Morstad, associate state director for advocacy, AARP Texas, and Lanetta Cooper, Texas Legal Services Center.

At Senator Watson's request, Lloyd was called to discuss POLRs. Lloyd stated that the concept behind POLRs was to ensure that everyone had a wired line. He said that there can be a circumstance in which a customer asks a carrier for a wired line and that carrier then has the obligation to provide that service no matter the cost.

Senator Estes asked whether PUC has the authority to review the finances of telecommunication companies and determine whether POLRs still need subsidies from TUSF. Lloyd responded that there are different sets of analysis for large and small carriers and that statutory language provides that it is not necessary for carriers to show revenues in order to receive TUSF support.

Morstad stated that that rigorous analysis should be done before any contemplation of eliminating POLR. He said that there is uncertainty from the federal government with regard to the federal universal service fund (USF) and federal broadband deployment goals. Morstad said that Texas should wait to see how the federal goals are implemented before addressing changes to TUSF.

Cooper stated that the penetration rate for the Lifeline program of the federal USF is low and more effort should be put forth to ensure that all qualified Texas households receive the benefit of the Lifeline program. She said that Texas should consider requiring all carriers who provide VoIP services to provide basic local service with protections from disconnection. She said that most low-income customers use wireless as their only means of communication. Cooper asked the committee to consider caller identification services for the elderly and texting services for customers with hearing and speech impediments. Cooper stated that universal support from TUSF for broadband deployment should be extended and asked that a task force be created to advise the committee about issues relating to universal service and Internet access for low-income customers.

The committee recessed subject to the call of the chair.

—by *Endi Silva Ollis, SRC*

