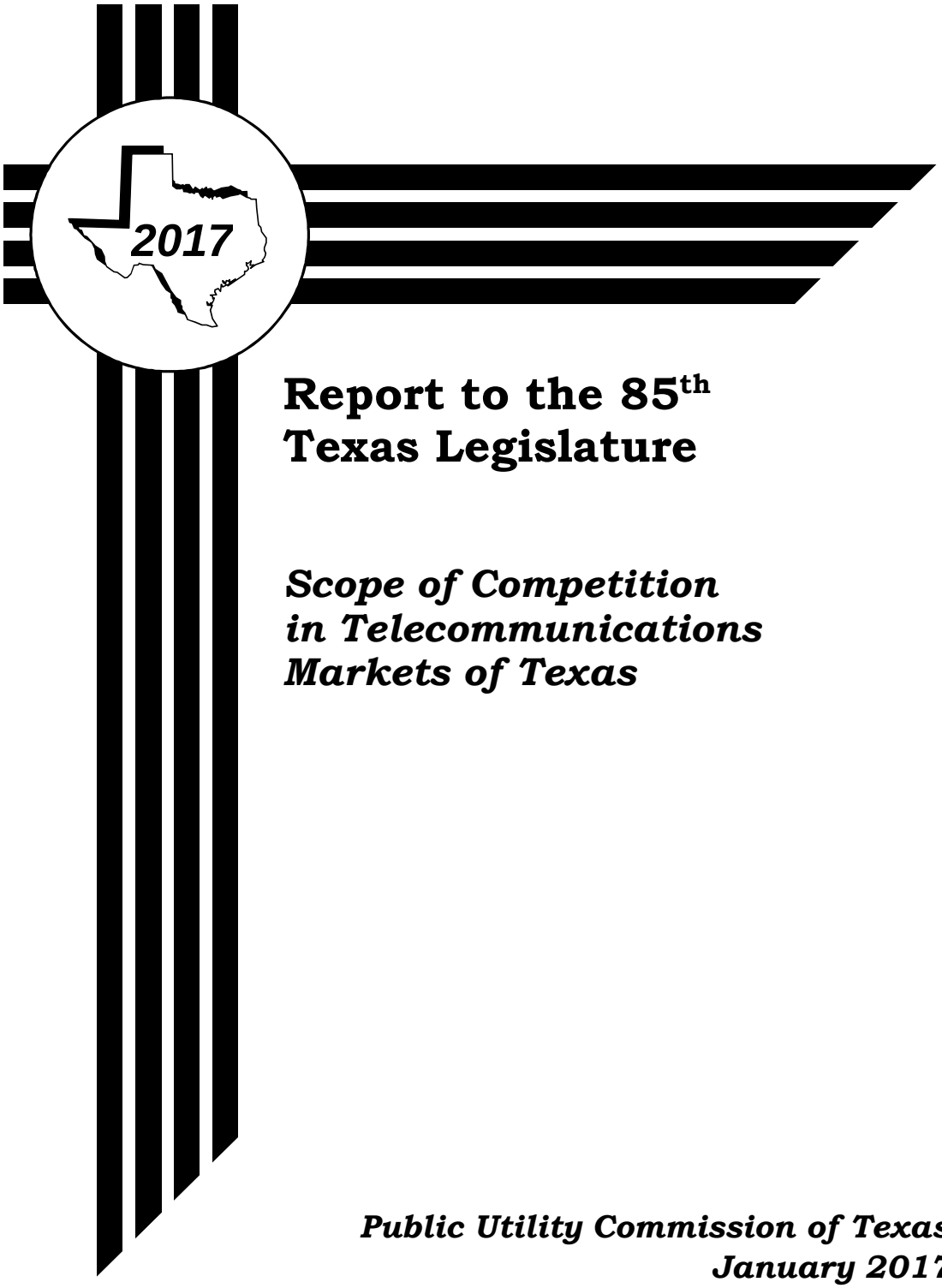


Report to the 85th Texas Legislature

Scope of Competition in Telecommunications Markets of Texas

Public Utility Commission of Texas
January 2017

ACKNOWLEDGEMENTS:

Public Utility Commission of Texas
Donna L. Nelson, Chairman
Kenneth W. Anderson, Jr., Commissioner
Brandy Marty Marquez, Commissioner

Brian H. Lloyd, Executive Director

Project Supervisors
Pam Whittington, Deputy Executive Director
Scott Smyth, Division Director, Competitive Markets Division
Liz Kayser, Director, Competitive Markets Division

Project Leader
Fred Goodwin, Competitive Market Analyst, Competitive Markets Division

In addition, special thanks to other Commission Staff members who contributed to the preparation of this report:

Bill Abbott
Kristin Abbott
Chris Burch
Denise Foote
Ben Haguewood
Julia Harvey
Nancy Hernandez
Mike Hoke
Brittany Johnson
Shana Joyce
James Kelsaw
Laura Kennedy
Teresa Kirk
Jennifer Lucky
Alicia Maloy
Kennedy Meier
Stephen Mendoza
Parrish Pratt
Katie Rich
Keith Rogas
Keva Roundtree-Williams
David Smithson
AJ Smullen
Dale Stacy
Linda Stapleton
Jay Stone
Gordon Van Sickle

Donna L. Nelson
Chairman

Kenneth W. Anderson, Jr.
Commissioner

Brandy Marty Marquez
Commissioner

Brian H. Lloyd
Executive Director

Greg Abbott
Governor

Public Utility Commission of Texas

January 17, 2017

Honorable Members of the Eighty-Fifth Texas Legislature:

We are pleased to submit our 2017 Report on the Scope of Competition in Telecommunications Markets as required by Section 52.006 of the Public Utility Regulatory Act. This report provides an update on the status of telephone competition in Texas. Competition in Texas' telecommunications industry has been driven by advances in mobile and broadband technologies, as well as the deployment of Voice over Internet Protocol (VoIP).

The report concludes with a discussion of observations that the Legislature may want to consider. We look forward to working with you on these and other policy objectives. If you need additional information about any issues addressed in the report, please do not hesitate to call on us.

Sincerely,

Donna L. Nelson
Chairman

Kenneth W. Anderson, Jr.
Commissioner

Brandy Marty Marquez
Commissioner

This page intentionally blank

2017 Scope of Competition in Telecommunications Markets of Texas

Table of Contents

List of Appendices

List of Tables

List of Figures

This page intentionally blank

I. EXECUTIVE SUMMARY

This Report examines the status of competition in telecommunications markets in Texas during the two-year period since the last Scope of Competition Report in Telecommunications Markets in Texas report was submitted to the 84th Legislature in 2015. This Report also examines continuing trends affecting competition in the telecommunications industry, effects of competition on rates, service availability, universal service, competition in the broadband and cable/video markets, customer protection and complaint issues, and Commission activities of notable interest over the last two years. The Report concludes with legislative observations.

Three trends continue to define the competitive telecommunications marketplace in Texas: (1) losses in the number of traditional analog POTS (Plain-Old Telephone Service) lines; (2) substitution of wireless service for wired service; and (3) adoption of high speed broadband services and other IP (Internet protocol)-enabled services like VoIP (Voice over Internet Protocol, which requires a broadband connection).

This page intentionally blank

II. INTRODUCTION

A. Overview

This Report begins with a discussion of trends in voice communications among incumbent and competitive providers, including a discussion of competition in voice and wireless markets, and the effects of competition on the rates and availability of voice services in Texas. Broadband markets are then analyzed at a high level since the Commission does not have authority in this area. This is followed by a review of telecommunications consumer complaint data. The next section of this Report covers significant telecommunications related Commission activities since the 84th Legislative session. Finally, the Commission offers observations related to the Universal Service Fund (USF) in Texas.

B. Technology

New technologies in telecommunications often provide business opportunities for both existing and new competitors. The most prolific new land line based technology in the telecommunications marketplace is VoIP which permits internet technology to be used for voice transmission. This enables much more efficient use of network capacity or bandwidth, as voice and data can share the same communication channel simultaneously. Cable and telephone companies offer VoIP service by using their own broadband data networks, while third-party service providers such as Vonage rely on their customers' existing broadband connections to provide VoIP service.

The Federal Communications Commission (FCC) has imposed most of the traditional obligations of basic local telephone service (BLTS) upon providers of interconnected VoIP service. VoIP providers are required to provide E911 service, Local Number Portability, customer proprietary network information (CPNI) (the FCC limits VoIP providers' use of CPNI data, and requires that they protect this information from disclosure), Telecommunications Relay Services (TRS), and to ensure that their services are usable by individuals with disabilities, if such access is readily available. The FCC also requires interconnected VoIP providers to comply with the Communications Assistance for Law Enforcement Act of 1994 (CALEA) and to contribute to the Federal Universal Service Fund (FUSF).

This page intentionally blank

III. EFFECTS OF COMPETITION ON RATES, SERVICE AVAILABILITY, AND UNIVERSAL SERVICE

A. Competition for Voice Telecommunications in Texas

Telecommunications historically have been dominated by landline delivery of telephone calls and faxes. However, telecommunications today involves traditional landlines, coaxial cable, fiber optics, and wireless technologies, delivering calls, television programming, internet content, and other data. While the competitive landscape in Texas over a decade ago was dominated by competition between incumbent local exchange companies (ILECs) and competitive local exchange companies (CLECs) using traditional wireline infrastructure, technological innovation has broadened the scope of competition within the telecommunications industry.

The primary providers of telecommunications services in the local exchange market are wireless providers, ILECs, and non-ILECs (e.g., CLECs and traditional cable television companies). The category of non-ILECs includes CLECs that provide traditional switched access service as well as CLECs that deploy different types of facilities such as cable and VoIP technology. ILECs and some CLECs have historically provided local services using traditional wireline switched access services. In the last few years, ILECs and non-ILECs, such as the cable companies, have increased their offerings of retail interconnected VoIP service, which enables voice communications over a broadband connection and allows users to both receive calls from, and place calls to, the public switched telephone network, like traditional phone service.

As subscribers continue to use wireless service as a replacement for traditional wireline service, wireless providers have steadily increased their market share of local exchange access lines. The number of mobile wireless subscribers in Texas (28,220,000 as of December 2015)[1] significantly exceeds the number of access lines provided by Texas ILECs and CLECs (8,334,000 as of December 2015),[2] and wireless substitution continues to increase. However, many customers continue to subscribe to landline service, even though they also subscribe to a mobile wireless service.

For the purpose of this report, a distinction is made between mobile wireless subscribers who use their wireless service instead of traditional wireline service and those who use wireless in addition to wireline service. Only the portion of those mobile wireless "lines" used by customers as primary telephone lines in place of traditional wireline service

[1] Voice Telephone Services: Status as of December 31, 2015 at Supplemental Table 1 (Nov. 2016), available at https://www.fcc.gov/voice-telephone-services-report.

[2] *Id.*

(described in this report as "primary wireless lines") are considered in the analysis of local competition of telecommunications providers.[3]

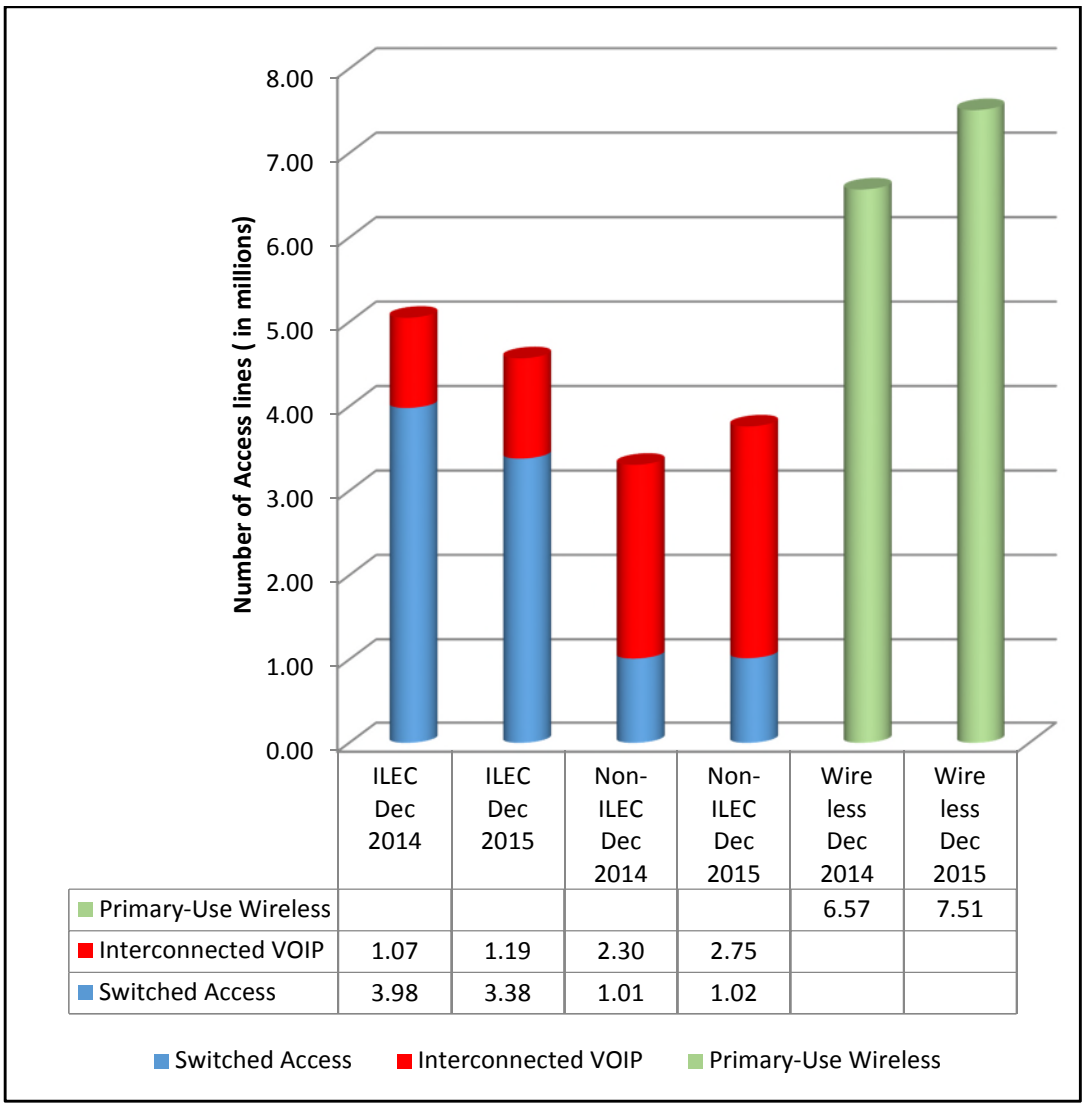
Using publicly available data collected from various sources, this section addresses the state of intermodal competition in the local telephone market between ILECs, non-ILECs, and wireless providers. It provides a general overview of the different telecommunication facilities used by ILECs, non-ILECs, and wireless companies in the local and broadband markets. The research methodology used in analyzing data pertaining to the competitive landscape for the voice telecommunications and broadband markets (see Sections III and IV of this report) is described in Appendix A.

1. Wireline Market Share

As shown in Figure 1, primary use wireless companies have continued to erode the market share of ILECs. ILEC total market share decreased 9 percent from 2014 to 2015 (latest available data). Non-ILEC total market share, on the other hand, increased 14 percent from 2014 to 2015. The number of interconnected VoIP lines served by ILECs and non-ILECs increased 17 percent from 2014 to 2015. Primary wireless lines served by wireless companies increased 14 percent from 2014 to 2015. As a result, today there are approximately 7.51 million primary-use wireless lines, as compared to 4.57 million ILEC access lines including interconnected VoIP service lines.

[3] Due to a lack of sufficient Texas-specific data on wireless subscribers, exact percentages are difficult to determine. As a result, the percentages used in this section rely on the more certain lower end of the range of estimates for the number of Texas subscribers who exclusively use wireless service for local calls.

Figure 1 - Lines in Texas by Company Type: ILEC, Non-ILEC, and Primary Use Wireless Companies[4]

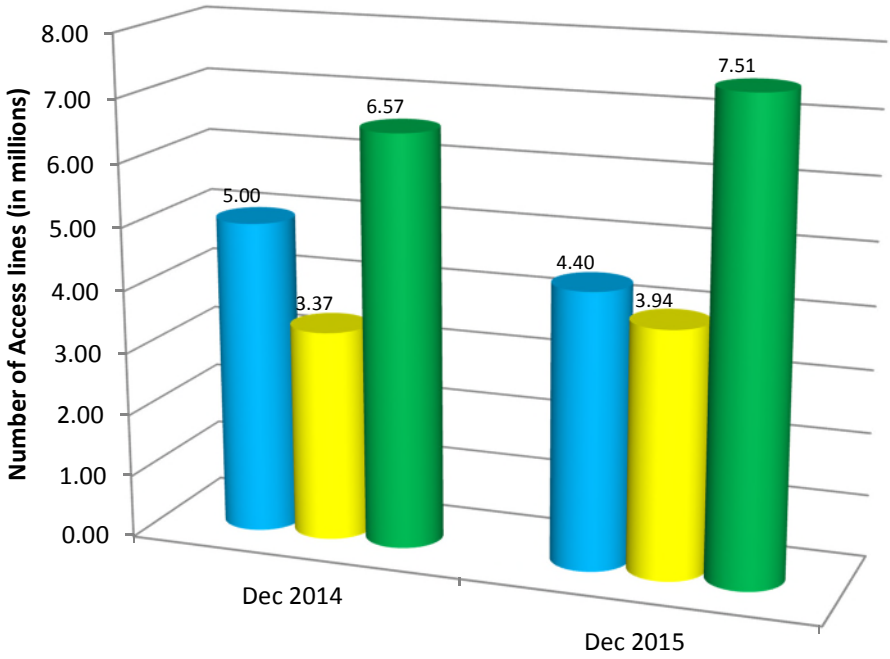


	ILEC Dec 2014	ILEC Dec 2015	Non-ILEC Dec 2014	Non-ILEC Dec 2015	Wireless Dec 2014	Wireless Dec 2015
Primary-Use Wireless					6.57	7.51
Interconnected VOIP	1.07	1.19	2.30	2.75		
Switched Access	3.98	3.38	1.01	1.02		

Figure 2 shows that as of December 2015, there were approximately 4.40 million switched access lines and 3.94 million interconnected VoIP lines. Again, primary-use wireless lines continue to increase; there are approximately 7.51 million primary-use wireless lines.

[4] Voice Telephone Services Report (Status as of December 31, 2015) at Supplemental Table 1 (Nov. 2016); Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January-June 2015 (Released Dec. 2015).

Figure 2 – Number of Local Telephone Customers in Texas by Technology Type[5]



	Dec 2014	Dec 2015
Switched Access (ILEC/Non-ILEC)	5.00	4.40
Interconnected VOIP (ILEC/Non-ILEC)	3.37	3.94
Primary-Use Wireless	6.57	7.51

Switched Access (ILEC/Non-ILEC) Interconnected VOIP (ILEC/Non-ILEC)

Primary-Use Wireless

As shown in Figure 3 and Figure 4, the share of access lines provided by switched access facilities decreased from 34 percent in 2014 to 28 percent in 2015. The number of interconnected VoIP access lines slightly increased from 22 percent in 2014 to 25 percent in 2015. Primary wireless lines served by wireless facilities slightly increased from 44 percent in 2014 to 47 percent in 2015.

[5] *Id.*

Figure 3 - Local Telecommunications Percentage of Market Share in Texas by Technology Type: December 2014

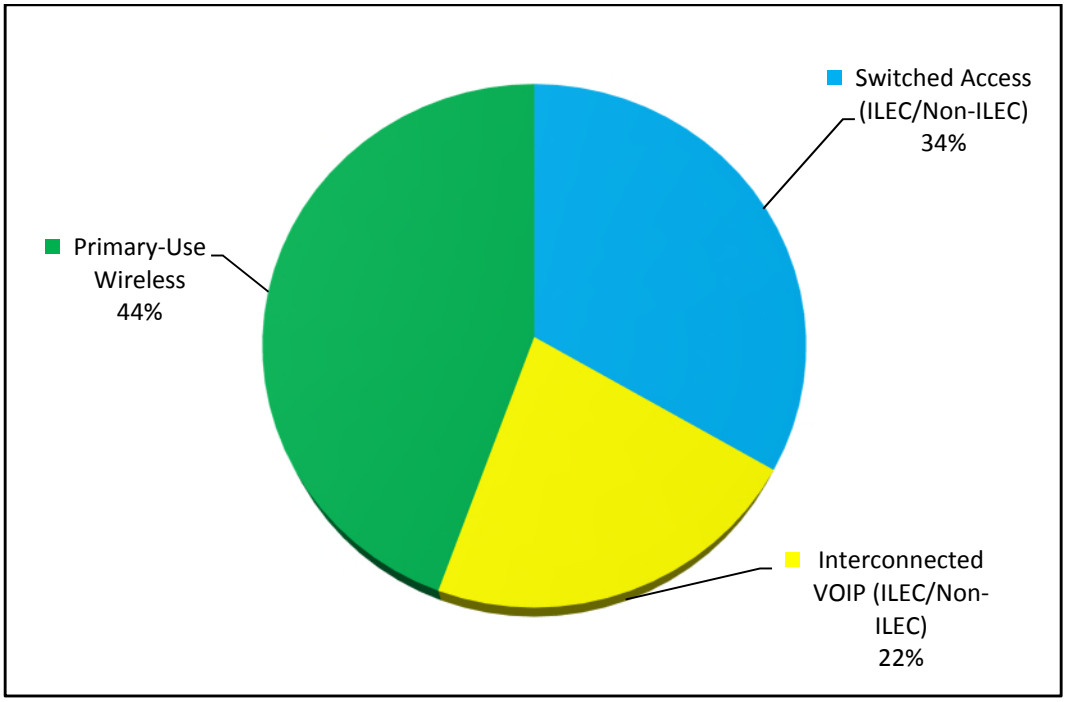
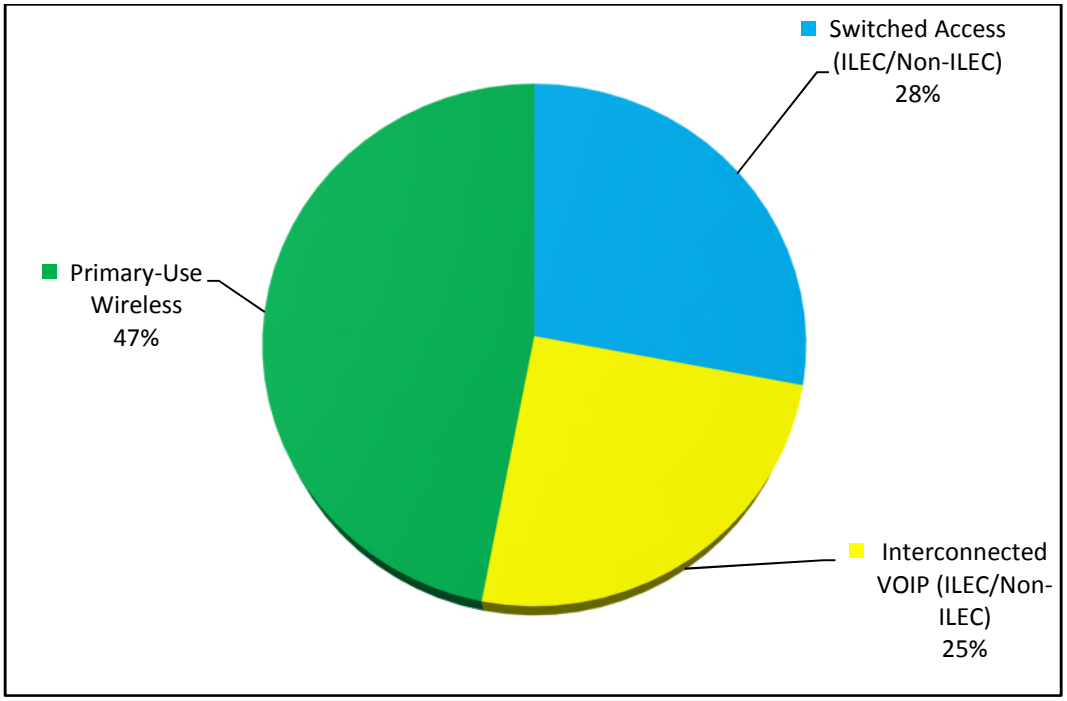


Figure 4 - Local Telecommunications Percentage of Market Share in Texas by Technology Type: December 2015

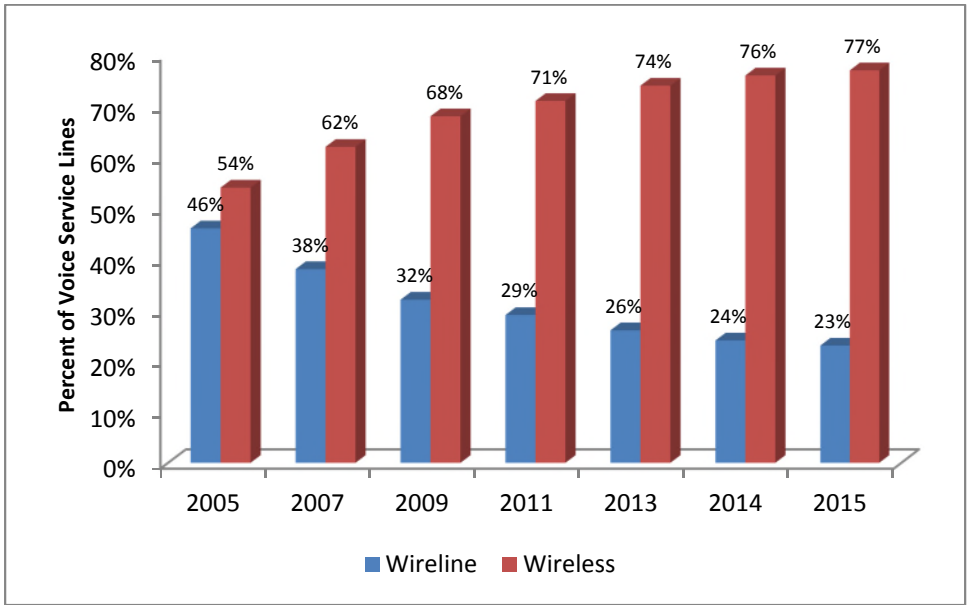


2. Wireless Market Share

Figure 5 shows the change in the percentage of wireline and wireless voice service lines since 2005. Figure 6 shows the change in the number of wireline and wireless voice service lines over the same period. From 2005 to 2015, there has been significant growth in mobile wireless subscribership, while wireline subscribership has experienced an equally significant decline. Taking into consideration all wireless subscribers (not just those who use wireless as their primary voice service), the wireless market share has grown from 54% of all voice service lines in 2005 to 77% of all voice service lines in 2015. However, when the change is considered in terms of number of voice service lines as shown in Figure 6, the change is significant for wireless lines (an increase of approximately 13.8 million lines), but not as significant for wireline lines (a decrease of approximately 3.98 million lines).

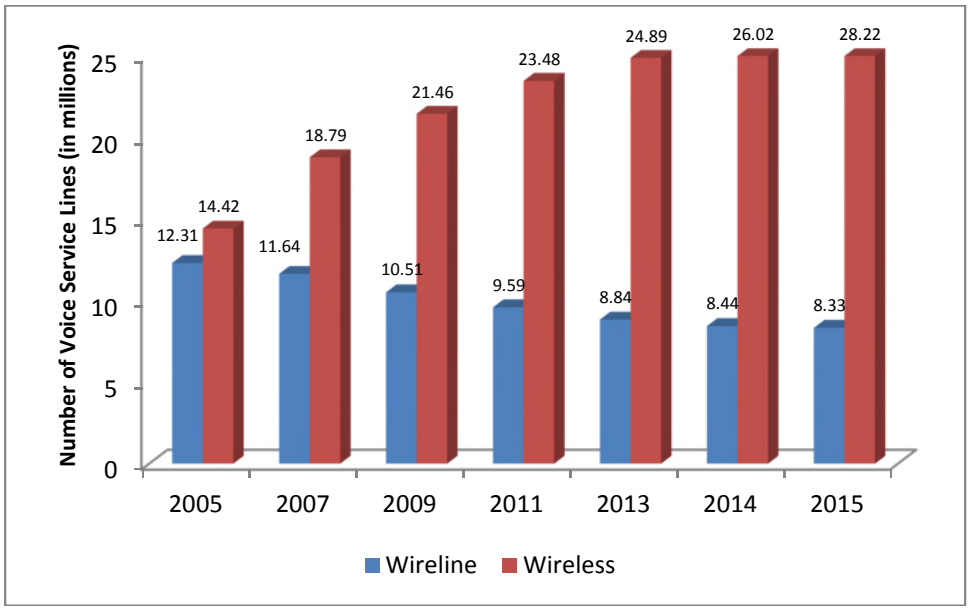
The number of "wireline" voice service lines in Figure 5 and Figure 6 include interconnected VoIP and traditional switched access voice lines served by ILECs and CLECs in Texas.

Figure 5 - Percent of Wireline and Wireless Voice Telecommunications Lines in Texas[6]



[6] 2009 and 2011 Reports on the Scope of Competition in Telecommunications Markets of Texas; Local Telephone Competition Report (Status of June 30, 2009) at Tables 8 and 17 (Sept. 2010); Local Telephone Competition Report (Status of Jun. 30, 2013) at Tables 9 and 18 (Jun. 2014); Voice Telephone Services Report (Status as of December 31, 2015) at Supplemental Table 1 (Nov. 2016).

Figure 6 - Number of Wireline and Wireless Voice Telecommunications Lines in Texas[7]



B. Effects of Competition and Regulation on Rates

The expansion of competition in the telecommunications market has not completely staved off the slow, mostly upward, movement of rates. Telecommunication rates in Texas have largely been influenced to this point by regulation rather than competition. Over the last two years, rates for local telephone service, stand-alone vertical services, and packages and bundles have all risen to some degree, due in large part to several ILECs increasing their rates to what is considered a more reasonable level in order to lessen their dependence on the Texas High Cost Universal Service Plan (THCUSP). The following sections provide detail regarding the levels of these increases, rationale for them, and information regarding some of the offsetting nature of package and bundle rates versus "a-la-carte" pricing.

Most of the competition in telephone services is in connection with wireless service and service packages from wireline companies (including cable companies) that provide customers enhanced or bundled services, such as internet or video. It is not as clear that competitive forces are influencing BLTS rates.

For purposes of this report the Commission categorizes ILECs into two groups: (1) fully regulated (Chapter 52), and (2) partially or fully deregulated (Chapters 58, 59,

[7] *Id.*

and 65). Rates for competing non-ILECs (e.g., CLECs, cable companies, and wireless companies) are not regulated by the Commission.

1. Fully Regulated ILEC Areas

In general, fully-regulated ILEC areas tend to be located in the more rural parts of Texas. In rural areas of the state, BLTS rates are priced below the economic cost of providing the service and are supported through universal service fund mechanisms at both the State and Federal levels. In these areas, universal service subsidies and subsidies from switched access charges have not been reviewed since 2000.[8]

In these largely rural areas over the last two years, the ILECs' rates for basic local service, vertical services, and packages have generally increased through Commission approved filings. However, as local rates are still being subsidized in these areas, the rates are still below cost.

Additionally, the Commission established Docket No. 41097,[9] a proceeding to establish a reasonable rate for BLTS for small and rural ILECs. However, it should be noted that subsequent legislation exempted a majority of the small and rural ILECs from the requirements established in Docket No. 41097.[10]

2. Partially or Fully Deregulated ILEC Areas

a. *Chapter 58 and 59 Regulation*[11]

The election of PURA Chapter 58 and 59 regulations by a majority of the medium-sized ILECs (eight companies) would ordinarily restrict increases in residential basic local service rates for the customers of those companies. Chapters 58 and 59 regulations allow increases in the rates only in limited or special circumstances. As an example, the Commission adopted a rule in Project No. 39938[12] regarding the Texas Universal Service Fund (TUSF) high-cost plan for these areas which would offset reductions in TUSF support in these rural areas by 25% of the increases in rates for BLTS up to the established reasonable rate, over a transitional period. Overall, the effect on customers of this docket is a gradual increase in BLTS rates and a corresponding gradual reduction in TUSF support.

---

[8] *Compliance Proceeding for Implementation of the Small and Rural ILEC Service Plan*, Docket No. 18516 (Jan. 14, 2000).

[9] *Commission Staff's Petition to Establish a Reasonable Rate for Basic Local Telecommunications Service Pursuant to P.U.C. SUBST. R. 26.404*, Docket No. 41097 (Aug. 30, 2013).

[10] See Docket No. 41097, *Order No.9 Granting Motion to Dismiss* (Jun. 12, 2013). See also SB 583, *Relating to eligibility for support from the universal service fund*, from the 83rd Legislative Session.

[11] Chapter 58 provides for incentive regulation of those companies that elect to be subject to its provisions. Chapter 59 provides for an infrastructure commitment by those companies that do not elect to be subject to Chapter 58 regulation.

[12] *Rulemaking Proceeding to Amend Substantive Rules Relating to the Small and Rural Incumbent Local Exchange Company Universal Service Plan*, Project No. 39938. Final Order (Nov. 21, 2012).

b. *Chapter 65 Regulation*

Chapter 65 also allows "transitioning" ILECs to increase the rates for BLTS, when combined with at least one other vertical service, in those exchanges that have been deregulated.[13] Rate increases have been reviewed and approved over the past two years for the two largest telephone companies in the state as a result of reduction in the amount of TUSF support these ILECs received.

The last report to the legislature indicated that 412 exchanges of three ILECs had been deregulated since 2005. The deregulated exchanges are served by AT&T Texas, GTE Southwest Incorporated d/b/a Verizon Southwest (now known as Frontier Southwest Incorporated d/b/a Frontier Communications), and Central Telephone Company of Texas, Inc. d/b/a CenturyLink. AT&T Texas is a deregulated company;[14] the others are classified as "transitioning" companies whereby at least one, but not all of the company's exchanges have been deregulated.[15] Since the last report, Verizon[16] has been granted 25 additional deregulated exchanges to bring the total to 438 (one market, Hutto, has since been re-regulated,[17] bringing the net total to 437 deregulated exchanges).

Effective July 11, 2014, AT&T Texas has deregulated all of its exchanges. Additionally, effective October 23, 2014, AT&T Texas was allowed to relinquish its

---

[13] A Chapter 65 transitioning ILEC is an ILEC with one or more, but not all, of its market areas deregulated.

[14] A deregulated company is an ILEC for which all of the company's markets have been deregulated. See *Southwestern Bell Telephone Company d/b/a AT&T Texas' Petition for a Certificate of Operating Authority and to Rescind Its Certificate of Convenience and Necessity*, Docket No. 42741, Finding of Fact No. 17 (Oct. 23, 2014).

[15] *Staff's Petition to Determine Whether Markets of Incumbent Local Exchange Carriers (ILECs) Should Remain Regulated*, Docket No. 31831 (Dec. 28, 2005). On December 28, 2005, an Order was issued by the Commission classifying SBC, Verizon, and Central Telephone as "transitioning" companies. Effective January 1, 2006 53 markets (exchanges) were declared deregulated: 39 SBC markets, 11 Verizon markets and three Sprint-Centel markets. *AT&T Texas' Petition to Determine Whether Markets of Incumbent Local Exchange Carriers (ILECs) with Populations Less than 30,000 Should Remain Regulated*, Docket No. 32977 (Oct. 17, 2006). On October 17, 2006, an Order was issued by the Commission deregulating 17 additional SBC and Centel markets. *Petition of AT&T Texas to Determine Whether Certain Markets with Population Less Than 100,000 Should Remain Regulated*, Docket No. 41731 (Nov. 4, 2013). On November 4, 2013, an Order was issued by the Commission deregulating 109 additional AT&T Texas markets. *Petition of AT&T Texas to Determine Whether Certain Markets with Population Less Than 100,000 Should Remain Regulated*, Docket No. 42451 (Jul. 11, 2014). On July 11, 2014 an Order was issued by the Commission deregulating 95 AT&T markets.

[16] *Petition of Verizon Southwest to Determine Whether Certain Markets with Population Less Than 100,000 Should Remain Regulated*, Docket No. 41740 (Nov. 4, 2013). On November 4, 2013, an Order was issued by the Commission deregulating 13 additional Verizon markets. *Petition of Verizon Southwest to Deregulate Certain Markets*, Docket No. 42745 (Oct. 23, 2014). On October 23, 2014, a Final Order was issued by the Commission deregulating an additional 15 Verizon markets. *Petition of Verizon Southwest to Deregulate Certain Markets*, Docket No. 45056 (Nov. 6, 2015). On November 6, 2015, a Final Order was issued by the Commission deregulating an additional ten Verizon markets.

[17] *Petition for Review of Monthly Per-Line Support Amounts from the Texas High-Cost Universal Service Plan Pursuant to PURA § 56.031 and P.U.C. SUBST. R. 26.403*, Docket No. 34723 (Apr. 25, 2008).

Certificate of Convenience and Necessity in exchange for a Certificate of Operating Authority (COA).[18] The effect of these changes is that rates for AT&T Texas's services are now controlled by market pressure, rather than by Commission order.

In July 2012, a new proceeding was established to determine a reasonable rate for BLTS along with the corresponding reductions in support from the THCUSP each ILEC would experience as a result of the newly determined reasonable rates for BLTS. This proceeding resulted in a revised reasonable rate for BLTS of $24.00 per month for AT&T Texas, Verizon, and CenturyLink f/k/a Embarq. For Windstream Communications Southwest, the new rate was determined to be $23.50 per month.[19] The agreement called for a rate increase over a four year period ending in January 2016.

During the last two years BLTS rates for three of the largest telephone companies in the state (AT&T Texas, Frontier Communications f/k/a/ Verizon, and CenturyLink f/k/a/ Embarq) have continued to increase as the TUSF subsidy for BLTS also decreased for all of the large ILECs (AT&T Texas, Frontier Communications f/k/a Verizon, CenturyLink f/k/a Embarq and Windstream).

3. Local Telephone Service Rates

a. *Basic Rates*

Table 1 provides an illustration of BLTS rates applicable to residential service, single-line business service, and multiple-station business trunk service in deregulated and regulated markets in Texas served by ILECs regulated under various regulatory regimes.

As shown in Table 1, local telephone rates for business customers are higher than those charged to residential customers and rates in urban areas exceed the rates in rural areas in most cases. For example, the Dallas Metropolitan Exchange, a deregulated market served by AT&T Texas, offers residential local telecommunications service at a rate of $26.00 per month. This rate reflects the culmination of increases over the last two years as AT&T Texas sought to offset the reduction of support from the TUSF. Generally speaking, the rates in deregulated exchanges, with the exception of certain grandfathered, lifeline, and tribal rates, are uniform throughout AT&T Texas's service territory that has been deemed competitive.

The rates for single-line business service in the rural exchanges appear to depend on whether the ILEC serving the exchange has the ability to exercise pricing flexibility. As shown in Table 1, the single-line business rates in the rural areas of Huxley and Port Aransas are less than the rates for the same service in the rural area Jarrell. The difference in rates may be attributed to the fact that Jarrell is served by an ILEC (Frontier Communications f/k/a Verizon) that has the flexibility to set prices for a non-basic service such as single-line business in these exchanges under PURA Chapter 58. On the other

[18] *Southwestern Bell Telephone Company d/b/a AT&T Texas' Petition for a Certificate of Operating Authority and to Rescind Its Certificate of Convenience and Necessity*, Docket No. 42741 (Oct. 23, 2014).

[19] *Commission Staff's Petition to Establish a Reasonable Rate for Basic Local Telecommunications Service Pursuant to P.U.C. SUBST. R. 26.403*, Docket No. 40521 (Sept. 28, 2012).

hand, Huxley and Port Aransas are served by Eastex Telephone Cooperative, a Chapter 52 ILEC and CenturyTel of Port Aransas d/b/a CenturyLink, a Chapter 59 ILEC, respectively, and these companies are constrained in their ability to engage in pricing flexibility for single-line business customers.

Recent FCC decisions on intercarrier compensation reform may also have an effect on residential and business local rates in Texas.[20] The FCC has required telecommunications carriers to reduce, over a period of six to nine years, the rates they charge to transport and terminate another carrier's telecommunications traffic. The FCC has permitted ILECs to recover at least part of the lost intercarrier compensation revenues caused by the reduction in intercarrier compensation rates through increases in end-user charges and new federal universal service support. Specifically, ILECs are permitted to charge a limited monthly charge called the Access Recovery Charge (ARC) on wireline telephone service, with a maximum annual increase of $.50 for consumers and small businesses, and $1.00 per line for multi-line businesses.[21] This monthly charge may not be imposed on consumers whose total monthly rate for local telephone service is at least $30 and on multi-line business customers if the ARC and existing subscriber line charge (a federal fee) exceeds $12.20 per line.

[20] *In the Matter of Connect America Fund, et al*, FCC 11-161, Report and Order and Further Notice of Proposed Rulemaking (Released: Nov. 18, 2011), paragraphs 35-37. Available online at: http://www.fcc.gov/document/fcc-releases-connect-america-fund-order-reforms-usficc-broadband

[21] The $0.50 ARC may increase an additional $0.50 annually through 2016 or 2017, depending on the type of carrier (price cap or rate-of-return). The FCC also will allow Incumbent LECs to assess a monthly charge of up to $1.00 per line on multiline business lines. The $1.00 ARC on multiline business lines may increase an additional $1.00 annually through 2016 or 2017, depending on the type of carrier (price cap or rate-of-return).

Table 1 - Sample of Basic Local Telephone Service Rates in Texas[22]

Serving Company	*Major City/ Local Access Transport Area (LATA)*	*Exchange served*	*Basic Single Line Service Rates*		
			Residential	**Business**	**Business Trunk**
AT&T Texas – Chapter 65	Dallas/ Dallas LATA	Dallas Metropolitan Exchange - *deregulated*	$26.00	$114.00	$114.00
Frontier f/k/a Verizon – Chapter 65	Irving/Dallas LATA	Irving Exchange - *deregulated*	$31.00	$49.10	$52.10
Frontier f/k/a Verizon – Chapter 65	Jarrell/Austin LATA	Georgetown Exchange - *regulated*	$24.00	$37.75	$45.10
CenturyLink - Chapter 65	Humble/Houston LATA	Humble Exchange - *deregulated*	$21.22	$40.00	$56.00
CenturyLink - Chapter 58	Hutto/Austin LATA	Hutto Exchange - *regulated*	$21.22	$29.00	$34.00
Windstream Comm. SW - Chapter 58	Texarkana/Longview LATA	Texarkana Exchange	$14.40	$30.54	$40.10
Blossom Telephone Company – Chapter 52	Blossom/ Dallas LATA	Blossom Exchange	$14.00	$15.50	n/a
Eastex Telephone Coop – Chapter 52	Huxley/Houston LATA	Huxley Exchange	$18.00	$25.84	$28.37
CenturyLink - Chapter 59	Port Aransas/Corpus Christi LATA	Port Aransas Exchange	$5.85	$11.35	$17.95

b. *Vertical Services Rates*

Vertical services rates are not capped under Chapters 58, 59, and 65 of PURA. Thus, the rates of many of the most popular vertical features have generally continued to increase. The most popular vertical services include Caller ID Name and Number, Automatic Call Blocking, Call Forwarding, Speed Calling, Call Return, and Three Way Calling. Because AT&T Texas and Frontier Communications f/k/a Verizon are Chapter 65 companies, they are no longer required to file tariff updates to implement price changes.

[22] Source: Texas P.U.C. tariff filings. The exchanges shown were chosen to best represent a broad cross-section of all customers in the State of Texas.

As a deregulated company, AT&T Texas is not required to maintain tariffs on file at the Commission; therefore information on price changes is not readily available.

c. *Packages, Bundles, Term Commitments, and Promotions*

As in the past few years, the trend continues for ILECs, CLECs, cable providers, and VoIP providers to market service packages to residential and business customers that include basic local service, vertical features, and long-distance services bundled with video services and high speed internet access. The most prolific of bundles offered by telephone and cable companies is the "triple play" offering – a package comprising video service, high-speed internet access, and voice telephone service. Triple play offerings are typically priced under $100 per month with a one to two-year term commitment, in most cases.

Cable companies and VoIP providers continue to offer special promotions to lure customers away from the incumbent, while the incumbent continues to regularly offer special promotions to former residential and business customers to "win-back" their business. Both forms of promotions generally provide temporary economic incentives to induce customers to switch their local telephone service, video service, and/or high speed internet service. As reported two years ago, the term agreement continues to be a common offering for large and small companies and provides revenue security for competitive telecommunications carriers.

C. Effects of Competition and Regulation on Service Availability and Customer Choice

In areas that remain regulated, service availability, or the ability of Texas residents to obtain some form of telephone service (a/k/a "subscribership"), is not affected by competition, but rather is governed by state laws and Subchapter C of the Commission's Chapter 26 regulations. However, the ability of Texas residents to choose from multiple providers of telephone service has been greatly enhanced with increasing competition.

Chapter 65 companies that are completely deregulated and have a COA no longer have a provider of last resort (POLR) obligation.[23] Subscribership in deregulated areas of Chapter 65 companies is driven by market forces. Areas were deregulated based on the proven availability of at least two telephone providers in addition to the incumbent,[24] so that through the competitive market, customers have not only the ability to obtain some form of telephone service, but also have a choice of providers.

[23] Public Utility Regulatory Act, Tex. Util. Code § 65.102(a)(1) (West 2007 & Supp. 2016) (PURA).

[24] The Commission is not aware of a case where any exchange that was deregulated because of the presence of at least two facilities-based competitors has experienced the loss of one of those competitors.

1. Subscribership

a. *Subscribership Regulation*

Legal and regulatory provisions are in place in Texas to ensure that telecommunications service is made available to customers residing in still-regulated areas. PURA and Commission rules require a POLR in all regulated areas in Texas, thereby guaranteeing at least one provider of telecommunications service for these areas in Texas, due either to regulation or proven competition in deregulated areas.[25]

For those areas in Texas that are uncertificated, there is a process in place that enables customers to request telecommunications service.[26] That process has been exercised four times to date. Two applications to serve uncertificated areas have been received since the 2009 Scope of Competition Report, and neither was approved.[27] In addition, wireless and satellite providers provide coverage in many of the uncertificated areas.

An uncertificated area is an area of the state where no ILEC is required to provide service. PURA Chapter 56, Subchapter F authorizes the Commission to designate a telecommunications provider to provide BLTS in uncertificated areas if the provider is otherwise eligible to receive high cost support from the TUSF.

PURA § 56.210 and its implementation in 16 Tex. Admin. Code § 26.423 (TAC) establishes procedures for the Commission to designate an Eligible Telecommunications Provider (ETP) to provide voice-grade services to permanent residential or business premises that are not included within the certificated area of a holder of a CCN, and for the reimbursement of costs from the TUSF if potential subscribers agree to pay a portion of the ETP's construction costs.[28] Once an ETP volunteers or is designated to serve the area, construction costs and monthly assistance rates may be approved for the new service.

b. *Programs Supporting Subscribership*

The THCUSP and the Small and Rural ILEC Universal Service Plan (SRILECUSP) provide financial support to eligible carriers in a competitive environment to ensure that customers in high cost areas in Texas and low-income customers throughout the State of Texas have access to BLTS at just, reasonable, and affordable rates.

---

[25] *See* PURA §§ 54.301-54.303 (West 2016). *See also* 16 Tex. Admin. Code §§ 26.22(a)(1) and 26.54(c)(1) (TAC).

[26] *See* PURA Chapter 56, Subchapter F (West 2016). *See also* 16 TAC §§ 26.421 and 26.422.

[27] *Petition of Cathryn Cope Kessler for Telecommunications Service in Uncertificated Area Pursuant to P.U.C. SUBST. R. 26.421*, Docket No. 36097, petition filed Sept. 2, 2008, denied on May 19, 2010; *Petition of Martin D. Soward for Telecommunications Service in Uncertificated Area Pursuant to P.U.C. SUBST. R. 26.42*, Docket No. 40473, petition filed June 11, 2012; denied on July 19, 2012.

[28] Other requirements include actions such as entering into an agreement for subscription to basic local service for a period of time and proof of ownership of the residential or business property in question.

c. *Lifeline Service*

Lifeline service provides qualifying low-income customers a discount for local telephone service. Qualifying Lifeline customers receive a discount of up to $12.75 per month from their Lifeline provider, which is reimbursed from a combination of the TUSF and the FUSF.

In addition, eligible customers served by Lifeline providers operating in the service areas of AT&T Texas, Verizon Southwest, CenturyLink, and Windstream Communications Southwest, or their successors, receive a discount equal to 25% of any increases to residential basic network service rates in regulated exchanges of the four companies mentioned above consistent with 16 TAC § 26.412 and the Order issued in the Commission's Docket No. 40521.[29] This additional discount is reimbursed from the TUSF.

To receive support from the FUSF, a telecommunications carrier has to be designated by the Commission as an Eligible Telecommunications Carrier (ETC). To receive support from the TUSF, a telecommunications carrier has to be designated by the Commission as an ETP. All certificated telecommunications providers are required to offer Lifeline service.

All certificated providers, other than a total service reseller (TSR), can apply to become an ETC or ETP and can thereby qualify for support from the FUSF and the TUSF.[30] A wireline TSR provider that is certificated as an SPCOA or COA can apply to become a resale eligible telecommunications provider (RETP) to receive TUSF support for providing Lifeline service.[31]

Lifeline enrollment funded by state support has decreased since 2009 primarily due to participants selecting wireless Lifeline providers that are funded through the FUSF. Table 2 shows the enrollment figures since 2012.

Table 2 - Lifeline Enrollments, 2012 - 2015[32]

2012 Lifeline	2013 Lifeline	Percent Increase/ Decrease 2012 - 2013	2014 Lifeline	Percent Increase/ Decrease 2013 - 2014	2015 Lifeline	Percent Increase/ Decrease 2014 - 2015
619,148	389,142	-37.15%	218,999	-43.72%	132,244	-39.61%

[29] *Commission Staff's Petition to Establish a Reasonable Rate for Basic Local Telecommunications Service Pursuant to P.U.C. SUBST. R. 26.403*, Docket No. 40521 (Sept. 28, 2012).

[30] 16 TAC §§ 26.417 and 26.418.

[31] 16 TAC § 26.419.

[32] Solix – Low-Income Discount Administrator (LIDA).

2. Choice of Providers

The increased footprint of wireless providers, cable companies, and VoIP providers has generally increased the availability of BLTS over and above what has been traditionally provided by ILECs. Moreover, the availability of peripheral services, features, and functionality provided in conjunction with BLTS has also become more widespread. Rural areas, with higher infrastructure costs and smaller populations, have not attracted robust local exchange competition, but they have, in many instances, been afforded the options of cable, wireless, or satellite telecommunications service as alternatives to consider when making a choice for telecommunications service. The provision of VoIP service appears to be increasing for business customers that use a variety of data and high-speed transmission services.

As seen in Table 3,[33] there were 694 municipalities in Texas that had one or two providers of residential telephone service. Similarly for business providers, there were 376 municipalities in Texas that had one or two providers of business telephone service (see Table 4). Not every service provider provides both residential and business telephone service. It should be noted that the data used to create the tables below does not include wireless providers.

Table 3 - Number of Landline Residential Service Providers in Texas Municipalities as of March 2016[34]

Range of Residential Service Providers	Number of Municipalities
1-2	694
3-5	336
6-10	70
11-15	4
16-20	1
21-30	0

[33] Source: http://www.puc.texas.gov/consumer/phone/providers/Search_Phone.aspx

[34] *Id.*

Table 4 - Number of Landline Business Service Providers in Texas Municipalities as of March 2016[35]

Range of Business Service Providers	Number of Municipalities
1-2	376
3-5	307
6-10	195
11-15	99
16-20	49
21-25	37
26-30	16
31-40	18
41-50	3
51-60	2

PURA, Chapter 66, provides for a state-issued certificate of franchise authority (SICFA) to new entrants as well as incumbent cable or video providers wishing to compete in new or existing markets.

As shown in Table 5, the cable and video market showed little growth in Texas over the last two years. In 2008, there were 185 counties with either one or no cable and video service provider; however, by 2016 that number has decreased to 67 counties. The number of counties with at least four providers has increased from 15 counties in 2008 to 44 counties in 2016. There are four counties that are served by at least 12 cable and video service providers. However, the number of counties that have between four and 16 cable and video service providers has decreased since 2014. It should be noted, that cable and video service providers do not necessarily offer service throughout the counties they are serving.

[35] *Id.*

Table 5 - Number of Cable and Video Providers in Texas[36]

Number of Providers	Number of Counties in 2008	Number of Counties in 2010	Number of Counties in 2012	Number of Counties in 2014	Number of Counties in 2016
0	63	54	24	15	23
1	122	84	48	51	61
2-3	52	84	114	110	111
4-6	15	26	51	54	44
7-11	2	6	15	19	11
12-16	0	0	2	5	4

[36] Source: State-issued certificate of franchise authority filed with the Commission. Available online at: http://www.puc.texas.gov/industry/communications/business/sicfa/sicfa.aspx

IV. COMPETITION IN BROADBAND

A. Overview

In today's digital world, broadband [37] represents an increasingly important mode of communication. Broadband services provide a platform for communications firms to offer information content, such as entertainment and video, and business services involving data transfer. As broadband services expand, they become increasingly important to the competitive environment of telecommunications services in Texas.

B. Market Share

Broadband is now a major offering in the telecommunications market. The number of broadband subscribers in Texas has increased 215 percent from 2009 to 2015,[38] demonstrating a high rate of adoption of broadband service as the price for the service continues to drop.

As shown in Table 6, the number of broadband subscribers in Texas has grown from approximately 7.4 million in June 2008, to more than 29 million as of December 2015. Of this number, 1 million were digital subscriber loop (DSL) subscribers, 3.5 million were cable modem subscribers, half a million were fiber subscribers, and 21.5 million were mobile broadband subscribers (see Figure 7). In December 2015, Texas ranked second in the nation with respect to number of broadband subscribers (including mobile broadband connections); see Table 6.

[37] For the purpose of this section, the publicly available data collected from various sources do not use the FCC's current post-2015 definition of broadband of 25 Mbps, but instead use the FCC's pre-2008 definition of broadband of 200 kbps. *See In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, et. al*, GN Docket No. 14-126, FCC 15-10, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment (rel. Feb. 4, 2015) at pages 8 and 29, https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-10A1.pdf.

[38] *Internet Access Services: Status as of December 31, 2015* at Figure 33, (Nov. 2016), https://apps.fcc.gov/edocs_public/attachmatch/DOC-338630A1.pdf (*Internet Access Services Report)* (note the FCC usually releases its *Internet Access Report* in June and December of every year, and previous scope of competition reports have used the FCC's mid-year statistics as a measure. For 2015, however, the FCC did not issue a mid-year report. Thus, the statistics used in this report for 2015 compare end-of-year statistics).

Table 6 - Broadband Subscribers in Texas as Compared to Other States (000s)[39]

State	Jun. 2008	Jun. 2009	Jun. 2010	Jun. 2011	Jun. 2012	Jun. 2013	Dec. 2015	Percent Change 2009/2015
California	12,649	14,691	18,779	26,029	30,773	34,083	44,318	202%
Texas	**7,484**	**9,214**	**12,420**	**17,487**	**21,288**	**23,612**	**29,011**	**215%**
New York	7,405	7,986	9,988	13,664	16,182	18,294	22,503	182%
Florida	6,729	7,571	9,479	12,720	15,851	17,765	21,469	184%
Illinois	4,265	4,843	6,274	8,645	10,085	11,300	14,464	199%
New Jersey	3,517	3,983	4,921	6,529	7,623	8,695	11,059	178%
Pennsylvania	4,225	4,775	6,067	8,212	9,581	10,819	13,797	189%
National	102,043	116,374	149,531	206,124	243,397	275,608	355,212	205%

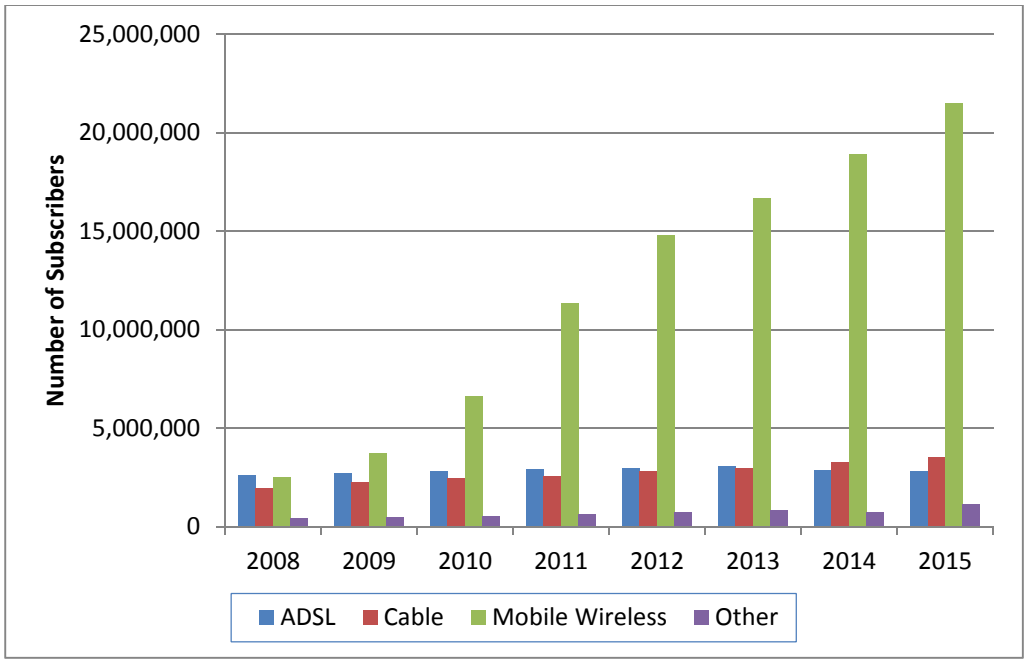
Broadband service is typically offered by wireless companies, cable companies, and local exchange companies. Local exchange companies typically use asymmetric DSL (ADSL) technology to provide service to its customers. ADSL allows customers to use their voice telephone lines to also transmit and receive data over the same copper facility. Similarly, cable modem service utilizes the same coaxial facility used to transmit cable television to also transmit broadband service. Other media for broadband service include fixed wireless, satellite, fiber to the home, broadband over power lines, and other wireline technologies.

Figure 7 depicts the level of subscribership to various technologies used in providing broadband service in Texas from 2008 to 2015. Although customers have several options available to them, mobile wireless service holds the largest share of broadband subscribership. Over the last five years, mobile wireless broadband subscribership has rapidly grown from 3.7 million connections in 2009 to 21.5 million connections in 2015, which represents a 481 percent increase.[40] For the first time since 2008, however, ADSL experienced a decrease in market share.

[39] *Id.*

[40] This increase in market share can be attributed to cheap pricing plans as well as the ever-increasing smartphone penetration rates and a host of new devices such as tablets, netbooks, and mobile internet devices (MIDs).

Figure 7 - Broadband Subscribers in Texas[41]



[41] *Internet Access Services Report*, *supra* note 39.

This page intentionally blank

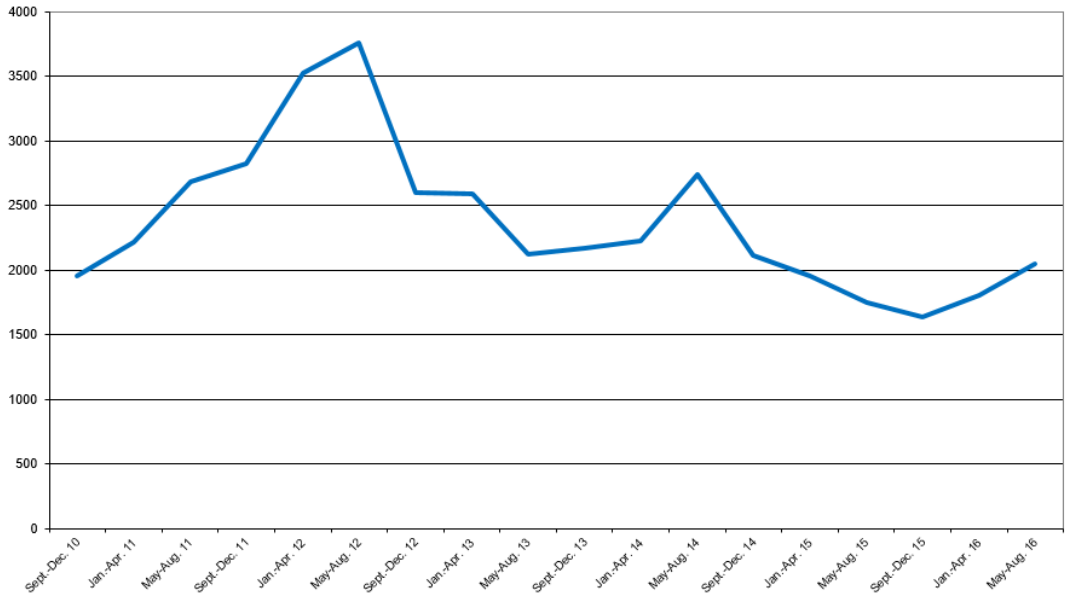
V. CUSTOMER PROTECTION / COMPLAINT ISSUES

Commission rules allow consumers to complain to the Commission about their utility service, and the Commission is required to keep records of the complaints. This chapter discusses the number and types of complaints received.

A. Complaints Received

As shown in Figure 8 below, telecommunications-related complaints received increased steadily from September 2010 through April 2012, then decreased gradually from August 2014 through March 2016.

Figure 8 - Total Numbers of Telephone Complaints Received
September 2010 – August 2016

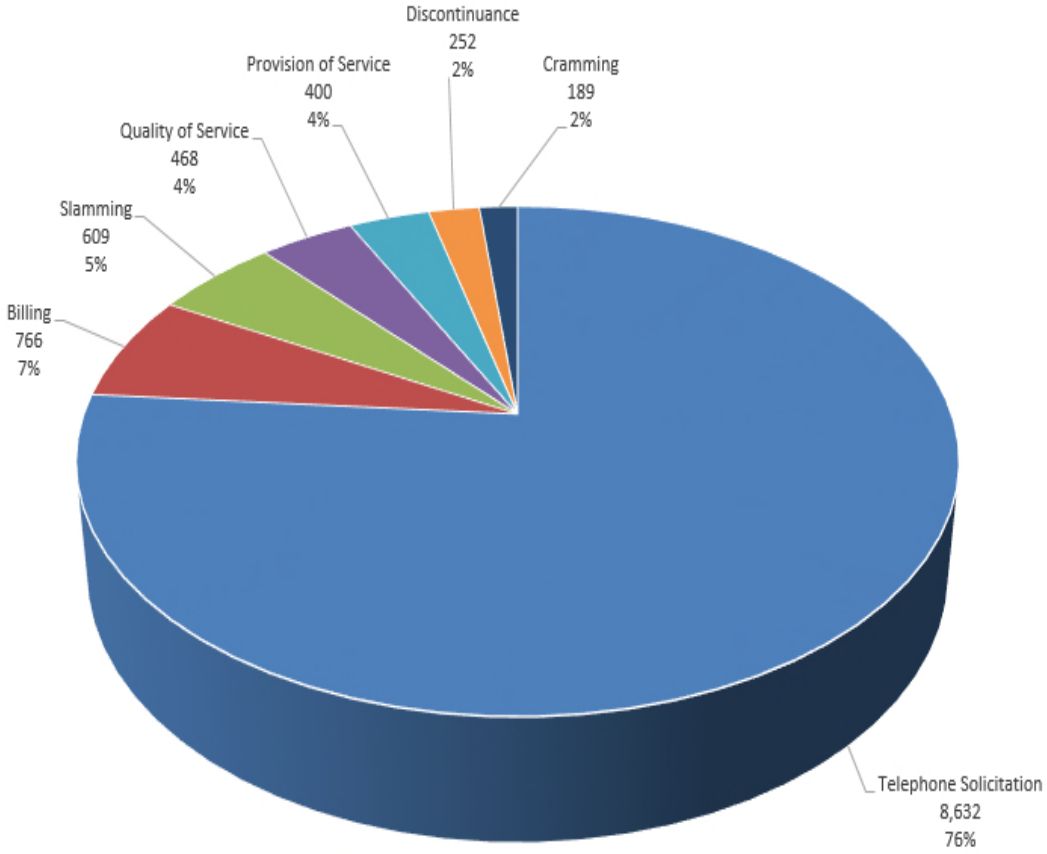


B. Types of Complaints

A total of 11,316 telecom complaints were received over the September 1, 2014 through August 31, 2016 period. The 8,632 complaints related to telephone solicitation, primarily the "Texas No Call List," accounted for 76% of the telecom complaints.

The decline in telephone complaints from September 2014 to March 2016 is likely due to the decline in Quality of Service complaints, customers switching from basic telephone service to mobile wireless, broadband services and VoIP. Because these advanced technologies are not under the jurisdiction of the Commission, customers wishing to file complaints regarding mobile wireless, broadband services or VoIP, must be referred to the FCC for assistance.

Figure 9 - Types of Telephone Complaints Received, September 2014 – August 2016



Effective April 1, 2016, Frontier acquired the Texas landline telephone, television, and internet service operations of Verizon, Inc.[42] Following the change in control from Verizon, Inc. to Frontier, a number of customers have reported disruptions in their service. As shown in the below table, the Commission experienced a large increase in the number of complaints and inquiries from customers regarding service issues in the area affected by the change in control.

Table 7 – Number of Customer Complaints Related to Sale of Verizon[43]

Types of Complaints		Verizon Southwest April–June 2015	Verizon/Frontier April–June 2016
Complaints within the Commission's jurisdiction	Cramming/Slamming	1	3
	Customer Service	5	14
	Deposits/Refunds	2	7
	Discontinuance	6	14
	Outages	7	2
	Quality of Service	14	2
	Rates & Charges	17	40
	Refusal of Service	1	1
	Solicitations	0	0
	Other	1	2
Inquiries regarding issues outside the Commission's jurisdiction	TV Services	0	0
	Internet Services	3	11
	VoIP	0	458
	Wireless Services	0	0
	Other	2	232
	Total	**59**	**786**

The Commission's customer contact personnel in the Consumer Protection Division have devised response material specific to the issues to provide to customers. For customer matters within the Commission's jurisdiction, customer contact personnel assisted customers as part of the Commission's informal and formal complaint process. With respect to matters not within the Commission's jurisdiction, customer contact personnel provided the contact information for the FCC and facilitated communications between customers and Frontier in order to help ensure that customers' concerns were addressed appropriately.

[42] *Notification of Frontier Communication for Acquisition Notice of Service Pursuant to Subst. R. §26.101(f)(1)*, Docket No. 45894, Frontier Communications Acquisition Notice of Service Effective Date (hereinafter "Letter") (Apr. 27, 2016).

[43] Source: PUC complaint data.

This page intentionally blank

VI. SIGNIFICANT COMMISSION ACTIVITIES: 2014-2016

A. Deregulation of ILEC Markets

PURA Chapter 65, provides for the deregulation of certain Incumbent Local Exchange Company (ILEC) markets. In 2011, SB 980 of the 82nd Legislative Session provided the criteria for deregulation of these markets so that markets with a population of less than 100,000 satisfy the test of deregulation if the ILEC can demonstrate that there are at least two unaffiliated competitors providing voice communications without regard to the delivery technology including through internet protocol, satellite, or wireless technology. As of publication, a total of 437 markets have been deregulated since 2005 (see Table 8).

AT&T Texas is the largest ILEC in Texas. AT&T Texas was the first ILEC in Texas to have all of its markets deregulated by the Commission, in accordance with the provisions of PURA Chapter 65. AT&T Texas's exchanges were all deregulated because each met the requirement that they have at least two competitors to AT&T Texas's basic voice service. AT&T Texas relinquished its CCN and was issued a COA. As a deregulated company, AT&T Texas is no longer required to fulfill POLR obligations, comply with retail quality of service standards, file an earnings report, or file tariffs. It is important to note that as a result of this deregulation, AT&T Texas is no longer eligible for TUSF support.

Table 8 - Number of Deregulated Markets in Texas by Provider

Number of Deregulated Markets in Texas by Provider				
Docket No.	**SBC (AT&T Texa**	**Verizon Southwes (Frontier)**	**Sprint-Centel (CenturyLink)**	**Docket Totals**
31831[44]	40	11	3	**54**
32977[45]	15		2	**17**
34723[46]			-1	**-1**
39962[47]	41			**41**
40398[48]		57		**57**
40646[49]		27		**27**
41731[50]	109			**109**
41740[51]		13		**13**
42451[52]	95			**95**
42745[53]		15		**15**
45056[54]		10		**10**
Company Totals	**300**[55]	**133**	**4**	**437**

[44] *Staff's Petition to Determine Whether Markets of Incumbent Local Exchange Carriers (ILECs) Should Remain Regulated*, Docket No. 31831 (Dec. 28, 2005) (effective Jan. 1, 2006). In this project AT&T, Verizon, and CenturyLink (Central Telephone of Texas) were classified as "transitioning" companies.

[45] *Petition of AT&T Texas to Determine Whether Markets of Incumbent Local Exchange Carriers (ILECs) with Populations Less Than 30,000 Should Remain Regulated*, Docket No. 32977 (Oct. 17, 2006).

[46] *Petition for Review of Monthly Per-Line Support Amounts from the Texas High-Cost Universal Service Plan Pursuant to PURA § 56.031 and P.U.C. Subst. R. 26.403*, Docket No. 34723 (Apr. 25, 2008). In Docket No. 34723, the Hutto Exchange served by CenturyLink (Central Telephone of Texas) was re-regulated under PURA Chapter 58 in April 2008 as part of a settlement by the parties.

[47] *Petition of AT&T Texas to Determine Whether Certain Markets with Populations Less Than 100,000 Should Remain Regulated*, Docket No. 39962 (Feb. 24, 2012). Docket No. 39962 was the first docket processed under the provisions of SB 980 (2011).

[48] *Petition of Verizon Southwest to Deregulate Certain Markets*, Docket No. 40398 (Jul. 30, 2012).

[49] *Petition of Verizon Southwest to Deregulate Certain Markets*, Docket No. 40646 (Oct. 26, 2012).

[50] *Petition of AT&T Texas to Determine Whether Certain Markets with Populations Less Than 100,000 Should Remain Regulated*, Docket No. 41731 (Nov. 4, 2013).

[51] *Petition of Verizon Southwest to Determine Whether Certain Markets With Populations Less Than 100,000 Should Remain Regulated*, Docket No. 41740 (Nov. 4, 2013).

[52] *Petition of AT&T Texas to Determine Whether Certain Markets With Populations Less Than 100,000 Should Remain Regulated*, Docket No. 42451 (Jul. 11, 2014).

[53] *Petition of Verizon Southwest to Deregulate Certain Markets*, Docket No. 42745 (Oct. 23, 2014).

[54] *Petition of Verizon Southwest to Deregulate Certain Markets*, Docket No. 45056 (Nov. 6, 2015).

[55] As of Sept. 1, 2014, 100% of AT&T Texas exchanges have been deregulated.

B. Revisions to the Texas Universal Service Fund

The purpose of the TUSF is to implement a competitively neutral mechanism to enable telecommunications providers to provide BLTS at reasonable rates in high cost rural areas of the state. The TUSF accomplishes this purpose by providing financial support to ETPs to assist in the provision of BLTS at reasonable rates to customers in high cost rural areas and to qualifying low-income and disabled customers. Eleven programs are supported through the TUSF. These programs can generally be categorized as one of two types: assistance for high cost areas or assistance for low-income or disabled individuals. The eleven TUSF programs are listed in Table 9. The disbursements for each of the eleven TUSF programs are listed in Table 10.

Table 9 - Programs Supported by the Texas Universal Service Fund

Programs Supported by the Texas Universal Service Fund
Programs for high cost assistance:
Texas High Cost Universal Service Plan (THCUSP) (a/k/a Large Company Area High Cost Program)
Small and Rural ILEC Universal Service Plan (SRILECUSP) (a/k/a Small Company Area High Cost Program)
PURA § 56.025 Maintenance of Rates and Expansion of Fund for Certain Companies
Uncertificated Areas
Successor Utilities
Additional Financial Assistance (AFA)
IntraLATA (For Non-58/59 companies)
Programs for low-income or disability assistance
Lifeline
Relay Texas (Telecommunications Relay Service)
Specialized Telecommunications Assistance Program (STAP)
Audio Newspaper Program (ANP)

Table 10 – Texas Universal Service Fund Disbursements, 2013-2016

TUSF Program Disbursements	FY 2013 (Actual)	FY 2014 (Actual)	FY 2015 (Actual)	FY 2016 (Actual)	Percent of Total USF (FY 2016)
Texas High Cost Universal Service Plan (THCUSP)	$194,109,112	$162,894,812	$132,983,991	$118,156,517	48.82%
Small and Rural ILEC Universal Service Plan (High Cost)	97,807,052	97,779,663	95,392,860	92,013,823	38.02%
Texas Relay Service	4,676,258	3,320,035	3,162,660	2,442,439	1.01%
Lifeline	25,354,403	15,437,763	9,804,461	6,996,099	2.89%
Specialized Telecommunications Assistance Program	7,511,317	5,624,574	6,386,703	11,227,152	4.64%
* Implementation of PURA § 56.025 A	4,747,877	3,334,924	1,949,455	1,947,730	0.80%
* Implementation of PURA § 56.025 C	2,203,273	6,337,443	1,929,033	1,734,311	0.72%
USF Reimbursement for Certain IntraLATA Services	1,116,810	1,292,314	717,552	566,916	0.23%
Additional Financial Assistance (AFA)	-	-	-	-	0.00%
Service to Uncertificated Areas	167,209	177,010	166,797	165,578	0.07%
Tel-Assistance	7,496	6,452	4,783	4,206	0.00%
DARS	929,700	891,601	941,563	1,244,071	0.51%
PUC	596,235	423,202	342,361	360,294	0.15%
Other	52,000	52,000	54,000	54,000	0.02%
Low Income Discount Administrator (LIDA)	3,401,949	6,270,940	4,947,718	3,785,531	1.56%
TUSF Administrator	949,092	789,687	949,858	884,910	0.37%
Audio Newspaper Program	416,067	398,200	476,292	447,954	0.19%
TOTAL USF	$344,045,849	$305,030,620	$260,210,087	$242,031,531	100%

The two largest programs are the THCUSP and the SRILECUSP. The THCUSP was established to provide support in markets served by the largest incumbent local exchange companies in Texas, including Verizon and AT&T Texas. The SRILECUSP provides support in the markets served by the remaining, much smaller, incumbent local exchange companies.

The TUSF is funded by a statewide uniform charge, or "assessment," payable by each telecommunication provider that has access to the customer base. The assessment is assessed as a percentage of each customer's bill for intrastate telecommunications service.

In most cases, telecommunications providers choose to recover their assessment via a fee to customers. The current TUSF assessment rate is 3.3%.[56]

Total disbursements from the TUSF have steadily declined since 2006. In FY 2006, the TUSF disbursed a total of $572 million and in FY 2016, $242 million was disbursed, representing a decrease of $330 million. The Commission continues to implement further reductions to the TUSF, including the orders in Docket Nos. 40521[57] and 41097[58], which decreased the support available to certain incumbent local exchange companies from the THCUSP and the SRILECUSP and permitted affected companies to offset support reductions using rate increases or by deregulating certain markets.

PURA 56.023 requires that before January 1, 2019, companies receiving THCUSP support must file a petition to show financial need for their continued TUSF support. On December 28, 2015, CenturyLink petitioned the Commission to demonstrate its financial need for continued TUSF support. In its Final Order dated May 5, 2016, the Commission approved continued THUSF support for 79 of CenturyLink's 108 exchanges.[59] On December 28, 2015, Valor Telephone petitioned the Commission to demonstrate its financial need for continued TUSF support. On May 6, 2016, the Commission approved continued TUSF support for 176 of Valor's 196 exchanges.[60]

Finally, Texas has seen the continued deregulation of additional markets served by ILECs, including the total deregulation of the largest incumbent in Texas, AT&T Texas. Because the Legislature has required that there be at least two other competitors in an incumbent's exchange before it can be deregulated, AT&T Texas's complete deregulation can be interpreted as evidence of widespread competition in Texas. AT&T Texas's request for a COA to replace its CCN was approved in 2014.

[56] *TUSF Administration*, Project No. 21208, Order Changing the TUSF Assessment (Dec. 18, 2014).

[57] *Commission Staff's Petition to Establish a Reasonable Rate for Basic Local Telecommunications Service Pursuant to P.U.C. Subst. R. 26.403*, Docket No. 40521 (Sept. 28, 2012).

[58] *Commission Staff's Petition to Establish a Reasonable Rate for Basic Local Telecommunications Service Pursuant to P.U.C. Subst. R. 26.404*, Docket No. 41097 (Aug. 30, 2013).

[59] *Petition of Central Telephone Company of Texas, Inc. d/b/a CenturyLink and United Telephone Company of Texas, Inc. d/b/a CenturyLink Pursuant to Section 56.023 of the Public Utility Regulatory Act*, Docket No. 45473 (May 5, 2016).

[60] *Application of Valor Telecommunications of Texas, LLC d/b/a Windstream Communications Southwest Pursuant to Section 56.023 of the Public Utility Regulatory Act*, Docket No. 45472 (May 6, 2016).

C. Other Commission Actions Related to Telecommunications

1. Sale of Verizon Southwest to Frontier Communications

Effective April 1, 2016, Frontier Communications Corporation (Frontier) acquired the Texas landline telephone, television, and internet service operations of Verizon, Inc.[61] As part of the transaction, Frontier obtained a controlling ownership interest in GTE Southwest Incorporated d/b/a Verizon Southwest (Verizon Southwest), and renamed it as Frontier Southwest Incorporated d/b/a Frontier Communications of Texas.[62] Under the authority of a CCN and a COA originally awarded to Verizon Southwest, Frontier provides various services to approximately 605,000 customers in Texas.[63] The majority of Verizon Southwest's customers are served pursuant to its CCN, while a small number of business customers outside of its CCN territory are served pursuant to its COA.[64] Generally, the Commission has less regulatory authority over services provided pursuant to a COA, as opposed to a CCN.[65]

Sales, transfers, and mergers for regulated utilities are typically governed by PURA § 14.101.[66] However, under PURA § 51.010(c), the process is different for the sale, transfer or merger of a company subject to incentive regulation.[67] Prior to the transaction with Frontier, Verizon Southwest had earlier elected incentive regulation treatment under PURA Chapter 58.[68] Verizon Southwest was only required to file a written notification with the commission no later than 30 days after the change in indirect control of Verizon Southwest's CCN was completed, which it did.[69]

Because the transferred Verizon Southwest entity also held a Commission-issued COA, Frontier and Verizon, Inc. were required to request Commission approval of the

---

[61] Docket No. 45894, Letter.

[62] *Application of Frontier Southwest Incorporated d/b/a Frontier Communications of Texas for an Amendment to a Certificate of Convenience and Necessity*, Docket No. 45932 (August 3, 2016).

Application of Frontier Southwest Incorporated d/b/a Frontier Communications of Texas for an Amendment to a Certificate of Operating Authority, Docket No. 45933 (June 29, 2016).

[63] Docket No. 45933, Notice of Approval at 2.

[64] *Application of GTE Southwest Incorporated d/b/a Verizon Southwest and Frontier Communications Corporation for an Amendment to a Certificate of Operating Authority*, Docket No. 44630, Finding of Fact No. 23 (Sept. 18, 2015).

[65] *See* PURA §§ 52.101, 52.102.

[66] *See* PURA § 14.101 (setting out report and review procedures for sales, transfers, and mergers involving public utilities); *see also* 16 TAC § 26.74 (implementing PURA § 14.101).

[67] PURA § 51.010(c) (stating that PURA § 14.101 does not apply to a company electing incentive regulation under PURA Chapter 58); *see also* 16 TAC § 26.74(e).

[68] *GTE Southwest, Inc. Notification Pursuant to Subtitle H (Incentive Regulation of Telecommunications) Section 3.352*, Project No. 14741, Notification (Sept. 20, 1995).

[69] 16 TAC § 26.101(f)(1). Frontier filed the required notification on April 27, 2016. *See* Docket No. 45894, Letter).

transaction as it related to Verizon Southwest's COA.[70] On April 9, 2015, Verizon Southwest and Frontier jointly filed an application for approval of the change in control of Verizon Southwest's COA.[71]

The joint application was subject to Commission review to consider whether the Verizon Southwest entity, following the transaction, would comply with the requirements for certification under the Commission's rules governing COAs.[72] The application affected only a small number of business customers receiving service outside of Verizon Southwest's CCN footprint, and Verizon Southwest did not serve any residential customers under its COA.[73]

2. New Area Code

According to the North American Numbering Plan Administrator (NANPA), Neustar, Inc. (Neustar), the supply of central office codes for the 210 area code is forecasted to exhaust by the first quarter of 2018. Neustar recommends the implementation of an overlay of a new area code, 726, for all new phone numbers in the current 210 area code territory. On July 20, 2016, the Commission adopted a 12-month implementation schedule for the new overlay area code.[74]

[70] 16 TAC § 26.111(i).

[71] *See generally* Docket No. 44630, Application (Apr. 9, 2016).

[72] Docket No. 44630, Order at 3 (Sept. 18, 2015) (discussing the standard of review for the joint application under 16 TAC § 26.111(i)).

[73] *Id*. at Finding of Fact No. 23.

[74] *Public Utility Commission of Texas Numbering Plan Area Relief Planning for the 210 Area Code*, Project No. 45224 (July 20, 2016).

This page intentionally blank

VII. LEGISLATIVE OBSERVATIONS

Texas Universal Service Fund

The Commission does not have legislative recommendations to present to the 85th Legislature but rather provides the following observations regarding issues that are expected to impact the Texas Universal Service Fund.

a. PURA §56.025 Make-Whole Provision

Incumbent Local Exchange Carriers (ILECs) can receive high cost universal service support from both the state and federal jurisdictions. Whenever a Federal Communications Commission (FCC) action has the effect of reducing Federal Universal Service Fund (Federal USF) payments to certain small ILECS, PURA §56.025 requires the Commission to allow such ILECs to be made whole either by receiving additional funds from the Texas Universal Service Fund (Texas USF) or by raising their local service rates to a level that would not adversely affect universal service.

Generally, the Commission has awarded one-time disbursements from the Texas USF to make such ILECs whole. In cases where the Commission finds the local exchange rates are too low, the Commission will order rate increases along with Texas USF disbursements to make the ILEC whole.

Looking to the future, several new FCC policies may result in additional Federal USF reductions, which in turn, may result in certain ILECs requesting increased future Texas USF disbursements or increased ILEC local exchange rates. Given that most such ILECs have already increased their local exchange rates, it is likely that they will request to be made whole through increased Texas USF disbursements. Because Staff cannot ascertain ahead of time what the impact of the FCC's actions will be, or what the affected ILECs will choose to do in response, predicting future Texas USF disbursements, and the potentially resulting assessments on customers, under PURA §56.025 is problematic.

b. Small and Rural Incumbent Local Exchange Company Universal Service Program

The PUC implemented the Small and Rural Incumbent Local Exchange Company Universal Service Program (SRILEC USP) for high cost support in 2000.[75] The PUC determined a monthly support amount for each company to receive for each line that it served. Monthly, the companies reported the number of lines served to the Commission

[75] *Compliance Proceeding for Implementation of the Small and Rural Incumbent Local Exchange Carrier Universal Service Plan*, Docket No. 18516, Final Order (Jan. 14, 2000).

and received the monthly per line support for each line served. The support amounts to each SRILEC decreased over time due to loss of basic local service customer lines.

In 2011, HB 2603,[76] enacted PURA §56.032 which allowed most SRILECs to receive high cost support calculated using the number of customers served in 2000 multiplied by the monthly per line support as adjusted by the consumer price index for each year. This change increased the high cost support for every SRILEC.

This provision expires September 1, 2017. At that time, the SRILECs will once again receive high cost support based upon the number of lines served multiplied by the monthly per line support set by the Commission in 2000. While the Commission doesn't have the information to calculate the specific amounts, the Commission anticipates that the high cost support to each SRILEC will be reduced when this law expires.

c. Competitive Eligible Telecommunications Providers' Continued Universal Service Support after Incumbent Stops Receiving Such Support

When the PUC implemented the high cost TUSF programs in 2000, the support was portable with the customer, meaning that the incumbent or competitor could qualify to receive the support amount for the customer it served.

In 2005, SB 5[77] allowed ILECs to deregulate their service areas. When an ILEC chooses to deregulate an exchange, high cost universal service support is no longer available in that exchange. However, in 2015, SB 804[78] allowed certain competitors to continue to receive high cost support until the later of December 31, 2017 or for two years after the ILEC was deregulated, while other competitors were allowed to continue to receive support until December 31, 2017.

As of July, 2014, AT&T Texas (the wireline company) became fully deregulated. Therefore, as of December 31, 2017, AT&T Texas' competitors will no longer be able to receive high cost support for the areas served by AT&T Texas.

d. TUSF Lifeline Program and New FUSF Support for Broadband Service

The FCC recently expanded the *federal* Lifeline program to include support not only for retail local services, such as local telephone service, but also now for broadband service.[79] PURA states that, for purposes of the *state* TUSF, "Lifeline service" is defined as a "retail local service described by 47 C.F.R. § 54.401(a)."[80] The section of the FCC's rules that this PURA definition refers to, 47 C.F.R. § 54.401(a), now includes not only

[76] House Bill 2603, 2011, 82nd Leg., R.S., (eff. Sept. 1, 2011).

[77] Senate Bill 5, 2005, 79th Leg., 2d C.S., ch. 2 (eff. Sept. 1, 2005).

[78] Senate Bill 804, 2015, 84th Leg., R.S., (eff. Sept. 1, 2015).

[79] *In the Matter of Lifeline and Link Up Reform and Modernization, et al.*, WC Docket No. 11-42, *et al*., Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Record 3962 (rel. Apr. 28, 2016).

[80] PURA § 55.015(e).

retail local services, such as local telephone service, but also broadband services. Because broadband service is not a retail local service, the state TUSF Lifeline service does not provide support for broadband service.

This page intentionally blank

Appendix A. Research Methodology

This appendix discusses the methodology used by the Commission for compiling data for the 2017 Scope of Competition Report. Rather than collecting data from ILECs and CLECs operating in Texas, the Commission gathered data from reports published by the Federal Communications Commission in the *Voice Telephone Services* report and the *Internet Access Services* report. Data from the *Voice Telephone Services* report was used to develop the market share of the switched access lines and VoIP subscriptions of ILECs and Non-ILEC providers operating in the state of Texas for 2014 and 2015. Data from the *Internet Access Service*s report provided the Commission with the number of broadband subscribers nationwide and in various states, including Texas, and the number of broadband lines provided by various technologies (for example, ADSL versus cable modem). Data from this report has enabled the Commission to develop time-series charts on broadband use in Texas.

The Commission relied on the *Wireless Substitution: Early Release of Estimates from the National Health Interview Study Survey, January-June 2015, National Center for Health Statistics, December 2015*[81] report to determine an approximate percentage of wireless-only households for 2014 and 2015. The Commission used the national percentage of wireless-only households as a proxy because specific information regarding percentage of wireless-only households in Texas has not been updated since 2007. The Commission finds the use of the national percentage of wireless-only households to be a reasonable proxy for percentage of wireless-only households in Texas because the nationwide percentage selected appears to underestimate the percentage of wireless-only households in Texas when considered in the context of published data on the percentage of adults in Texas that live in wireless-only households. The national percentage of wireless-only households in 2014 and 2015 was then factored into a calculation with the data from the FCC reports on ILEC/Non-ILEC switched access and interconnected VoIP lines to determine the proportion of mobile wireless service users who had moved from using traditional wireline access to using only wireless service.

[81] Stephen J. Blumberg, Ph.D., and Julian V. Luke, U.S. Dep't of Health & Human Services, Ctrs. for Disease Control & Prevention, Nat'l Ctr. for Health Statistics, *Wireless Substitution: Early Release of Estimates from the National Health Interview Study Survey, January-June 2015* (Dec. 2015). Available at: http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201512.pdf.

This page intentionally blank

Appendix B - Incumbent Local Exchange Companies

ILECs	Chapter 65 Status	Incentive Regulation Election/PURA Chapter
Alenco Communications (d/b/a A.C.I.)	Regulated	Chapter 52
AT&T Texas (formerly Southwestern Bell)	Deregulated[82]	Chapter 65
Big Bend Telephone Company, Inc.	Regulated	Chapter 52
Blossom Telephone Company, Inc.	Regulated	Chapter 52
Border to Border	Regulated	Chapter 52
Brazoria Telephone Company	Regulated	Chapter 52
Brazos Telephone Cooperative, Inc.	Regulated	Chapter 52
Cameron Telephone Company	Regulated	Chapter 52
Cap Rock Telephone Cooperative, Inc.	Regulated	Chapter 52
Central Texas Telephone Cooperative, Inc.	Regulated	Chapter 52
CenturyLink – Central Telephone Co. of Texas, Inc.	Transitioning	Chapter 65
CenturyLink – United Telephone Co.	Regulated	Chapter 58
CenturyTel of Lake Dallas, Inc.	Regulated	Chapter 59
CenturyTel of Northwest Louisiana, Inc.	Regulated	Chapter 52
CenturyTel of Port Aransas, Inc.	Regulated	Chapter 59
CenturyTel of San Marcos, Inc.	Regulated	Chapter 59
Coleman County Telephone Cooperative, Inc.	Regulated	Chapter 52
Colorado Valley Telephone Cooperative, Inc.	Regulated	Chapter 53 (Partially Deregulated)
Comanche County Telephone Company, Inc.	Regulated	Chapter 52
Community Telephone Company, Inc.	Regulated	Chapter 52
Consolidated Communications of Fort Bend	Regulated	Chapter 58
Consolidated Communications of Texas	Regulated	Chapter 58
Cumby Telephone Cooperative, Inc.	Regulated	Chapter 52
Dell Telephone Cooperative, Inc.	Regulated	Chapter 52
Eastex Telephone Cooperative, Inc.	Regulated	Chapter 52
Electra Telephone Company, Inc.	Regulated	Chapter 52
ENMR Telephone Cooperative, Inc.	Regulated	Chapter 52
Etex Telephone Cooperative, Inc.	Regulated	Chapter 52
Five Area Telephone Cooperative, Inc.	Regulated	Chapter 52
Frontier Communications (f/k/a Verizon Southwest)	Transitioning	Chapter 65
Ganado Telephone Company, Inc.	Regulated	Chapter 52
Guadalupe Valley Telephone Cooperative, Inc.	Regulated	Chapter 53 (Partially Deregulated)

[82] On August 7, 2014, Southwestern Bell Telephone Company (d/b/a AT&T Texas) filed a petition, pursuant to Chapter 65 of PURA, requesting that the Commission issue it a COA and rescind its CCN. *Southwestern Bell Telephone Company d/b/a AT&T Texas' Petition to Issue a Certificate of Operating Authority and Rescind its Certificate of Convenience and Necessity*, Docket No. 42741 (Oct. 23, 2014).

Hill Country Telephone Cooperative, Inc.	Regulated	Chapter 52
Industry Telephone Company	Regulated	Chapter 52
La Ward Telephone Exchange, Inc.	Regulated	Chapter 52
Lake Livingston Telephone Company	Regulated	Chapter 52
Leaco Rural Telephone Cooperative, Inc.	Regulated	Chapter 52
Lipan Telephone Company	Regulated	Chapter 52
Livingston Telephone Company	Regulated	Chapter 52
Mid-Plains Rural Telephone Cooperative, Inc.	Regulated	Chapter 52
Nortex Communications	Regulated	Chapter 52
North Texas Telephone Company	Regulated	Chapter 52
Panhandle Telephone Cooperative, Inc.	Regulated	Chapter 52
Peoples Telephone Cooperative, Inc.	Regulated	Chapter 52
Poka-Lambro Telephone Cooperative, Inc.	Regulated	Chapter 52
Riviera Telephone Company, Inc.	Regulated	Chapter 52
Santa Rosa Telephone Cooperative, Inc.	Regulated	Chapter 52
South Plains Telephone Cooperative, Inc.	Regulated	Chapter 52
Southwest Arkansas Telephone Cooperative, Inc.	Regulated	Chapter 52
Southwest Texas Telephone Company	Regulated	Chapter 52
Tatum Telephone Company	Regulated	Chapter 52
Taylor Telephone Cooperative, Inc.	Regulated	Chapter 52
Texas Windstream (f/k/a Texas Alltel, Inc.)	Regulated	Chapter 58
Valley Telephone Cooperative, Inc.	Regulated	Chapter 53 (Partially Deregulated)
West Plains Telecommunications	Regulated	Chapter 52
West Texas Rural Telephone Cooperative, Inc.	Regulated	Chapter 52
Wes-Tex Telephone Cooperative, Inc.	Regulated	Chapter 52
Windstream Kerrville (f/k/a Kerrville Telephone Co.)	Regulated	Chapter 58
Windstream Communications Southwest (d/b/a Valor Telecommunications of Texas, L.P.)	Regulated	Chapter 58
Windstream Sugarland (f/k/a Sugar Land Telephone Company)	Regulated	Chapter 58
XIT Rural Telephone Cooperative, Inc.	Regulated	Chapter 52

Appendix C - State-Issued Certificates of Franchise Authority Issued January 1, 2015 to June 30, 2016[83]

Company Name	SICFA Number	Date Granted	Type
Buford Communications 1 LP	90094	8/19/2015	Cable Service
Hillary Communications LLC	90093	3/17/2015	Video Service
Windstream Sugarland LLC	90095	1/28/2016	Cable and Video Service
Comcast of Louisiana/Mississippi/Texas, LLC	90096	5/23/2016	Cable Service

[83] *State-Issued Certificate of Franchise Authority Directory*, available online at http://www.puc.state.tx.us/industry/communications/directories/Default.aspx.

This page intentionally blank